

**Stories within stories:
A narrative study of six international PhD researchers'
experiences of doctoral learning in Australia**

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Abstract

This study explores the lived experiences of six international doctoral researchers over the course of two years of their candidature in an Australian university. In particular, it examines the participants' perspectives on the nature and quality of their learning, their opportunities to participate in the practices of their academic communities and the quality of the support they received.

National surveys of doctoral candidates have confirmed a dramatic increase in the number of international students enrolling in doctoral programmes in Australia in the last ten years and identified trends in enrolment patterns and candidate characteristics (Pearson, Cumming, Evans, Macauley & Ryland, 2011; Pearson, Evans & Macauley, 2008). This study seeks to complement the findings of such large-scale surveys by providing a detailed account of six international PhD researchers' perspectives on their learning and socialisation experiences. The research employs a longitudinal narrative inquiry approach drawing on multiple interviews with each participant over a two year period. The study draws on social practice theory (Lave & Wenger, 1991), activity theory (Engeström, 1999), theories of academic literacies development (Lea & Street, 2006) and notions of scholarly identity construction (Baker & Lattuca, 2010) for its analytical framework.

The project's outcomes are presented in the form of a *thesis by publication* comprising three journal articles and two book chapters framed by traditional thesis chapters. The study highlights the complexity and particularity (Cumming, 2007) of the doctoral experience. Differences were revealed in participants' readiness for doctoral study, the learning, research and teaching opportunities they were afforded, the quality of support provided and the extent to which events occurring outside the PhD impacted on their lives. Recommendations for improving doctoral supervision and socialisation practices are provided.

Statement of Candidate

I certify that the work in this thesis entitled “Stories within stories: A narrative study of six international PhD researchers’ experiences of doctoral learning in Australia” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than Macquarie University.

I also certify that the thesis is an original piece of research and it has been written by me. Any help and assistance that I have received in my research work and the preparation of the thesis itself have been appropriately acknowledged.

The thesis is presented in the form of a thesis by publication as allowed in the degree rules of Macquarie University.

In addition, I certify that all information sources and literature used are indicated in the thesis.

The research presented in this thesis was approved by Macquarie University Ethics Review Committee, reference number HE28NOV2008-D06220.

Sara Cotterall

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Introduction

Overview

This chapter introduces the study by first locating it in the context of important challenges facing Australia's higher education sector and providing relevant background on the topic. It then discusses previous research in the area before identifying an important issue which has received little systematic attention from doctoral education researchers in the Australian context. The chapter then outlines the focus and methodology of the study and the research questions which it seeks to address before identifying the ways in which it contributes to existing research on doctoral education in Australia. The final section of the chapter outlines the structure of the thesis.

Background to the study

Doctoral education worldwide has seen enormous growth and change in the last decade, fuelled by the increasing globalisation and massification of doctoral programmes (Engebretson et al., 2008; Nerad & Heggelund, 2008). These developments include the expansion and diversification of doctoral programmes, an increase in enrolments, innovations in doctoral pedagogy and important changes in modes of knowledge production and institutional and government policies (Boud & Lee, 2009). Australia has benefited from these developments by positioning itself as a provider of high quality graduate education in a multicultural English-speaking setting. The doctoral student population in Australia is becoming increasingly diverse (Pearson, Cumming, Evans, Macauley, & Ryland, 2011) and now includes a significant proportion of international candidates.

The international education sector added more than \$18 billion of export income to the Australian economy in 2010, with higher education accounting for \$10.4 billion of the total and New South Wales generating the most international export income of all the states (Australian Education International, May 2011a). International PhD candidates, who represent approximately 25% of the country's doctoral candidates (Australian Education International, May 2011b), therefore play an important role in Australia's international education sector. Given the economic benefits to

Australian universities of participation by increasing numbers of international students (Bullen & Kenway, 2003; McCallin & Nayar, 2011 in press), attention needs to be paid to the quality of students' learning experiences. However to date, little systematic research has addressed the quality of international doctoral candidates' experiences in Australia.

The growth of doctoral education in Australia in recent decades has attracted the attention of both researchers and policymakers. Researchers have explored the nature and quality of supervision (Green, 2005; Kiley, 2011; Manathunga, 2005a), supervisor development (Halse, 2011; McCormack, 2009b; Pearson & Brew, 2002), doctoral pedagogy (Boud & Lee, 2005; Johnson, Lee, & Green, 2000; Kamler & Thomson, 2006), doctoral writing (Aitchison, Kamler, & Lee, 2010; Starke-Meyerring, 2011), the impact of government and institutional policies (Neumann, 2009; Pearson, 2005), new ways of conceptualising research degrees (Gilbert, 2009; Pearson, 1999) and issues of thesis quality (Bourke, 2007; Holbrook, 2007). A great deal of information on the demographics of the doctoral population in Australia has also been gathered from national surveys (Pearson, et al., 2011). However there has been little systematic in-depth research into the experiences of international doctoral candidates in Australia apart from a small number of studies focused on exploring particular aspects of students' experiences (Bullen & Kenway, 2003; Cadman, 2000; Ingleton & Cadman, 2002; Manathunga, 2007a; Novera, 2004; Wang & Li, 2011).

The term 'international student' is used in this study to describe nationals of other countries who have come to Australia in order to undertake academic study (as opposed to those who migrate to Australia and subsequently participate in education). However, it is acknowledged that this term is sometimes associated with the process of 'othering' (Palfreyman, 2005):

in the process of labelling students, we put ourselves in the powerful position of rhetorically constructing their identities, a potentially hazardous enterprise. At worst, a label may imply that we sanction an ethnocentric stance. At the very least, it can lead us to stigmatize, to generalize, and to make inaccurate predictions about what students are likely to do as a result of their language or cultural background. (Spack, 1997b, p. 765)

Despite these risks, the term 'international student' is retained in the study because it designates an important official Australian government category (Pearson, Cumming, Evans, Macauley, & Ryland, 2008) and is widely used in the discourse of higher education in Australia. Furthermore, the term usefully identifies the study's participants (and others like them) as individuals who are new to

Australia, to their university and to the education system within which their doctoral programme is framed. Consequently, students designated by this term are likely to share a certain number of commonalities in their perspectives.

Two other terminological matters require clarification. In doctoral education research, differences between the North American doctorate and the model adopted in Australia, New Zealand and the United Kingdom are reflected in the use of terms which designate important elements in the respective processes. Throughout this thesis, the preferred Australian term ‘supervisor’ is used to describe the members of academic staff assigned to guide doctoral candidates through their research degree, and the term ‘thesis’ is used to describe the research text they present for examination. However, when discussing and citing North American research studies, the terms adopted by the researchers - ‘advisor, advisee and committee and dissertation’ - are retained.

The third issue relates to terminology associated with those who engage in doctoral study. Here the researcher aligns herself with Kamler and Thomson’s (2006) practice of referring to such individuals as ‘doctoral *researchers*’, choosing to define doctoral candidates in terms of their work (research) rather than their position in the institutional hierarchy. In acknowledgement of the diverse ages, experience and professional status of those engaged in doctoral study, and as a mark of respect, the term ‘doctoral researcher’ is therefore adopted except in reporting previous studies (where the original terminology is retained) and where its use might create ambiguity.

The study is motivated by concerns about the quality of the educational experience provided to international doctoral researchers in Australia and other English-speaking countries. Competition in global higher education has resulted in large numbers of international students enrolling in universities in English-speaking countries. However there is little evidence that institutions which spend considerable effort and expense recruiting international students are equally committed to monitoring the quality of those students’ experiences once they are enrolled. The researcher’s decision to focus on the experiences of international doctoral researchers in Australia is motivated by three principal concerns. First, the rapid increase in the number of international students enrolling at universities in Australia (Neumann, 2007; Tananuraksakul, 2009) and the corresponding dearth of research into the quality of their learning experiences — particularly at the graduate level — suggests the need for a study such as this one. Second, the researcher’s previous experience teaching international graduates in Australia and New Zealand suggests that the quality of students’ educational experiences varies considerably. Third, events in Australia at the time of the

study (Quiddington, 2009) suggested that international students might be the object of racist attitudes or attacks outside the university or experience barriers to their community participation. Therefore the researcher wished to investigate the participants' experiences of inclusion (or otherwise) in their departmental and disciplinary communities, as well as their participation in the wider community beyond the university.

Previous research

International doctoral candidates' learning experiences are situated in a context characterised by considerable institutional and political tension. Academic staff in Australian universities, as elsewhere, experience the dual tensions of needing to publish in order to ensure departmental and institutional research funding while also being required to guide their PhD students to timely completion (McCallin & Nayar, 2011 in press). Such tensions are likely to impact on the supervision relationship and process. For instance, there is evidence that some supervisors avoid working with international doctoral candidates, as the following comment from an academic in an Engineering faculty demonstrates:

We have consciously gone for local students because they are more self starting, they have got the right background skills, they have the ability to tell a staff member they are wrong, whereas the foreign students wouldn't dare do that. And so the students have to be more self-reliant because we have to jack up the numbers with fewer staff and so, yeah, it is a matter of getting more confident students who basically can run the projects to a substantial degree themselves.
(Neumann, 2009, p. 220)

Evidence of stereotyping in this academic's comments resonates with the findings of a UK study which reported that overseas research students 'are commonly characterised as intrinsically "problematic" by virtue of being "hard work" to supervise'. (Goode, 2007, p. 592). Other tensions experienced by some international doctoral students relate to potential mismatches between their expectations of the doctorate and those of their supervisors (Kiley, 1998). Given the challenges associated with doctoral study, the high stakes involved and the policy-related tensions associated with doctoral enrolments, there is a need for research into the way that these elements impact on international candidates' doctoral experiences. To date however, international doctoral researchers' experiences in Australia have received little systematic attention.

There have, however, been a number of valuable investigations into different aspects of international graduate students' experiences in Australia in the last ten to fifteen years. Researchers have explored international students' transition to the Australian higher education context (Cadman, 2000), their experiences within an integrated English language/research education programme (Cargill & Cadman, 2005), the emotional and social factors associated with international students' success in graduate study (Ingleton & Cadman, 2002), their experiences of thesis writing (Cadman, 1997; L. Y. Li & Vandermensbrugghe, 2011), the ways university staff position international female graduate students (Bullen & Kenway, 2003), the role of race and gender in intercultural study (Kenway & Bullen, 2003) and experiences of intercultural graduate supervision (Aspland, 1999; Manathunga, 2007a). What none of these studies provide however is a qualitative, longitudinal investigation of international doctoral researchers' experiences of the doctorate in Australia.

Focus of the study

Whereas higher education researchers in Australia have actively explored key elements in the doctoral learning process (including supervision pedagogy, supervisor development, writing practices, supervisor feedback and the thesis examination process) as well as conducting survey research on the profile of doctoral students in Australia, only a small subset of these studies focus specifically on the experiences of international doctoral candidates. Furthermore, those studies which do focus on international doctoral researchers tend to be limited in duration and focus on only one aspect of the candidates' experience divorced from the circumstances of their lives.

A number of international researchers (Leonard, Pelletier, & Morley, 2003; Trahar, 2011) have therefore argued that qualitative longitudinal studies of international doctoral students' learning experiences are needed to complement the large-scale quantitative studies already conducted. Leonard and Becker (2009, p. 71) claim that 'relatively little empirical work includes the perspectives of [doctoral] students ... [who] are increasingly regarded as cogs in the system and not "key stakeholders"'. To reverse this tendency, each of the aspects investigated in the studies referred to above — doctoral supervision, pedagogy, research training, and writing practices — needs to also be investigated in the situated experience of particular international doctoral researchers. By adopting the candidates' perspectives, such studies are likely to offer insights into the way international PhD researchers conceptualise the doctorate and the strategies which support their learning:

Still little is known about the resources (linguistic, emotional, intellectual, technological, strategic) that students mobilise to manage their overseas study experience; how they synthesise new and unfamiliar teaching and learning approaches with previous educational experiences; and the roles and responsibilities of the university. (Kettle, 2011, p. 2)

The research methods best suited to shedding light on doctoral researchers' trajectories are qualitative and longitudinal — 'some of the most instructive research is longitudinal, with in-depth case studies of learners' academic socialisation' (Duff, 2007a, p. 01.04). Furthermore, a research approach which facilitates access to participants' frank reflections on their experiences offers the promise of insightful data. Whereas longitudinal studies of Australian *graduate* students' experiences (see for example McCormack, 2009a) and accounts of the lived experiences of doctoral candidates in other countries (Hopwood, 2010a; Jazvac-Martek, Chen, & McAlpine, 2011) are starting to appear, the lived experiences of international doctoral researchers in Australia have, to date, received only limited attention.

This study therefore complements previous research by presenting a longitudinal narrative inquiry into six non-native English speaking international doctoral students' experiences of learning, socialisation and academic literacies development in an Australian university. The study draws on 35 individual interviews conducted with the participants between May 2009 and June 2011 which document their experiences of and reflections on their doctoral learning. A 'research interview as social practice orientation' (Talmy, 2010) to the interviews was adopted (discussed in detail in Chapter 3) in recognition of the way in which participants co-constructed their narratives with the researcher through successive interviews. In addition, this orientation translated into a commitment to exploring both what the participants said and the means by which their narratives were produced (Holstein & Gubrium, 2003) in the data analysis process.

The study interrogates the participants' narratives to explore the nature of the experiences which contribute to their formation as researchers, and to determine the quality of the support they receive. In doing so, it explores ways in which the participants' trajectories are influenced by their being newcomers to Australia, the contexts in which their learning takes place, and the opportunities they had to participate in the practices of their respective disciplines. It has been suggested that – 'in many ways being 'international' or 'domestic' makes little difference to the experience of being a doctoral candidate, although there are some differences.' (Pearson, et al.,

2008, p. 98). One of the study's aims is to explore the impact of the participants' 'international' status on their doctoral trajectories. It also sets out to explore the way their academic literacies in English develop (Hirvela & Belcher, 2001) and to identify the nature of the support they receive in developing their research abilities. Finally, the study seeks to explore the participants' experience of 'community' within their departments, the university and their respective disciplines. Previous studies indicate that access to the research and student subculture (Hockey, 1994) helps new doctoral candidates adjust to their new status. However, there is some evidence that gaining access to legitimate peripheral participation (Lave & Wenger, 1991) in a new community of practice is not as benign a process as some have made it sound. In fact, it is possible that the desired community may remain imagined for some (Starfield, 2010, p. 139).

The study's concerns are summarised in the following research questions:

1. What is the nature and quality of the participants' doctoral learning experiences?
2. What opportunities do the participants have to engage in the practices of their respective academic communities?
3. What is the nature and quality of support provided to the participants by their supervisors, peers, other academics in their department, the institution and members of their wider disciplinary community?

The title of this thesis — 'Stories within stories: A narrative study of six international PhD researchers' experiences of doctoral learning in Australia' — refers to the complex layered nature of doctoral narratives of experience. One way in which this complexity is evident is in the participants' tendency to recount different versions of their stories on different occasions. For instance, some participants discussed their dissatisfaction with some of their supervisors' practices during interviews, but were unwilling to express these views to their supervisors. The privileged nature of the communication between the researcher and the participants therefore entailed access to perspectives not always shared more widely. The title of the thesis also alludes to the fact that the study provided the researcher with access to a multitude of stories. In addition to engaging with the stories her participants shared during the interviews, the researcher listened to the stories of members of her personal network of PhD researchers, read the stories of numerous doctoral researchers reported in the research literature and generated her own doctoral narrative.

Whenever and wherever such stories were exchanged, a similar sense of relief was observed as researchers discovered they were not alone in their experiences.

Contribution of the study

This study adds to existing research on the student experience of the PhD in Australia by focusing specifically on international researchers and by providing a longitudinal, situated account of their perspectives on the doctoral experience. The researcher's doctoral project — which is presented in the form of a thesis by publication — provides insights into those aspects of the participants' experiences which they chose to highlight during interviews. These include reflections on doctoral writing, doctoral supervision, personal, academic and social tensions, doctoral pedagogy, identity and the role of emotions in the doctoral experience.

The study's findings reveal substantial differences amongst the participants' experiences of the doctorate. Differences were identified in their readiness for doctoral study, the learning, research and teaching opportunities they were afforded, the quality of support provided and the extent to which events occurring outside the PhD impacted on their lives. The study also confirmed that most of the issues faced by the international participants — lack of confidence, difficulty with writing, stress, discouragement and isolation — confront all doctoral students. More disturbingly, the study revealed that the one Caucasian participant experienced significantly more support and opportunities than the other five participants. Another finding of concern was that the participants had limited contact with Australian students (and some with the English language) during at least two years of their candidature.

Structure of the thesis

This thesis is presented in the form of five research texts (prepared for publication) framed by conventional Introduction, Literature Review, Methodology, Discussion and Conclusion chapters. This first chapter (*Chapter One*) has introduced the study and outlined its aims, methods and findings. The content of each of the remaining chapters is outlined below.

Chapter Two maps out the theoretical and empirical framework for the study by reviewing relevant international and Australian literature on doctoral education. First it discusses the characteristics of international doctoral researchers and then considers the learning practices in which they typically engage before reviewing the different settings in which doctoral learning takes place and the

individuals who contribute to it. The final section of Chapter Two considers the way in which the process of scholarly identity construction is intertwined with doctoral candidates' trajectories.

Chapter Three explains the methods that were adopted in conducting the study and the rationale underpinning the methodological decisions taken. It describes the research participants and the way they were recruited, the way in which the research interview was theorised in the study and the implications of this approach for the way in which interviews were conducted and analysed.

Chapters Four, Five, Six, Seven and Eight present the five research texts which were prepared for publication as part of the thesis. The texts are presented in their published (or pre-published) form apart from minor changes to wording and formatting.

Chapter Four introduces the first research text which presents the findings of the first phase of the study:

Cotterall, S. (in press). Identity and learner autonomy in doctoral study: International students' experiences in an Australian university. In B. Morrison (Ed.), *Independent language learning: Building on experience, seeking new perspectives* (pp. 57-72). Hong Kong: Hong Kong University Press.

Chapter Five presents the second research text which examines the writing practices encountered by two of the study participants during the second year of their candidature:

Cotterall, S. (2011). Doctoral students writing: Where's the pedagogy? *Teaching in Higher Education*, 16(4), 413-425.

Chapter Six presents the third research text which explores the range of pedagogical practices to which the participants are exposed:

Cotterall, S. (2011). Doctoral pedagogy: What do international PhD students in Australia think about it? *Pertanika Journal of Social Sciences and Humanities* 19(2), 521-534.

Chapter Seven presents the fourth research text which is a reflexive account of similarities and differences between the participants' lived experiences as doctoral students in Australia and those of the researcher:

Cotterall, S. (forthcoming). Six outsiders and a pseudo-insider: International doctoral students in Australia. In V. Kumar & A. Lee (Eds.), *Doctoral education in international context: Connecting local, regional and global perspectives*. (pp. xx-xx). Serdang, Malaysia: Universiti Putra Malaysia Press

Chapter Eight presents the final research text which draws on Activity Theory in analysing the role of emotion in the doctoral researchers' trajectories:

Cotterall, S. (forthcoming). More than just a brain: Emotions and the doctoral experience. *Higher Education Research & Development*.

Chapter Nine presents an overview of the study's findings, drawing together the outcomes of the five research texts and the researcher's reflections on the study. It also considers the study's strengths and weaknesses and evaluates the different analytical tools applied to the data.

Chapter Ten summarises the study's findings, draws conclusions and discusses the implications for students, supervisors and institutions. The chapter also acknowledges the limitations of the study and identifies suggestions for future research.

Literature Review

Overview

This chapter introduces and defines the central constructs investigated in the study, outlines theories used in interpreting the data and reviews the findings of related research. The chapter is divided into four main sections which deal respectively with international doctoral researchers in Australia, the learning practices in which doctoral researchers engage, the contexts in which doctoral learning occurs, and the process of scholarly identity construction which doctoral learning entails.

International doctoral students in Australia

Of the 44,292 PhD students enrolled in Australian universities in 2009, almost 26% were international students (Department of Education Employment and Workplace Relations, 2011b) representing an increase of 15% in international PhD enrolments on previous years (Department of Education Employment and Workplace Relations, 2009a). These statistics reflect the importance of international doctoral student enrolments to Australia's higher education industry and economy. Furthermore, the presence of international students benefits host countries in a number of other ways (Andrade, 2006) including the racial and ethnic diversity they bring and their contributions beyond graduation as researchers and academics (Andrade, 2006; D. Kim, Bankart, & Isdell, 2011).

In Australia, the term 'international student' is an important official government category (Pearson, et al., 2008), particularly because of the way it influences funding. It is typically used to designate an individual who is neither an Australian citizen nor a permanent resident or a New Zealander. In this study the term is used to describe six individuals who travelled to Australia from their home countries for the purpose of undertaking doctoral studies. All six participants in the study are native speakers of languages other than English. However, as these characterisations suggest, the term "international student" exemplifies the process of *othering* – 'the ways in which the discourse of a particular group defines other groups in opposition to itself' (Palfreyman, 2005, p. 213). Since anyone can be described as "international" given a particular context, use of the term in discussions about higher education in Australia may reflect an "us and them" worldview. Unfortunately, the term is also often associated with a tendency to discursively construct as deficient (Candlin & Crichton, 2010) the individuals it identifies. Writing about higher education in the United Kingdom,

Goode reports that ‘it is not uncommon to hear talk about “international students” as a whole as “hard work”, both deferential and demanding ... leading to a generalised stereotyping for what is ... a heterogeneous group’ (Goode, 2007, p. 592). Despite these negative connotations, the term “international students” is employed throughout this thesis both because it is a formal descriptive category employed in the university where the participants are enrolled and because it is commonly used in the discourse of higher education in Australia.

A number of researchers in recent times have challenged the assumptions of homogeneity which often accompany the use of institutional labels such as “international student” or “non-native writer” (Bullen & Kenway, 2003; H. Lee & Maguire, in press). For instance, in discussing the problematic way that some staff at one Australian university represent international women postgraduate students, Bullen and Kenway ask provocatively – ‘are international students’ need and desire for “guidance”, their “deference”, their “lack of assertiveness” a reflection of cultural difference, or what happens when this “difference” meets the “pedagogy of indifference”?’ (2003, p. 46). While it is important to resist the homogenising connotations sometimes associated with the label “international student”, Manathunga argues that a ‘liberal *disavowal of difference*, where authors argue that the needs of all students are the same regardless of culture’ (2007a, p. 95) could result in a failure to acknowledge differences which do exist. Therefore the term is adopted advisedly in this study with no assumptions made about either the characteristics or the experiences of students labelled as “international” by the Australian education system.

Many of the challenges international doctoral students encounter in their studies are shared by their local counterparts. These include issues such as negotiating a satisfactory supervision relationship, acquiring taken-for-granted knowledge related to learning and academic practices, developing research writing confidence and becoming an independent researcher. However, non-native English speaking doctoral students are required to meet all of these challenges in a language other than the one in which they likely feel most at home. Casanave and Li explain that in addition to being socialised into the roles of graduate student and potential member of the academic profession, non-native English speaking doctoral students face a third challenge:

These challenges are difficult for all graduate students, but they are particularly daunting for non-native and non-mainstream speakers of English as they have to cope with triple socialization, the third being the immediate socialization into a

language and culture that their mainstream peers have been immersed in for a life time. (2008, p. 3)

While some international students have operated in English for many years prior to commencing their doctoral studies, there is no doubt that the challenges of learning, conducting research and reporting on it in another language add another dimension to international candidates' doctoral experiences. Additional issues for international students which have been discussed in previous research include concerns over finances and health insurance, difficulties adjusting to new cultural norms and changes in status, homesickness, lack of cultural understanding and community inclusion and gaining access to research and peer cultures (Deem & Brehony, 2000; S. H. O. Kim, 2011; Sherry, Thomas, & Chui, 2011). Research has suggested that the extent to which international students socialise with host nationals is influenced by a complex range of factors including their links with others from the same linguistic and cultural background, their family responsibilities and the existence of common interests (Myles & Cheng, 2003). For instance, several students in Myles and Cheng's Canadian study spoke of preferring to spend time with students from a similar ethnic background or with other "outsiders", rather than with Canadians.

Finally, a number of particular challenges faced by international students studying in Australia have been documented. One recent study, which focused specifically on intelligibility, documents the language shock and feelings of insecurity a group of international students enrolled in Masters programmes at one Australian university initially experienced (Tananuraksakul, 2009). The students experienced difficulty both with understanding spoken Australian English, and also with the different varieties of World English that they were exposed to in Australia. Another recent Australian study discovered that two thirds of the 200 international students interviewed had experienced problems associated with isolation or loneliness, particularly in their first few months (Sawir, Marginson, Deumert, Nyland, & Ramia, 2008). Some suggest that international students' isolation in Australia is due to the failure of institutions to adopt appropriate strategies to improve inclusion and engagement (Leask & Carroll, 2011). Reasons given by Indonesian, Malaysian and Singaporean students in one Australian study for not spending more time with Australians included 'lack of time ... discomfort with colloquial Australian English ... [and] their inability (for religious reasons) to hang out drinking in pubs' (Weiss & Ford, 2011, p. 238). Additional issues confronting some international students in Australia include personal safety, language proficiency, finances, sub-standard housing and racism (Marginson, Nyland, Sawir, & Forbes-Mewett, 2010). International doctoral researchers' experiences of writing and supervision are discussed in upcoming sections

entitled “Writing experiences of multiliterate doctoral students” (p. 11) and “International students and supervision” (p. 56)

Learning practices

How can doctoral learning practices be characterised? In this chapter, four theoretical frameworks will be drawn upon in considering how this question has been addressed – a *communities of practice* approach, *academic literacies* research, *activity theory* and *identity*. In each of these subsections, first the theory is outlined before considering how each contributes to an understanding of the nature and quality of doctoral learning.

Communities of practice approach

The principal contributions of Lave and Wenger’s (1991; Wenger, 1998) notion of “community of practice” (COP) to a discussion of doctoral learning is its representation of learning as participation in the practices of a community of experts. Rather than focus on the actions of an individual learner, this conceptualisation views learning as situated within a community of practitioners. The COP framework emerged from Lave and Wenger’s (1991) ethnographic studies of midwives, tailors and others in which newcomers were inducted into work practices by established employees (“old-timers”). They proposed the notion of *legitimate peripheral participation* as a way of characterising the kind of learning which operated in such settings – the process whereby newcomers observe the practices of experts and then tentatively adopt those practices as they seek to become legitimate community members.

Viewing doctoral learning in terms of participation in a COP has intuitive appeal. Whereas in the past, the image of the “lone scholar” (Pilbeam & Denyer, 2009) might have accurately described the experience of many doctoral candidates, a more social collaborative model of learning has been proposed in recent times (Duff, 2007a; Hakala, 2009; Riazi, 1997). While significant differences persist between patterns of doctoral education in different parts of the world (e.g. the inclusion (or not) of course work and comprehensive examinations in the doctoral programme), and in terms of disciplinary differences, it is nevertheless possible to identify an overall shift towards more collaborative learning and supervision approaches in recent doctoral research literature (Austin, 2009; Johnson, et al., 2000; Malfroy, 2005; Manathunga & Goozée, 2007).

The COP framework therefore implies that learning occurs not only when doctoral researchers interact with their supervisors but also in their interactions with peers and other researchers. Many

doctoral researchers identify their peers as important sources of learning and support (Caffarella & Barnett, 2000; Devenish et al., 2009). In arguing that providing a rich learning environment is not in itself sufficient to improve doctoral learning outcomes, Boud and Lee make a case for reconceptualising doctoral pedagogy ‘as significantly “distributed” and “horizontalized”, with an associated dispersal of responsibilities and of agency’ (2005, p. 502). A “horizontalized” conception of doctoral pedagogy explicitly acknowledges the potential for peer learning, and “distributed” pedagogy envisages the possibility of doctoral students learning in a range of different settings, including beyond the supervisory dyad and the department.

Advantages

Viewing doctoral learning as participation in a COP illuminates some important aspects of the doctoral learning process. First, it highlights the socially situated nature of learning, emphasising how learning is experienced in interaction with others and meaning is negotiated by participating in the “conversations” of established communities. Second, it acknowledges the central role and importance of the community’s shared practices. The activities, thinking and understandings that constitute the practices of each researcher’s discipline are both the means and the end of their doctoral learning processes. These disciplinary practices can be considered part of the ‘invisible curriculum of the PhD’ (McAlpine & Ashgar, 2010, p. 169), which need to be explicitly identified and discussed as a first step to ‘newcomers’ developing understanding of them.

Third, the COP framework usefully expands attention from the dyadic relationship between doctoral candidate and supervisor as the central site of learning to include the candidate’s interactions with a range of different individuals. In addition to their relationships with their supervisors, doctoral students are likely to interact with peers on the same campus, peers at other institutions in the same country or abroad, former colleagues or teachers, other academics, journal article reviewers, authors of books and journals, members of conference abstract review committees and others. These communities, concrete and virtual, real and imagined (Kanno & Norton, 2003) create the contexts in which doctoral students learn and engage with the practices of their disciplines.

The final advantage of viewing doctoral learning through the COP lens is that it helps explain the important relationship between doctoral learning and scholarly identity formation. The learning process which lies at the heart of the doctoral experience involves a fundamental shift in identity from that of student to that of scholar. As Wenger says – ‘Learning transforms our identities: it transforms our ability to participate in the world by changing all at once who we are, our practices,

and our communities' (1998, p. 227). This process of transformation occurs as newcomers negotiate the meanings of shared practices with established members of their disciplinary community and acquire skill in adopting those practices.

Limitations

However the COP approach has a number of limitations in seeking to theorise the learning practices of doctoral researchers. Most significantly for this exploration of doctoral learning, Wenger fails to critically examine the relations of power that operate within COPs. A number of researchers have criticised Wenger's depiction of COPs as overly benign (Duff, 2007b; Kanno, 1999; M. R. Lea, 2005). In fact, newcomers may remain on the periphery of a community if they fail to receive suitable induction into its practices, if their attempts to participate are rejected by the host community (Miller, 1999) or if they find the community hostile or unappealing. Research therefore needs to interrogate the role of power relations in doctoral researchers' learning practices and identify ways in which their access to participation is facilitated or inhibited. One of the goals of this study therefore is to present narratives which explore the participants' experiences of interacting with their disciplinary communities and examine the quality of their access to and support in participating in these communities.

Another limitation of the COP approach is its failure to provide a means of exploring the role of personal agency. Wenger presents a picture of a naïve newcomer who seeks unquestioning participation in the community's established practices. But what of the newcomer who has relevant experience to contribute or who resists certain practices? Personal agency can account for dramatically different doctoral trajectories in seemingly similar programmes. Hopwood suggests that doctoral researchers' relationships with others can be viewed as 'mediators of agency' and demonstrates how exploring these relationships can reveal the ways in which they 'act and struggle to act on their intentions' (2010c, p. 114). Other researchers have also highlighted the need to incorporate agency in any conceptualisation of learning in higher education. McAlpine and her colleagues argue that higher education institutions are the locus of considerable dynamism and tension, and that the COP framework is 'insufficient in explaining the relation between structure and personal agency, the dialectical – competing and complementary – experiences of individuals with different roles within multiple embedded overlapping structures' (McAlpine, Jazvac-Martek, & Gonsalves, 2008, p. 118).

The third limitation of the COP approach for exploring doctoral learning is the fact that it conceptualises the relationship between candidate and supervisor in terms of the expert-novice dichotomy. While some doctoral researchers lack experience in academic practices, this is not always the case since many are also full time members of academic staff concurrently engaged in teaching and research. The metaphor therefore often masks the knowledge and experience that doctoral researchers already possess. Writing of the way in which she was positioned during her graduate school experiences, Fujioka states: 'a simple conceptualization of this [COP] framework does not match the complexities of lived experiences within an educational setting such as graduate school' (2008, p. 68). The expert-novice metaphor also tends to suggest that the relationship between candidate and supervisor aims to promote imitation. Such a conservative theorization of the relationship is not well suited to higher level reflective, creative and transformative thinking (Bjuremark, 2006).

Fourth, Wenger's discussion of COPs as a social theory of learning fails to specify the different types of learning that occur as part of the newcomer's socialising practices. Given this study's central concerns, this inability to distinguish between the different practices entailed in learning is a major shortcoming. In discussing the application of the COP framework to second language research Haneda argues:

In attempting to understand what is learned, it seems critical to articulate the kinds of practices that are taking place ... Unless these different types of practices are analytically teased out, it is difficult to tell what types of learning are occurring in relation to specific activities, events, or interactions. In this sense, the term participation risks becoming a black box, in which all types of learning are subsumed without critical analysis. (2006, p. 812)

If doctoral learning is to avoid remaining a black box, it is therefore essential to find a means of identifying and describing the different practices that it entails.

This discussion suggests that while COP's conceptualisation of learning as situated practice, its attention to all interactions involving more and less expert community members, and its emphasis on the community's shared practices are likely to generate insights into doctoral learning practices, it has a number of limitations. Lea, however, recommends adopting the approach as a heuristic and using it to interrogate the practices and explore the communities represented in the doctoral learning environment:

There is little recognition of the complex nature of communities of practice in higher education contexts, with too much emphasis upon the student as novice being acculturated into the established academic community Reinventing communities of practice as a heuristic is an important part of exploring and understanding learning contexts and their contrasting and often conflicting practices within the broad arena of today's higher education. (2005, p. 194)

Adopting the COP approach as a heuristic should therefore make it possible to explore the doctoral researchers' opportunities for participation, the relationships and structures which facilitate their access to the community's resources and possibly the identities they develop as a result of participating in a given COP. These are some of the central questions addressed in this study.

Academic literacies research

The second theoretical perspective drawn on in this study is that of academic literacies research (M. R. Lea & Street, 1998; Lillis & Scott, 2007). Lea and Street (1998) argue that educational research into student writing in higher education can be divided into three main perspectives: study skills, academic socialisation, and academic literacies. However, they critique the underlying assumption of the study skills approach — that literacy is a set of discrete transferable skills — and argue that the academic socialisation perspective falsely suggests that literacy practices are relatively homogeneous across the institution and that writing is a 'transparent medium of representation' (M. R. Lea & Street, 1998, p. 159). Consequently they favour adopting an academic literacies approach which:

views student writing and learning as issues at the level of epistemology and identities rather than skill or socialisation. An academic literacies approach views the institutions in which academic practices take place as constituted in, and as sites of, discourse and power (p. 159).

Lea and Street argue that academic literacies research takes account of both the study skills model and the acculturation processes associated with the academic socialisation model by incorporating them in its understanding of student textual practices as framed by 'institutional practices, power relations and identities' (1998, p. 158).

This study aligns itself with the academic literacies approach. Viewing international doctoral researchers' learning practices through an academic literacies lens emphasises the role and

influence of discipline-specific epistemologies and 'foregrounds the institutional nature of what "counts" as knowledge in any particular academic context' (M. Lea & Street, 2006, p. 368). This approach also allows international doctoral researchers' academic literacy experiences to be viewed systemically rather than as one-off experiences. The study also adopts Lillis and Scott's (2007) preference for the plural form "academic literacies" in recognition of the fact that literacy practices are multiple, situated and governed by the requirements of different genres, contexts and disciplines.

Adopting an academic literacies perspective provides a theoretical framework for exploring the discursive, textual and social practices associated with doctoral researchers' learning and research experiences. Reflecting on his experiences as a non-native English speaking graduate student, Braine argues that academic literacy at the graduate level requires 'more than the ability to read and write effectively'; it also requires graduate students to build effective relationships with supervisors and peers, develop research strategies and writing skills and 'adapt smoothly to the linguistic and social milieu of their host environment and to the culture of their academic departments and institutions' (2002, p. 60). In fact, it has been suggested that focusing on the non-linguistic aspects of discourse communities may prove more important in helping graduate students acquire academic literacy (Hasrati & Street, 2009). Newcomers learn to participate in new discourse communities and engage with academic literacies by interacting with more experienced others. One way in which this occurs is for example when supervisors provide scaffolded learning opportunities, although it has been noted that 'not all so-called experts are good socialising agents' (Duff, 2007a, p. 1.6). Clearly an important area to explore in newcomers' experiences of academic literacies is the quality of their introduction to target practices.

Studies which focus on the development of academic literacies are based on the notion that academic learning and writing are closely connected and that writing in the academy is a contextualised social practice. An academic literacies approach is therefore well suited to exploring doctoral students' efforts to acquire familiarity with the tacit conventions, underlying assumptions and ways of interacting that reflect the expert knowledge of participants in their disciplinary COP. It also provides a theoretical framework for analysing debates over the form of scholarly reporting, the impact of imposing norms in terms of writing and publication and the operation of power in such settings. The discussion also recognizes the identity work associated with individuals' decisions to adopt, manipulate or contest these practices (M. R. Lea & Street, 1998).

The rest of this third section of the chapter surveys research into the development of doctoral researchers' academic literacies in seven different areas. The first three discuss research into discursive practices associated with doctoral researchers' reading, oral and writing experiences, while the fourth focuses specifically on the writing practices of multiliterate doctoral students. The fifth section explores research into ways in which graduate students' academic literacies are developed. The sixth section considers variables which influence the development of academic literacies and the final section summarises the key ideas presented in this part of the discussion. The extent of previous research (reflected in the relative length of this part of the chapter) testifies to the complexity of the processes involved in developing the academic literacies required for graduate study.

Reading Experiences

Surprisingly little research has been conducted into the reading practices of graduate students; the vast majority of studies of academic socialisation focus on writing practices (for reasons which are discussed in section 3.2.3 below). However in a paper which presents case studies of four undergraduate students' experiences of reading, Mann suggests that in the academic context 'the normally neutral or pleasurable private activity of reading is *disturbed* by the potential for this activity to be made public through the various assessment activities which bound the student's daily reading life' (2000, p. 297). In the context of doctoral study, it seems equally possible that students' typical reading practices may be 'disturbed' by the ubiquitous spectre of appraisal. In a paper which describes her initiation into argumentative writing, Li cites Elbow's advice that, when reading, scholars should treat the texts written by 'fellow writers – as fully eligible members of ... [an ongoing intellectual] conversation, not treat them as sacred' (X. Li, 2008, p. 53). However, apart from such incidental references to personal approaches to reading, it appears that doctoral researchers are generally expected to be already competent in the reading practices associated with participation in the academic community.

One of the most challenging types of reading doctoral researchers are required to engage in relates to the review of previous research. The literature review, which lies at the heart of the doctoral thesis, presents a rationale for undertaking the research, describes and justifies the study's theoretical framework, design and methodology, and locates the project within the broader field of published studies (J. A. Maxwell, 2006). Crafting the review of research is therefore a high-stakes venture since it functions both as a blueprint for the doctoral study and a vehicle for displaying the researcher's skill at performing central practices of the discipline – selecting, critiquing and

synthesising ideas. It is this second function which causes novice researchers so much anxiety, since it is here, above all, that their claims to a scholarly identity are tested (Kamler & Thomson, 2006).

Given the importance of the literature review and the demanding reading and writing practices it entails, it might be expected to figure explicitly in doctoral researchers' cognitive apprenticeship. Yet published manuals offer little assistance beyond techniques of literature search and often reinforce the assumption that the literature review involves reading a finite list of references before embarking on the thesis project. Perhaps this explains why some novice researchers appear confused about the role it plays in conceptualising the research project:

The literature review will be the last thing I finish. It's only mostly a collection of quotes organised in (many) paragraphs. I don't like doing things twice so I haven't really written it yet since the whole structure of the review will depend on the findings of my research ... (Personal communication from doctoral researcher, September 14, 2009)

One important influence on literacy practices associated with the literature review is the "personal theories" which researchers hold regarding its purpose and characteristics. An account of a non-native English-speaking doctoral student (Cheng) and her interactions with one of her supervisors (Zhu) concerning her dissertation literature review reveals the profound influence that such personal theories can have. Cheng believed that the purpose of the literature review was to display the sum total of the knowledge she had acquired on her dissertation topic. In her view the key criterion of a successful review was therefore its comprehensive coverage of the topic. Her supervisor, on the other hand:

saw the primary purpose ... as advancing an argument and rationale for the proposed dissertation study ... I believed that a successful dissertation literature review ought to contain an argument developed through analysis, synthesis, and evaluation of theory and research relevant to the specific dissertation *study*, rather than be a thorough report of the research on the dissertation *topic*. (Zhu & Cheng, 2008, p. 137)

The authors are careful to point out that their views do not represent a right and wrong understanding of the purpose of the literature review, but rather reflect 'a division within the

educational research community as a whole over the proper form and goal of literature reviews that are part of dissertations and dissertation proposals' (J. A. Maxwell, 2006, p. 29). Their chapter reports how Cheng's developing text gradually became the focus of their discussions, which in turn allowed them to articulate and negotiate their different understandings. Accordingly, the authors argue for the importance of personal theories being made explicit in interactions between doctoral researchers and their supervisors so they can form the basis of discussion and negotiation.

A central concern for doctoral researchers as they begin working with the literature is the need to make important decisions about what to read. Kwan (2009) examined the guidance received by doctoral students in Hong Kong in deciding what to read as they began their review of the research. In her study, guidance was viewed as an aspect of disciplinary socialisation and a form of socio-cognitive apprenticeship. Kwan's participants reported obtaining guidance from a range of individuals including their supervisors, visiting academics, panel members and other academics. Analysis of the interview data revealed that, notwithstanding the guidance they received, the doctoral students found identifying the 'key' literature extremely challenging. Students who engaged in practices such as networking, attending conferences and collaborating with supervisors on research projects were successful in obtaining guidance from senior colleagues. Kwan suggests that better preparation of graduate students would involve dispelling the myths that doctoral students need to exhaust a finite list of references before embarking on their study, and that reading for the thesis is an autonomous process. Instead she recommends highlighting the socially situated nature of the process and the opportunities it presents for doctoral candidates to engage with expert members of the research communities they are seeking to enter.

But developing competence in the academic literacies associated with a specific discipline involves more than simply selecting texts and reading them. It also involves acquiring familiarity with the specialised language, concepts and theories associated with the field. In a disarmingly frank reflection on her graduate school encounters with the disciplinary literature, Casanave (a native speaker of English) reports having had 'numerous experiences of trying to read academic educational literature in English and not understanding what I was reading' (2008, p. 19). Her solution was to adopt avoidance strategies to mask her lack of understanding. Reading academic texts is demanding, not only because of the specialised terminology and theoretical frameworks, but because understanding them also demands a knowledge of the socio-political networks operating in the field, the ideological debates, the historical trajectory of ideas and the principal protagonists (Paré, 2011). While some supervisors may explicitly discuss such matters, many graduate students

are left to discern for themselves the nature and significance of these debates and allegiances and to reflect them in positioning their research. The magnitude of this challenge is such that it is likely to extend beyond the end of doctoral studies – ‘even with a successful dissertation experience, I and the students I knew had only begun to learn the participatory literacy practices of their fields’ (Casanave, 2008, p. 26).

Oral experiences

If reading is the principal means of accessing the literacy practices of the discipline, talking about those practices and the texts in which they are encoded is a crucial means by which doctoral researchers can develop a personal understanding of them. Oral learning experiences in the doctorate can occur in formal and informal settings — sometimes rehearsed, often spontaneous — in seminars, meetings with supervisors, conversations with peers, collaborative project discussions and conference presentations. Talking about concepts, theories, debates and texts can help doctoral researchers develop confidence in presenting and defending an argument — a skill which can later be transferred to written tasks:

effective critical oracy precedes critical literacy, and a most important aspect of this developmental process ... is that the students keep talking about their ideas and their thought processes regularly, in the first person, as they are formulating them. (Cadman, 1994, p. 7).

Talking about complex ideas in the language of the academy is therefore an important form of cognitive apprenticeship. However it is also extremely challenging, particularly when it occurs in a second language. Whereas many non-native English speaking graduates may have highly developed communicative competence in the language, developing advanced cognitive academic language proficiency (Cummins, 1980) requires regular opportunities to speak and write about cognitively complex ideas. As we shall see, in the highly globalised world of higher education, not all international doctoral researchers are provided with such opportunities. Writing about the challenges facing international students in higher education, Ryan and Viète (2009) highlight the fact that opportunities to participate in oral interactions may not be evenly distributed:

Being able to engage in dialogic interactions in learning environments is essential for international students to become full members of the learning community, and indeed, to learn. Yet many international students report that, despite their desire

to participate in these dialogues, they are not given adequate opportunity to do so. (2009, p. 305)

However, as the researchers point out, being able to express a view in such situations is only part of the challenge; in order to be accepted as a member of the learning community, students also need to be listened to.

One major site for oral interaction in the doctorate is supervision meetings. Discussion of work in progress, questioning of research methodologies and epistemologies and consideration of work published by other authors are all common topics when supervisors and doctoral students meet. Such interactions usually remain private, although a small number of transcribed supervision sessions are available in the literature (see, for example, Grant, 2003). A study of student-initiated advice sequences in Finnish Master's thesis supervision sessions (Vehvilainen, 2009) reveals important tensions at play in such settings. Vehvilainen's analysis identified two distinct questioning formats. In the less frequent format, students asked open-ended questions which reflected a clear lack of knowledge and elicited extensive assistance from supervisors. However the majority of the students' questions consisted of them seeking confirmation for a view they already held – in other words, they were proposing their own solution to the problem. Doctoral researchers need to demonstrate independence of thought and mind to their supervisors, since they are important gatekeepers for award of the degree. At the same time, they also need assistance with problems they cannot solve for themselves. These competing tensions may encourage candidates to adopt face-saving strategies at times, rather than reveal ignorance in areas where the supervisor might expect expertise.

A range of supervisor-initiated opportunities aimed at encouraging doctoral researchers to read and discuss ideas have been reported in the literature. Some of these can be viewed as supervisors' responses to perceived gaps in research students' skills. For example, Manathunga and Goozée (2007) report on one supervisor's efforts to develop her students' critical analysis skills by establishing a series of interest group meetings. At these meetings, students were asked to collaboratively develop a framework of critical analysis and then apply it in critiquing published articles and reviewing each other's writing. Interesting variations were reported between the supervisor's and the students' perceptions of the students' level of independence after the meetings ended. Whereas the supervisor did not perceive any significant increase in independence on the part of the students, she found that after the programme the students required less input and assistance from her, attributing this to the rich discussion of others' and their own texts during the

sessions. While three of the students rated themselves as more autonomous after the meetings, this cannot be attributed solely to the meetings. Furthermore, qualitative evaluative data gathered from the students also revealed differences in expectations of the sessions. While the supervisor's intention was to engender discussion and debate, some students regretted the supervisor's failure to present a 'definite stance' on the quality of articles being reviewed, and to evaluate students' opinions rather than simply welcoming them.

Opportunities for doctoral students to gain experience and confidence in presenting and discussing their ideas also exist outside of supervision meetings. Student-initiated writing and reading groups offer such opportunities, although some students may feel that such groups fail to offer the kind of critical feedback they seek. Informal meetings of staff and students in reading groups can provide non-threatening opportunities to observe and absorb academic discourse and behaviours, as one student commented:

I'm learning to talk about theoretical ideas and that is incredibly important. So it is about learning. For me ... all so much of this is about learning to be an academic.
(Boud & Lee, 2005, p. 507)

The importance of opportunities of learning to speak "like an academic" cannot be over-estimated. As a way of building confidence in giving presentations, Kuwahara (2008) recommends first giving presentations in smaller less threatening groups such as at student research conferences and only later "graduating" to presenting at larger conferences. Asking questions in seminars can be particularly challenging. Casanave (2008) tells an amusing but poignant story of asking a question about terminology in a lecture during her first year of graduate school and of being unable to understand the professor's explanation. After class, another student approached her, thanking her for asking the question as he too was struggling with the terminology. However, in a subsequent class, when the professor tried to engage Casanave in discussion, she was embarrassed and tongue-tied so that 'he never called on me again' (2008, p. 21). Such honest admissions are rare in the literature, particularly from native English speaking students; the experience of not understanding is almost certainly much less so.

Oral experiences of academic socialisation also extend to more formal events such as seminar and conference presentations. Morita's (2000) ethnographic study of the discourse socialisation of a group of non-native and native English speaking graduate students into oral academic presentations revealed that apprenticeship occurred through negotiations with teachers and peers as well as

opportunities to revise and rehearse. Morita concluded that oral academic presentations were 'complex cognitive and sociolinguistic phenomena' (Morita, 2000, p. 279). For example, in addition to summarising the aims and findings of the studies they were reporting on, presenters were expected to adopt their own 'epistemic stance' (Ohta, 1991, cited in Morita, 2000, p. 289) by expressing their view on the issues discussed in the article. In a formal academic setting therefore, giving an oral presentation is a crucial act of identity negotiation involving a number of complex demands:

the discourse and attendant socialisation into it typically involves being able to establish one's epistemic stance (as sufficiently knowledgeable but not arrogant) and credibility, establishing rapport with the audience and collaborators and mentor/instructor, fielding questions and leading a discussion following the presentation itself, handling critique well, and so on (Duff, 2007a, p. 1.9).

Furthermore, oral presentations are a hybrid variety of academic discourse (Duff, 2007a) in that they often include colloquial discourse at the start of the presentation (sometimes in the form of a joke or a compliment on the venue) and references to popular culture as well as more formal academic discourse. This hybridity adds complexity to the task, particularly for non-native speakers of the language. In Morita's study, the TESL learners' socialisation to the new practices occurred through 'dynamic moment-by-moment negotiations of expertise among participants who contributed different knowledge, experiences and specializations to the group' (Morita, 2000, p. 302). In a more recent study, Zappa-Hollman (2007) reported that even non-native English speaking graduate students with advanced language proficiency found giving oral academic presentations in English difficult, in part because they were given no guidance, modelling or opportunity to discuss task expectations. Doctoral researchers who give formal conference presentations face similar challenges; clearly the quantity and quality of support they receive in advance of such events has the potential to improve their confidence and chances of success.

Writing experiences of doctoral students

Writing is the third set of academic literacy practices to be considered here in relation to the findings of research into doctoral learning. The need for doctoral researchers to acquire effective writing skills is crucial for both the students and the institutions where they are enrolled. Not only is the development of scholars with good academic writing skills a central goal of doctoral education, but 'the quality and quantity of publications facilitate both a doctoral student's career and a

university's reputation' (Can & Walker, 2011). Furthermore, writing practices are centrally implicated in doctoral learning since writing is both a vehicle for thinking and a means of expressing understanding:

Although we usually think about writing as a mode of 'telling' about the social world, writing is not just a mopping-up activity at the end of a research project. Writing is also a way of 'knowing' – a method of discovery and analysis. (L Richardson, 1998, p. 345)

Indeed Parker (2009, p. 46) describes writing as 'the critical element of *practice* [emphasis in original] of relevance to higher degree research students' because of its role in the construction of scholarly and researcher identities. Another aspect of writing practices which may account for the attention they receive in academic literacies research is that they are central to the processes of assessment in higher education (Lillis & Scott, 2007) and particularly in doctoral research. Graduate research students are expected to proceed from 'knowledge telling' (Scardamalia & Bereiter, 1987) writing tasks, where they display their understanding of existing knowledge, to more complex writing tasks in which they actively construct new knowledge. These 'knowledge transforming' tasks are challenging because 'they ask new researchers to wrestle with issues of their own identity as novices writing to and in a community of experts' (Tardy, 2005, p. 325). For this reason, Thomson and Kamler (2010) argue that separating writing from other aspects of the research process is problematic. However, they claim that despite this, 'doctoral writing ... [is] a kind of present absence in the landscape of doctoral education ... something that everybody [is] worried about, but about which there ... [is] little systematic debate and discussion' (Kamler & Thomson, 2006, p. x)

Of critical importance to any discussion of doctoral writing is the fact that supervisors and students approach research writing from fundamentally different stances. Starke-Meyerring considers this to be the central paradox of doctoral writing:

what is normalized and appears universal to long-time members of a research culture is deeply culturally specific to that culture and therefore new to doctoral students. (2011, p. 77)

This situation is rendered more complicated by the fact that not all supervisors are skilled at articulating their deeply embedded knowledge of disciplinary discourse (Paré, 2011). Therefore in addition to having to engage with questions of knowledge production in their writing, doctoral

students are sometimes obliged to discover their discipline's conventions for themselves. Consequently, Starke-Meyerring argues that doctoral writing is 'deeply transformative' (2011, p. 80) since it transforms writers' understanding of the subject matter, the discipline and themselves. By contributing to their discipline's written conversations, doctoral researchers' identities are changed. However learning 'how to align themselves with and against the multiple and often competing theoretical, epistemological, or ideological factions within their research cultures' (Starke-Meyerring, 2011, p. 81) is a process which involves considerable struggle for most doctoral researchers.

Given the complexity of the contested research landscape within which doctoral researchers need to situate their work, most require guidance. Sometimes this process is facilitated by a more experienced community member, such as in the exemplary mentoring process described by Simpson and his supervisor Matsuda (2008). However for many graduate students, important lessons about the literacy practices of the academy may never be delivered explicitly, but rather absorbed 'in routine encounters with texts and with fellow novices, gatekeepers, and experts' (Hedgcock, 2008, p. 33). For instance, Hedgcock commends the 'value of viewing texts both as sources of disciplinary knowledge and as models to use in recognizing, analyzing, reproducing, and selectively reshaping textual conventions' (2008, p. 43).

The institution where students are enrolled also participates in their enculturation into disciplinary processes. The powerful influence of institutional norms and values is illustrated in Lea and Street's (1998) account of the confusion experienced by undergraduate students who were required to adopt different writing practices when writing assignments in different courses. Ridley argues that, particularly when working with international students:

there is a need [for academic staff in higher education] to become aware of and be able to articulate the underpinning epistemologies of a discipline, and thus become sensitive towards ways of enabling access for newcomers to the current conventions in a particular academic discourse community. (2004, p. 105)

Undergraduates and graduates alike are expected to learn and adopt the writing conventions of their disciplines. However, as Lea and Street indicate (1998), newcomers to the academy are also free to test the boundaries of their new COP by not conforming to the established practices, but the associated risks deter most from attempting this.

Another major source of challenge for doctoral writers is the need to develop a scholarly voice:

Academic discourse socialisation ... involves developing one's voice, identity, and agency in a new language/culture. Learning scientific discourse, in this view, involves learning to think, act, speak and write like a scientist in a scientific community of practice (or a simulation of one). (Duff, 2007a, p. 1.4)

If it is to not merely repackage existing knowledge, academic writing requires the author to adopt a stance and present evidence in supporting that stance. However, the act of adopting an authoritative stance in academic writing 'is anything but natural for a graduate student' (X. Li, 2008, p. 48). This phenomenon has been referred to as the 'novice-as-expert' paradox by Sommers and Saltz (2004, p. 133) in their discussion of undergraduate writing, but the description applies particularly well to the challenge facing doctoral writers. Writing requires doctoral researchers to position themselves as authorities in a field in which they are relative newcomers. When viewed in terms of the COP framework, academic writing demands behaviours and confidence that are unlikely to feel legitimate for newcomers, particularly if they are non-native writers of the language:

in order to write a good academic paper in English, the student has to exercise a privilege that she does not possess; perceive herself as an insider when she is on the periphery ... and adopt the attitude that "I know what I am talking about" when she does not know nearly enough to say anything with true authority. (X. Li, 2008, p. 49)

Such doubts and insecurities affect scholars writing in their first language too (Costley, 2008; Hedgcock, 2008). Duff claims that there is no reason to believe that native speakers' ability to engage effectively with sophisticated literacy practices should be superior (2007a).

The intimate relationship between a scholar's text and their identity reflects the high stakes involved in academic writing. Writing with authority and confidence demands considerable skill and involves significant risk. Within the social practices of the discipline, publication of scholarly work can be viewed as an invitation to engage with and, by extension, critique a scholar's text. Therefore it requires considerable courage for novice researchers to stake knowledge claims within their discipline by publishing their work. Engaging with feedback on one's writing can be traumatic for:

Nowhere is the connection between identity and text as clear as it is when scholars get together to debate the relative merits of particular texts. There is continual slippage between the person and the text. The text is an extension of the scholar, a putting of 'self' out there which is either successful – or not. (Kamler & Thomson, 2006, p. 15)

In highlighting the symbiotic relationship between the production of text and the self, Kamler and Thomson write of the doctoral researcher's 'mutual construction of text and identity' (2006, p. 66). This phrase succinctly explains the anxiety many doctoral students associate with writing. In producing a doctoral thesis, they are genuinely putting themselves on the line, attempting to insert themselves into disciplinary debates that have been raging since long before their PhD project was envisaged and which will continue long afterwards. Thomson and Kamler (2010) present examples of novice scholars' texts which reflect this ambivalence, as well as a more authoritative text which incorporates a confident discussion of previous researchers' contributions and positions.

Much of the challenge of academic writing resides in the fact that '[w]hether consciously or not, writers convey a sense of who they are, and the discursive practices they are able to draw on' (Starfield, 2002, p. 125). This means that doctoral researchers risk exposing weaknesses in their thinking and analysis when their writing is read by expert members of their discipline, prompting one doctoral researcher to describe sharing her writing with others as 'an intellectual striptease' (Caffarella & Barnett, 2000, p. 46). In a study which examined the title pages, tables of contents and introductory chapters of twenty PhD theses in History and Sociology from an Australian university, Starfield and Ravelli demonstrate that the choices thesis writers make concerning the macrostructure of their texts and the way they represent themselves (e.g. in relation to use of the first person pronoun or not) are 'sites of identity negotiation where the writer begins to align him or herself with a research tradition' (2006, p. 226). The identity work in which doctoral researchers engage is perhaps most intense in the literature review (Starke-Meyerring, 2011) since:

literature reviews are *the* quintessential site of identity work, where the novice researcher enters what we call occupied territory – with all the immanent danger and quiet dread this metaphor implies ... (Kamler & Thomson, 2006, p. 29)

Given the associated challenges, doctoral researchers are likely to need particular help with this aspect of their writing, yet, as is discussed below, not all supervisors are adept at providing helpful guidance (Paré, 2010a).

In seeking to acquire expertise in the academy's writing practices, some research students may choose to 'mimic the language and behaviours they consider appropriate for the understanding with which they are struggling' (Kiley, 2009, p. 296). Kiley argues that research students experience 'rites of passage' during the research process which are characterised by changes in state and status and the accompanying phenomenon of becoming 'stuck'. She claims that when students become 'stuck', they are particularly likely to mimic other writers' behaviours, as they consciously or unconsciously attempt to pass themselves off as competent. Such behaviour is a temporary strategy for masking a lack of competence — 'However ... when mimicry extends past the learning phase and becomes a proxy for learning ... difficulties can arise' (Kiley, 2009, p. 296).

Writing experiences of multiliterate doctoral students

While the previous section has outlined the principal challenges which most doctoral researchers face in writing for publication and producing their thesis, this section highlights some additional issues faced by doctoral researchers who are writing in a second language.

Many international students who enrol in postgraduate study are already successful writers in their first language and have established a strong writer identity associated with that language (Hirvela & Belcher, 2001). Therefore, experiencing the transition from a confident and authoritative first language writer self to what may initially seem an awkward and unsophisticated English language identity may be frustrating and even distressing for some. Shen, a Chinese scholar of English literature, writes of the ideological and identity struggles he experienced when he began writing in English at university:

To be truly "myself", which I knew was a key to my success in learning English composition, meant *not to be my Chinese self* at all. That is to say, when I write in English I have to wrestle with and abandon (at least temporarily) the whole system of ideology which previously defined me in myself ... In order to write good English, I knew that I had to be myself, which actually meant not to be my Chinese self. It meant that I had to create an English self and be *that* self. (Shen, 1998, pp. 125-126).

Li, another Chinese academic, comments on how her understanding of Shen's claim has changed with the development of her own scholarly writing profile:

I believed Shen was referring to the ethos that the writer creates in the writing, not to the self in its ontological sense, for one could not manufacture a new self as demanded by the occasion. However, a doctoral dissertation, a few publications, and two decades later, I have come to read Fan Shen's claim differently: Writing a thesis with an argumentative edge, I now believe, requires an identity different from the self-effacing, conduit-like subjectivity I assumed when writing my master's thesis in Chinese. (X. Li, 2008, p. 47)

Li's chapter explains how, in the course of her graduate studies in the USA, she learned to appreciate the significance of the argumentative element of academic papers in English and documents her personal struggle to adopt an authoritative personal stance in her writing in English.

For writers educated in a different rhetorical tradition, the tension between maintaining a sense of personal identity and accommodating the rhetorical demands of the university may be particularly acute. Phan Le Ha is a Vietnamese academic in an Australian university who writes passionately about the place that writing in English occupies in her professional life:

Like Casanave (2003), in the search for a meaningful voice in scholarly writing, I have realized "I am not a victim of disciplinary discourses, but an active agent in choosing how to represent myself in writing" (p. 143). This does not suggest that I blindly and stubbornly reject existing norms and practices. Instead, I do acknowledge and incorporate them in both content and the form of my writing, but in my own voice(s). (Phan, 2009, p. 137)

In discussing her Indonesian graduate student's struggle to sustain his identity when writing in English, Phan reminds us of the ubiquity of culturally situated notions of "literate" forms, "relevance" and "politeness" to which multiliterate writers are automatically expected to conform. However her article also demonstrates the way in which her student appropriated English in creative ways in completing his thesis.

Given these complexities, the writing support and guidance provided to multiliterate doctoral scholars is crucial. A study undertaken at two US universities which surveyed 137 first and second language graduate science students about their dissertation writing experiences (Dong, 1998) painted a rather bleak picture of the quality and quantity of writing support provided. While the students reported receiving help with multiple aspects of the thesis, 'professors' reports of the kinds

of help they provided were uniformly more generous than their students' own estimates.' (Dong, 1998, p. 376). For instance, professors were more likely than students to claim that they had helped their candidates with deciding on the topic, developing ideas, drawing conclusions, avoiding plagiarism and incorporating article citations.

Graduate students might also be expected to seek advice and feedback on their writing from their peers. However Dong's (1998) study found that, despite 60% of the respondents being involved in research which involved collaborative teamwork, many were isolated in terms of access to support with their writing, with almost half of the non-native students receiving writing help only from their supervisor. More disturbing still, nearly 20% of the non-native graduate students reported that they had no interaction with either fellow-students or staff regarding their dissertation writing. Dong concludes that non-native graduate students are disadvantaged by their lack of social networks, their unfamiliarity with other writing resources and their advisors' apparent ignorance of their struggles.

Writing for publication or drafting chapters for the thesis in a second language is likely to require considerably more time than writing in a first language since non-native users of English need to attend both to crafting and structuring their ideas and addressing language issues. Disturbingly, however, Dong (1998) found that supervisors treated the texts of non-native graduate students differently from those of their native students. Whereas the supervisor required native graduate students to revise their journal articles on average 4.7 times, non-native graduate students were only required to revise theirs on average 2.7 times. While these figures may reflect different amounts of drafting assistance provided to native and non-native graduate students, the figures also highlight the possibility that international students' opportunities for developing their academic literacies are more limited than those of local students.

The development of academic literacies

Given the complex nature of academic literacies, developing competency in scholarly reading and writing is likely to require considerable time. Parker suggests, for instance, that 'improvements in [scholarly] writing might take an extended period of time, perhaps the length of doctoral degrees and beyond' (2009, p. 52). Lea and Street view the processes involved in 'acquiring appropriate and effective uses of literacy as ... complex, dynamic, nuanced, situated, and involving both epistemological issues and social processes including power relations among people and institutions, and social identities' (2006, p. 369). Competence in advanced academic literacies also

demands 'rhetorical insight into the disciplinary community's ways of building and disseminating knowledge' (Tardy, 2005, p. 326). The kind of rhetorical knowledge which graduate students need to develop:

is the part of genre knowledge that draws upon an understanding of epistemology, background knowledge, hidden agendas, rhetorical appeals, surprise value, and kairos (rhetorical timing), as they relate to the disciplinary community in which a given genre is situated (Tardy, 2005, p. 327)

The complex learning associated with acquiring academic literacies leads one to expect a highly developed pedagogy of doctoral reading and writing to have evolved in higher education. However, Rose and McClafferty claim that despite the fact that 'the quality of scholarly writing is widely bemoaned ... we seem to do little to address the quality of writing in a systematic way at the very point where scholarly style and identity is being shaped' (2001, p. 27). Instead, doctoral researchers appear to develop their academic literacies in a mostly implicit process by reading and writing extensively within a particular domain while receiving differing amounts of guidance from their supervisors or mentors:

... as Paré et al (forthcoming)¹ note, apart from one-to-one work with their supervisors, doctoral students in many disciplines are left to learn the normalising ways of writing and speaking in their research communities by observation and trial and error. And, as they demonstrate, supervisors are often poorly equipped to address the need. (A. Lee & Aitchison, 2009, p. 90)

Kamler (2008) comments specifically on the lack of support for developing doctoral researchers' writing practices. In a paper which explores the patterns of supervisory support for publication experienced by six doctoral graduates in education and six in science, she notes that the science graduates experienced significantly more support from their supervisors, principally in the form of co-authorship. While five of the six education graduates also published from their thesis, they

¹ Paré, A., Starke-Meyerring, D., & McAlpine, L. (2010). The dissertation as multi-genre: Many readers, many readings. In C. Bazerman, A. Bonini & D. Figueiredo (Eds.), *Genre in a changing world* (pp. 179-193). West Lafayette: Parlor

published in less prestigious journals and, in one case, only in response to invitations for papers. Kamler concludes:

it is important to scaffold student publication and create structures in our disciplines that enable students to participate ... A key move ... would be to rethink co-authorship more explicitly as a pedagogic practice rather than as an output-driven manoeuvre to increase productivity. (2008, p. 292)

Co-authorship is therefore one pedagogic practice which supports the development of students' advanced academic literacies. However given the introduction of new forms of doctoral degree such as the thesis by publication, the development of more systematic and structured practices for supporting the development of research student writing may be required (Kwan, 2010).

Kamler and Thomson argue that the supervision experience is the ideal 'pedagogic space' for doctoral students to learn about and experience the textual practices of the academy (2006, p. 10). Where the supervisor possesses both expertise in writing and the ability to articulate that expertise, the possibilities for learning are rich. An excellent illustration of effective doctoral writing pedagogy can be found in a case study of a doctoral researcher (Sam) and her supervisor collaboratively responding to unfavourable feedback received on an article Sam submitted for publication (A. Lee & Kamler, 2008). The supervisor adopts a range of 'pedagogic moves' (p. 516) as she encourages Sam to view the feedback as helpful rather than emotionally damning, and supports her in planning, revising and resubmitting the article. This rare glimpse of the internal workings of a productive supervision relationship reveals the complex mix of affective, social and cognitive processes that operate in such discourse. It also reveals the rich learning opportunities inherent in supervision encounters which 'unpack' routine academic literacy practices.

Effective writing-related pedagogies for doctoral students are likely to involve a combination of discussion and practical experience since 'language by itself is inadequate to make tacit knowledge explicit' (Elton, 2010, p. 158). In a US-based study of 45 doctoral candidates, Caffarella and Barnett (2000) found that critiquing their peers' writing, and receiving feedback from professors and peers on successive drafts helped the students understand the process and produce better texts. Other studies too highlight the benefits of doctoral researchers giving and receiving feedback on writing (Haksever & Manisali, 2000; Simpson & Matsuda, 2008; Thein & Beach, 2010).

Collaboration between expert and less experienced writers offers particular benefits. Thein and Beach (2010, p. 122) discuss the benefits of ‘mutual engagement in collaborative research’, ‘co-authored research’, ‘reciprocal review and evaluation’ and ‘networking’ which their writing collaborations as doctoral researcher (Thein) and supervisor (Beach) generated. The feedback which Beach provided on Thein’s writing ‘modelled strategies for self-assessing her independent publishing’ (2010, p. 124), reflecting the supervisor’s goal of gradually transferring responsibility for revision to the candidate. The *reciprocal* aspect of the authors’ collaborative review process is particularly striking, with instances provided where Thein gives feedback on her supervisor’s writing in the context of a co-authored publication. Thein and Beach also make a case for networking as a strategy for enhancing writing, arguing that by interacting with more experienced researchers, doctoral researchers can enhance their ability to engage with an audience, understand the role of argument and acquire confidence in their scholarly voice (see also Kamler & Thomson, 2006; Simpson & Matsuda, 2008). While it has been noted that ‘the politics of co-authoring’ is complex (Cho, 2004, p. 66) — particularly where the collaboration involves a native speaker mentor and a non-native mentee — Cho maintains that such collaborations can be beneficial in spite of potentially unequal power relations.

However, the acquisition of scholarly writing expertise requires more than just observation, interaction and practice. Paré (2010b) identifies three additional strategies for helping doctoral researchers develop confidence and authority as writers. The first involves providing students with opportunities to experience the ‘heuristic power of writing (and speaking)’ (p. 31) where they can use writing to explore and develop their ideas. The second strategy entails directing attention to the discourse of the discipline in which the student’s work is located (see also Duff, 2007a). Paré argues that:

[a]cademic disciplines are complex communities with contested terrain, competing theories, historical rifts, methodological rivalries, and hostile factions.
(Paré, 2011, p. 69)

The complex and contested nature of the disciplinary terrain demonstrates why doctoral researchers require guidance in developing their academic literacies. As one of the supervisors in Paré’s study explains to his student about her discussion of the work of two recognised authorities in the field – ‘just make sure that you’ve genuflected enough to them’ (Paré, 2011, p. 70). Paré also argues that doctoral researchers need to actually participate in their disciplines’ ‘conversations’

(2010b, p. 31), for example by presenting at conferences and writing academic articles. However, in order to do this confidently, they need first to understand the ‘epistemology, background knowledge [and] hidden agendas’ (Tardy, 2005, p. 327) of their respective disciplines. Yet Paré cautions that:

Neither genuine rhetorical contributions nor explicit attention to rhetorical practices are common experiences for doctoral students, as the literature indicates ... (2010b, p. 32)

Kamler and Thomson (2006) discuss a number of other helpful strategies for supporting doctoral researchers in their writing. These include representing sections of text graphically (sometimes called “conceptual mapping”) (see also A. Lee & Kamler, 2008), joint texting, reading text as a writer, syntactic borrowing, encouraging the development of reflexivity and modeling strategies for locating the writer’s work within the discipline (see also Paltridge & Starfield, 2007).

Doctoral researchers’ personal characteristics — their confidence, their sense of personal agency and their social skills — may also affect the amount and quality of the support they receive in developing their academic literacies. Riaz’s (1997) account of the process by which four Iranian doctoral students were inducted into the writing practices of their domains of study highlights their active efforts to acquire and expand the knowledge they needed in order to participate. While instructors and peers are mentioned in the PhD students’ accounts of their learning experiences, the students themselves were the principal agents in their own learning process. However not all doctoral researchers may be so proactive. For those who are reluctant to seek advice or assistance beyond their supervisory relationship, access to social and peer networks becomes critical. But as Dong’s (1998) study has shown, many international graduate students lack access to social networks.

Research has also shown that useful opportunities for acquiring academic literacies can occur in the context of collaborative student writing groups. Peer writing groups offer a supportive environment (Torrance, Thomas, & Robinson, 1993) and the opportunity to practise giving and receiving critiques (Caffarella & Barnett, 2000). Aitchison, who has conducted a substantial amount of research into student writing groups, argues for the unique benefits of this learning configuration:

peer interaction in writing groups is doubly powerful because peers test and extend their conceptual knowledge as well as their capacity to communicate this knowledge through writing. (2010, p. 87)

Research into the success of writing group initiatives undertaken at two Australian universities (Aitchison & Lee, 2006), one consisting of graduate students and the other of academic staff members, identified four pedagogical principles underpinning their successful functioning: first, group members identified with each other in various ways; secondly, the principal group process was that of peer learning; thirdly, the writing group represented a community within which members could learn; finally, the groups treated research writing as part of the 'normal business' (A. Lee & Boud, 2003) of academic life. The authors argue that an important element in the establishment of the groups was its model of proactive writing development that embedded writing within research, viewing writing as a process of knowledge creation and its rejection of writing groups as a 'crisis control' response (Aitchison & Lee, 2006).

In an attempt to further isolate the pedagogical practices associated with effective writing groups, Aitchison (2009) conducted a retrospective evaluative survey of the research writing groups she had been involved with in a large Australian university. Survey participants reported a large number of positive learning outcomes ranging from sentence-level and grammatical issues to writing about data, argument development and giving and receiving criticism. Aitchison provides a thorough description of the learning cycle in the writing groups she facilitated and produces an impressive analysis of both what was learned in this process (drawing on the self-report data she obtained) and how that learning occurred. One of the findings which surprised participants the most was that they learned from critiquing others' writing as well as from receiving feedback on their own writing.

Another productive peer writing group experience is described in a case study which reports how a doctoral researcher's efforts at mapping her thesis's macrostructure eventually resulted in her developing different parts of the thesis for publication in separate articles (A. Lee & Kamler, 2008). In a student-authored article reporting on the same writing group, participants identified the two main benefits of their participation as their experience of peer learning and peer review, and the way the group functioned as a 'community of discursive social practice' providing cognitive, social and emotional support (Maher et al., 2008, p. 263). The students also credit their participation in the writing group for changing the way they viewed writing. Whereas initially they considered writing to be a private process, by the end of the study they viewed writing as 'a matter of public and shared work' (Maher, et al., 2008, p. 263).

Parker (2009) also reports on the benefits of peer writing groups. The scholarly writing groups (SWGs) she designed aimed to capture a learning community approach to writing, incorporating participant-identified projects, engagement in practice, interaction and reciprocity in the feedback process and reflection. However, while participants claimed to have gained confidence, become more enthusiastic about writing and acquired knowledge of the features of scholarly writing, the majority did not feel that their ability to produce scholarly writing had improved and did not perceive the value of reflection. Parker argues that the findings can most likely be explained by the short-term nature of the intervention and the likelihood that it takes considerable time to modify graduate students' identity as scholars. The findings also add weight to the argument that socialisation into the writing practices of the discipline is more a question of acquiring new ways of interacting and learning than of learning discrete skills (Aitchison & Lee, 2006; M. R. Lea & Street, 1998).

This review suggests that a significant body of previous research now exists in relation to collective learning practices aimed at encouraging the development of doctoral researchers' academic literacies. The most successful interventions report a sense of community amongst group members, opportunities for group members to critique others' writing as well as receiving feedback on their own writing, a common goal of constructing a scholarly identity and a view of writing as a normal part of academic life (Aitchison & Lee, 2006; Maher, et al., 2008; Parker, 2009). It will be interesting to observe the extent to which these practices occur in the study participants' narratives.

Influences on the development of academic literacies

This final section of this discussion of the academic literacies associated with doctoral learning briefly considers the factors which might influence international doctoral researchers' acquisition of academic literacies. These factors include researchers' cultural, educational and linguistic backgrounds, their supervisory relationships, their prior experiences of writing in their first and additional languages, the disciplines in which their study is located, their personal circumstances and their access to support networks. Research relating to each of these areas will briefly be considered in this section.

Some international doctoral researchers may find the process of developing advanced academic literacies in English demands a significant amount of time and attention, particularly where expectations about disciplinary practices remain implicit. Universities in the English-speaking world have traditionally responded to increasing student diversity by expecting students to conform to

their institutional norms (Sheridan, 2011) without always acknowledging the time that the transition process might involve. Commenting on the UK higher education context, Archer (2007) suggests that despite the rhetoric of internationalisation, many universities view international students within a deficit model, blaming them for their unequal patterns of participation. She also suggests that international and “non-traditional” students’ experiences need to be attended to more closely rather than simply being championed as evidence of the institution’s liberal recruitment policies:

the policy focus upon reified student bodies as a key marker of ‘diversity’ and ‘equality’ within higher education masks the ways in which these bodies are located and situated within unequal social structures. This positioning shapes the choices, experiences and outcomes of the individual student bodies, and raises the question as to how ethical and just it is to drive forward the recruitment of these ‘diverse’ bodies without paying comparable policy attention to their experiences within the system. (2007, p. 647)

In some contexts, there is little recognition of the expertise that international students bring with them and excessive focus on ways in which their expertise differs from local norms. Ryan and Viète make a plea for greater sensitivity and respect for international students in Australia, arguing that the discourse of higher education in this country has sometimes promoted ‘stereotyped misconceptions and essentialised notions of students from particular backgrounds’ (2009, p. 304). In addition, international students are sometimes treated as a homogenous group rather than recognised as diversely talented, multiliterate, culturally sophisticated individuals.

Adjusting to the style of supervision provided may also be a source of challenge for some international doctoral researchers. Previous studies have signalled the need for research students to negotiate a comfortable style of working and mode of interacting with their supervisor (Fujioka, 2008) and the importance of both parties making their expectations explicit (Kiley, 1998). A recent Canadian study found that 22% of international graduate students and 34% of faculty supervisors have experienced student-supervisor conflict over issues such as lack of openness, time, feedback, unclear expectations and poor English proficiency (Adrian-Taylor, Noels, & Tischler, 2007). Given that in Australia it is common for graduate students to be supervised by academic staff from a range of cultural, linguistic and educational backgrounds, intercultural supervision relationships offer rich potential for both learning and misunderstanding.

More serious still is the claim that some supervisors may inhibit rather than support their students' learning. In an exploration of the nature and quality of doctoral supervisors' feedback on their students' writing, Paré (2010a) demonstrates that some have difficulty articulating their knowledge and recognising what their students do not know about the discipline and its discourse. His study obtained examples of 'feedback that ranges from the barely articulate to the savvy and even eloquent' (p. 108), which suggests that some doctoral researchers may struggle simply to make sense of their supervisors' feedback. This points to the potential for inequities to exist in the affordances doctoral researchers in different departments and universities enjoy.

Another factor which influences the development of international doctoral students' academic literacies is the extent of their previous experience with English. The significant challenge that writing for publication represents for any novice scholar is illustrated in Li's (2007) account of the process by which a Chinese Chemistry graduate, Yuan, wrote a research article in English. Yuan's blog postings highlight the huge number of decisions involved in producing an academic text which satisfies the conventions of the genre while also reflecting the writer's individual agency. The writing process is also shown to be an instance of highly situated learning, with Yuan constantly interacting both with his researcher peers and also with the wider academic community through his reading and rereading of published articles. The study reveals a novice multilingual scholar independently exploring and making sense of the "rules of the game" (Casanave, 2002) while adopting his own strategies and stance in crafting his text. In a similar study (Flowerdew, 2000), the publication of a scholarly article by a Hong Kong scholar is presented as an instance of legitimate peripheral participation (Lave & Wenger, 1991) in the discourse community. The article is noteworthy for its detailed account of the lengthy submission and revision process involved, and the contributions of a local editor, the journal editor, a reviewer and the in-house editor. Clearly the process of developing academic literacies can continue long after completion of the PhD.

The culture of the discipline in which the doctoral researcher's work is located may also impact on their learning. Differences can be seen, for example, in the tendency for thesis topics in 'hard' disciplines (natural sciences and science-based professions) to be specified by the supervisor and for researchers to work in teams on a common project under the supervisor's leadership (Becher, 1994). Students in 'soft' disciplines, on the other hand, typically choose their own topic and work on it independently seeking guidance and feedback principally from their supervisor(s). However findings from Neumann's (2007) study suggest that while aspects of this distinction still exist in broad terms, the 'reality is more complex' (p. 464). Where disciplinary differences are shown to

exist, they may impact on researchers' experience by, for example, determining the availability of a local network of peers.

But doctoral learning is not confined to cognitive and academic experiences. Emotions also play an important role in scholarly work (Pekrun, Goetz, Titz, & Perry, 2002) and therefore in what has been described as the 'rollercoaster' (Christie, Tett, Cree, Hounsell, & McCune, 2008) of doctoral study. Increasingly researchers are acknowledging the role of the emotions in higher education:

Attention to affect seems particularly pertinent since the doctoral education literature demonstrates that academic values may be incongruent and challenge a student's values ... Or, tension may exist between increased sense of membership within a field, and ... being treated as a student in the institution and as an academic at a conference ... (McAlpine, 2009, p. 2)

McAlpine suggests that researchers need to explore the way that individuals make use of their emotions to move their work forward. While individuals vary in the extent to which they speak openly about their emotions, it is to be expected that emotions will be triggered positively and negatively throughout all doctoral researchers' learning trajectories.

Lee and Williams also maintain that affect occupies a central role in doctoral learning, arguing that 'the emotional and irrational dimensions of the PhD experience are ... both a necessary condition *and* effect of the production of the subject of doctoral study – the licensed independent scholar' (1999, p. 6), and suggesting that 'the production of the putatively *rational, autonomous* subject of disciplinary knowledge is predicated upon both the production and the disavowal of the 'irrational' and the emotions' (1999, p. 8). Several of the senior academics who participated in the workshop where Lee and Williams gathered their data spoke of the relationship between abandonment and autonomy in their own doctoral studies. One participant claimed that he 'had to be a completely self directed learner' because his supervisor effectively 'abandoned' him:

I had to work out what reasonable goals were, talking it through with various people, I had to work out a plan of my own of what I was going to do, I had to learn how to write, I had to learn how to do all sorts of research of methodologies and strategies and so on and I had to find a way of putting it together. And that was an unbelievably formative educational experience. (A. Lee & Williams, 1999, p. 16)

Whatever we might think of the participant's account of this experience or of the supervisor's alleged 'abandonment' of his student, the student most probably experienced feelings of anxiety or stress at some point. Therefore, in this study the participants' narratives will be examined for any insights they offer into the role of emotion in their learning.

The final influence on the way doctoral researchers' academic literacies develop is the resources to which they have access during their learning experiences. The challenges faced by non-native English speaking international doctoral researchers mirror those of their local counterparts but go significantly beyond them, as suggested by Casanave and Li's coining of the term 'triple socialization' (2008, p. 3). One of the greatest sources of support doctoral students can draw on is their peer and social networks, which Hockey (1994) refers to as the 'student subculture'. However, as we shall see, access to such networks is not evenly distributed.

Summary

This discussion of the academic literacies associated with doctoral research has considered the range and complexity of the practices involved, researchers' opportunities for developing their competence in these practices and the additional challenge that mastery may represent for non-native-English-speaking researchers. Previous studies have suggested that some supervisors may either assume that the candidates they are working with are already competent in these practices or may lack the skill to provide an effective orientation to them. The other key finding is that acquiring competence in academic literacies is a long-term undertaking; full competence may not be achieved until well after the PhD has been conferred.

Learning contexts

This section of the chapter considers three different contexts in which doctoral learning occurs. First, it reviews research into learning which occurs within the supervision process. Second, it considers studies of the learning which occurs when doctoral researchers interact with peers, friends and family members. Third, it discusses research into doctoral researchers' interactions with members of their wider disciplinary communities. The fourth section introduces Activity Theory and considers its potential for conceptualising the interactions between students' learning in these three different contexts.

Supervision

This discussion of research into doctoral supervision practices identifies important findings in relation to student and supervisor expectations, the nature of the supervisory relationship, models of supervision, the particular experiences of international doctoral researchers and access to research cultures.

Expectations

One of the most critical aspects of effective supervision is the degree of overlap in the expectations which candidates and supervisors bring to the encounter (Kiley, 1998; Manathunga, 2005b). Expectations relating to the style of supervision, the nature of the supervision relationship, the frequency of meetings and conceptualisations of the goal of the PhD can have a significant impact on the establishment of a successful supervision relationship. One important aspect of candidates' expectations not often discussed explicitly is their motivation for enrolling in the PhD. Two frequently contrasted motives are preparation for an academic career and investigation of an issue deriving from professional practice which have been referred to as wishing to become 'a professional researcher' and wishing to become 'a researching professional' (McAlpine & Norton, 2006, p. 11). Where supervisors and their candidates assign different priorities to these or other aspects of the researcher profile, difficulties may emerge.

Another crucial aspect of expectations relates to the degree of independence that the doctoral researcher wishes to exercise. Manathunga and Goozée (2007) argue that many supervisors inappropriately assume that doctoral researchers are autonomous scholars before they begin their research degrees; this phenomenon has been referred to as the paradox of the 'always-already' independent scholar (Johnson, et al., 2000). Leathwood (2006) identifies a similar assumption in the discourses of UK educational policy and practices arguing that 'dominant constructions of the independent learner are gendered and culturally specific and as such inappropriate for the majority of students in a mass higher education system' (p. 611). Such expectations, if unchallenged, can cause doctoral students to experience 'benign neglect' at the hands of their supervisors.

Doctoral students also have expectations about the qualities their supervisors will embody. In a study which evaluated the supervision requirements of Engineering doctoral students at a UK university, three aspects of supervision were found to impact on student satisfaction: personal help, indirect research-related help and direct research-related help (Haksever & Manisali, 2000). The biggest perceived shortfall between students' expectations of supervision and their experiences related to the third category of assistance – the most quintessentially academic of the three. A

number of explanations have been advanced for possible differences between students and supervisors' expectations, including differences in educational background and experience. The most common recommendation for preventing misunderstandings is that expectations be discussed explicitly, both at the beginning of the relationship and at regular points through the process (Kiley, 1998).

There is some evidence however that effective supervision may be more a question of matching the doctoral researcher's and their supervisors' styles than identifying a set of specific behaviours or characteristics. Krase's (2007) case study of a dysfunctional relationship between a Korean MA student and her advisor demonstrates the negative impact on the student of working with an academic whose 'egalitarian' advising style conflicted with her desire for more directive mentoring. In contrast, however, a Canadian exit survey of student satisfaction found that international students and those enrolled in 'soft disciplines' (such as Linguistics and Education) required a personal and holistic style of supervision in order to obtain maximum benefit from their studies (Egan, Stockley, Brouwer, Tripp, & Stechyson, 2009). While the design of the Canadian study did not allow researchers to establish causal relationships between variables, they suggested that international students' perceptions of the amount of time their supervisors allocated them influenced their supervisory experience to a greater degree than was the case for domestic students.

This finding merits further consideration. At the heart of the doctoral experience in Western settings is the expectation that doctoral researchers will gradually assume more and more responsibility for directing, managing and monitoring their own work. Yet, this expectation may not be shared by candidates. A question worth exploring in the current study therefore is the degree of match between the participants' and their supervisors' views of the role each should take in the doctoral project. In relation to this aspect of supervision, it is interesting to consider the mechanisms supervisors might adopt to encourage their doctoral students to assume greater control of decisions relating to their projects over time. The metaphor of scaffolding has been advanced to describe this process (Hasrati, 2005) and is discussed further in section 4.1.2 below.

Expectations also play a key role at a more micro level in the doctoral learning process. Given the different educational backgrounds that doctoral researchers and their supervisors may come from, nothing should be assumed about familiarity with theoretical concepts, methodological approaches or writing conventions. In order to ensure smooth progress for doctoral candidates, expectations surrounding all such matters need to be explicitly articulated and negotiated. The consequences of not doing so can be 'agonizing' as is demonstrated eloquently in Hirvela and Li's (2008) account of

the consequences of their failure to discuss their respective understandings of qualitative results writing.

The competing expectations of doctoral researchers, supervisors and institutional policies highlight another source of tension in supervision experiences. While supervisors' interpersonal qualities (such as enthusiasm, patience, sensitivity and respect) may be highly valued by research students, institutional authorities are likely to be more interested in completion rates and the content of examiners' reports (Nulty, Kiley, & Meyers, 2009). An instrument developed by Pearson and Kayrooz (2004) to map the practices involved in research supervision identified four subsets of facilitative supervisory practice: Progressing the Candidature, Mentoring, Coaching the Research Project, and Sponsoring Student Participation in Academic/Professional Practice. When the instrument was tested on postgraduate research students in two institutions, it was found to correlate highly with an overall satisfaction measure. This finding suggests that research students are able to analyse and prioritise their expectations of their supervisors. Routinely encouraging research students and their supervisors to discuss their expectations of each other and the supervision relationship therefore seems a promising strategy.

One final source of divergent expectations relates to doctoral researchers' and supervisors' respective views of research and scholarship:

different conceptions of research are not tied to disciplinary differences ... This is consistent with Becher's (1989) analysis of the culture of academic departments. He demonstrates that individuals' conceptions of research are a function of a complex set of factors, of which disciplinary allegiance is only one. (Pearson & Brew, 2002, p. 145)

Therefore research students and their supervisors may not share a common view of the research endeavour at the heart of the doctoral learning process. Given the comprehensive set of skills, knowledge and personal attributes required for effective supervision and the increased diversity in doctoral researchers' characteristics and motivations (Pearson, et al., 2008), it seems sensible for doctoral researchers and their supervisors to explicitly discuss their expectations of the research process and the supervision relationship.

Relationship

The relationship between the doctoral researcher and the supervisor has been described as a 'high-stakes, intimate tutorial - possibly the most crucial educational relationship of a student's life' (Paré, 2011, p. 59). Consequently, the entire doctoral experience can be shaped by the quality of that relationship (McAlpine & Norton, 2006). In a study which set out to identify aspects of the supervisor-researcher relationship which are essential for working together effectively, Belcher (1994) analysed the relationships between three graduate students and their supervisors. She found that the most successful graduate student enjoyed a less hierarchical relationship with her supervisor than the other two, and that the two less successful graduate students appeared to have limited confidence in their mentors' 'sense of their own communities of practice' (p. 31). Furthermore, the mentor of the most successful student 'perceived mentoring as a means of changing both newcomers and the community, as both 'reproduction and transformation', to borrow terms from legitimate peripheral participation theory (Lave & Wenger 1991: 55).' This finding is critical, suggesting that supervision relationships which acknowledge the potential for learning by both parties, and where disciplinary practices can be contested and negotiated are more likely to facilitate successful academic socialisation.

Other studies of supervision have adopted the student's perspective. Fujioka's (2008) account of her experience of changing her dissertation topic and committee (supervisors) highlights the social aspect of participation in her 'dissertation community of practice'. After beginning her dissertation, Fujioka realised that she would not be able to interact in the style most comfortable for her, or to receive the kinds of guidance she needed from her chosen supervisor. She therefore took the courageous step of seeking a new supervisor. Fujioka acknowledges frankly the important role of power and status differences in her interactions with her supervisor and, in particular, the emotional burden associated with deciding to change her topic and request a new supervisor.

In contrast, Simpson and Matsuda (2008) report on a highly effective relationship between a doctoral researcher and his supervisor. While acknowledging that their experience may not be typical, the authors argue that it may provide a useful account of the roles and interactions which occur in a productive supervision relationship. Matsuda identifies four 'mentoring' roles for himself:

- (1) creating opportunities for attenuated authentic participation;
- (2) providing resources and support to help my collaborators succeed;
- (3) providing examples

by sharing what I have done or by inviting mentees to observe what I do; (4)
introducing my mentees to the social network of professionals in the field. (p. 93)

Matsuda illustrates what he means by 'attenuated authentic participation' by reporting a sequence of 'challenging yet manageable' activities which he assigned Simpson (his student) including copyediting the proofs of a collection of papers, transcribing a scholarly conversation and collaborating in a long-term meta-disciplinary study. The authors reflect that in order for a mentoring relationship to be successful, both parties need to commit themselves to a long-term relationship and 'not just ... a short-term bartering of services' (Simpson & Matsuda, 2008, p. 102). Unfortunately, given the structural and administrative circumstances of most doctoral researchers' candidature, such a relationship is unlikely to reflect the experience of more than a few doctoral candidates.

A very different but also highly positive narrative of supervision is provided by Bartlett and Mercer (2000) in a paper which emphasises the enjoyable aspects of doctoral learning. The authors suggest that 'predominant models of postgraduate supervision centre on a hierarchical metaphor of power ... which assumes a knowing supervisor who passes on knowledge to the unknowing student in a sort of rite of passage' (p. 196). Their rejection of this model prompted them to analyse and report on their own narrative of supervision in an effort to demonstrate that collaboration between doctoral researcher and supervisor is both possible and productive. They present three highly original metaphors to characterise their collaborative efforts (creating in the kitchen, digging in the garden and bushwalking) and suggest that their alternative model of supervision is capable of 'making the experience of postgraduate research enjoyable, strengthening and completable' (Bartlett & Mercer, 2000, p. 204).

The ways in which supervisors view the supervision relationship are likely to be as diverse as those of students. In one study of supervisors' perspectives on their role, interviewees highlighted the following terms to characterise their relationships with their advisees: friendly/professional, collegial, supportive/caring, accessible and honest (Barnes & Austin, 2009, p. 309). The term *collegial* is interesting to consider given the respective status of the participants in the supervision relationship. On the one hand, we have Belcher's (1994) finding that the most successful relationship was the least hierarchical, supported by Bartlett and Mercer's (2000) account. On the other, we have Barnes and Austin's (2009) report that one of the supervisors they interviewed

attempted to 'dismantle the power structure or at least blur the lines so that the advisee feels that the relationship is balanced and equal'. They go on to quote the examples the supervisor gave:

When we're sitting in my office and we're looking at something, or we're writing something, I have them sitting next to me so it does not look like they are a peon coming to be with the grand master ... I try to give them the impression that we're on the same team. This is a collegial, cooperative relationship, rather than adversarial relationship ... (Male, economics) (Barnes & Austin, 2009, p. 310)

It is perhaps unfortunate that the very words the supervisor chooses to describe his efforts raise questions about the sincerity of his attempts; in particular, the expressions – 'so it does not look like ...' and 'try to give ... the impression' raise suspicions that this is simply a ploy. The supervisor's efforts appear to be directed at projecting a particular image rather than challenging the fundamentally asymmetric nature of the supervision relationship.

One approach to learning what contributes to an effective supervision relationship is to explore the practices of those who have been recognised (both by their institution and their students) as doing an effective job. This approach underlies a study conducted by Manathunga (2005b) which reports the strategies successful supervisors adopt to identify warning signs when their students are having difficulties and to take preventive action. One of the most interesting aspects of this study is the wide range of reasons the focus group students provided for not wishing to discuss their difficulties with their supervisors. These included feeling that financial problems were shameful, believing that feeling stressed or depressed was normal for research students, fearing that the supervisor would view family obligations as a sign of 'divided loyalties', and feeling that the student was supposed to be "superhuman" like the supervisor. Manathunga argues that supervisors may be more successful at achieving timely completions if they are more closely in touch with their students' personal circumstances and adopt explicit pedagogical strategies to support their candidates' learning.

Often the relationship between supervisor and doctoral researcher is complicated by various hidden agendas. First of all there is the unequal power structure inherent in the institutional relationship which is exacerbated by the supervisor's dual role as gatekeeper and learning guide. There is also likely to be pressure on the supervisor to get the candidate to complete in good time (Manathunga, 2005b). Some supervisors may even be hoping, by supervising the student, to exorcise a previous negative experience with a candidate or their own unhappy experience of doctoral study (Johnson, et al., 2000). Candidates too are likely to have their own reasons for

enrolling in the PhD, not all of which they may have shared with the supervisor. Family pressures and expectations are common for many international candidates (Ingleton & Cadman, 2002), as are employer expectations for those on paid leave from their company or educational institution. The obvious conclusion is that candid discussion of expectations surrounding the supervision experience is likely to benefit all concerned. However, given the critical role of personality in the pairing of supervisor and doctoral researcher, it may well be that '[u]ltimately, whether the novice PhD students enter a supervisory relationship which facilitates successful adaptation to their new position, is largely dependent upon chance' (Hockey, 1994, p. 187).

Models of supervision

There are generally understood to be two main *modes* of graduate supervision. The most frequently adopted (Egan, et al., 2009) is the one-to-one tutorial associated with the social sciences or the 'soft' disciplines. In this approach, the doctoral researcher and the supervisor work together in a dyad, largely independent of others in the department. However there are multiple variations on this approach, notably where a doctoral researcher is assigned two or more supervisors at enrolment (as in the current study) and works with them regularly. The second mode — that of research group or laboratory-based group supervision — tends to be associated with the physical sciences or 'hard' disciplines (C. M Golde & Dore, 2001). In this approach, groups of research students, academics and research fellows work together on a common project and support each other in the process. The supervisor leads the group, but research students may turn to more senior students for assistance rather than look primarily to the supervisor for advice.

Gatfield and Alpert's (2002) review of different management styles of supervision resulted in the identification of two potential dimensions upon which supervision styles are arrayed — structure and support — and four resulting styles of supervision. The 'laissez-faire' style (low structure, low support) assumes that the candidate is capable of managing both the research project and themselves; the 'pastoral' style (low structure, high support) is based on the assumption that the candidate is able to manage the project but may need personal support; the 'directorial' style (high structure, low support) assumes that the student needs support in managing the project but not themselves; and the 'contractual' style (high structure, high support) is based on the assumption that supervisors and doctoral researchers need to negotiate the extent of support required in relation to both the project and personal issues. Interestingly, nine of the twelve 'excellent' Business Faculty supervisors nominated by their Dean for interview described their supervisory style in a way that identified their style as 'contractual'. Research such as this can most usefully be exploited not by prescribing different styles of supervision, but by encouraging supervisors and candidates to

refer to the component dimensions of the model as they negotiate an appropriate supervision style and working relationship at different points in the doctoral researcher's candidature.

One critical characteristic of doctoral supervision is that the researcher's needs are likely to change at different stages of the project. For instance, while many doctoral researchers are likely to value a more 'hands on' style of supervision in their first months of candidature, once their project is underway, they may well feel more comfortable meeting the supervisor less frequently. Furthermore, some researchers may engage in comparatively little writing near the beginning of their candidature but may value more regular meetings with the supervisor at later stages of their project in order to obtain feedback on their writing. This suggests that adopting one model of supervision at the start of candidature and adhering to it unwaveringly is unlikely to be successful.

In acknowledging this important characteristic of the supervision relationship, Gurr (2001) advocates a 'dynamic alignment' of the supervisor's style and the doctoral researcher's *current* degree of development. He argues that the goal of doctoral study is the adoption of 'competent autonomy':

The PhD process must ... produce graduates with competent autonomy who, independently of their supervisor, are cognizant of the norms, expectations and standards within their discipline and are able to assess their own plans and actions to ensure compliance with these. (2001, p. 85)

Gurr cites Boud (1988) in identifying decision-making as the hallmark of autonomous behaviour, suggesting that having the opportunity to take significant decisions about the project is a crucial element in the doctoral researcher's experience. Gurr's model, which draws on models from clinical and medical supervision, is operationalised in a tool (Fig 2.1) which seeks to facilitate communication between supervisor and doctoral researcher by tracking developments in their relationship, and responding to those changes. The key axes of Gurr's model represent the student's stage of development (dependent to autonomous) and the supervisor's style of supervision (hands-on to hands-off). Like Gatfield and Alpert (2002), Gurr characterises the potential outcomes of four different combinations of the student's status and the supervisor's style ranging from 'appropriate support' to 'benign neglect'. The model also plots a hypothetical line of alignment over the course of candidature, allowing for the doctoral researcher's degree of independence to fluctuate over time. Gurr reports that his model has been empirically tested with four of his doctoral candidates as a

prompt for reflecting on the supervision relationship over a three year period with considerable success.

Other researchers have argued that it is paradoxical to view the goal of doctoral education as the production of the autonomous scholar and that the notion of the independent, autonomous scholar is profoundly gendered (Johnson, et al., 2000). The practices of the supervisors cited in the paper by Johnson and her colleagues are characterised as 'invisible pedagogy' in one case, and 'half-teaching' in the case of a supervisor who claimed never to have read any student's thesis in full, implicitly justifying this practice as a means of cultivating independence. However, attempts to implement more caring models of supervision create new problems:

the feminist graduate student supervisor, endlessly responding to her students' needs and demands, certainly needs to be questioned too as an unsatisfactory alternative to the 'master' Tutor (Johnson, et al., 2000, p. 144)

Bjuremark (2006) discusses the characteristics of three common models of supervision which she terms the Teaching model, the Apprenticeship model and the Partnership model. In the first two models, the relationship between supervisor and researcher is asymmetric with the supervisor responsible for leading the project and sharing her/his knowledge of theory, methods and techniques. However, she explains that candidates can become dependent when the Teaching model is adopted, and that the Apprenticeship model is often associated with a transmission approach to knowledge. In contrast, the relationship between supervisor and candidate in the Partnership model is conceived of as symmetric, with communication between them characterised as dialogical, mutual and relational. Bjuremark argues that researchers are more likely to develop independence and a researcher identity when the Partnership model is adopted since their needs shape the relationship.

Green proposes viewing supervision as something more than the sets of relations between individual doctoral researchers and their supervisors. He argues that 'supervision must be reconceptualized as comprising much more than the stereotypical image of an isolated dyadic relationship between a supervising academic, the "supervisor", and a doctoral candidate, the "supervisee"' (2005, p. 153). Green argues that supervision is better conceived of in terms of the total environment within which postgraduate research activity is realised. By using the word 'environment', Green opens up the possibility of viewing the doctoral researcher's interactions with peers and other academics, their participation in discussions, seminars and conferences, and the

university's diverse human and material resources as potential contributors to the supervision process. Such an approach appears to better acknowledge the distributed nature of doctoral learning than a restricted focus on the dyadic supervision relationship.

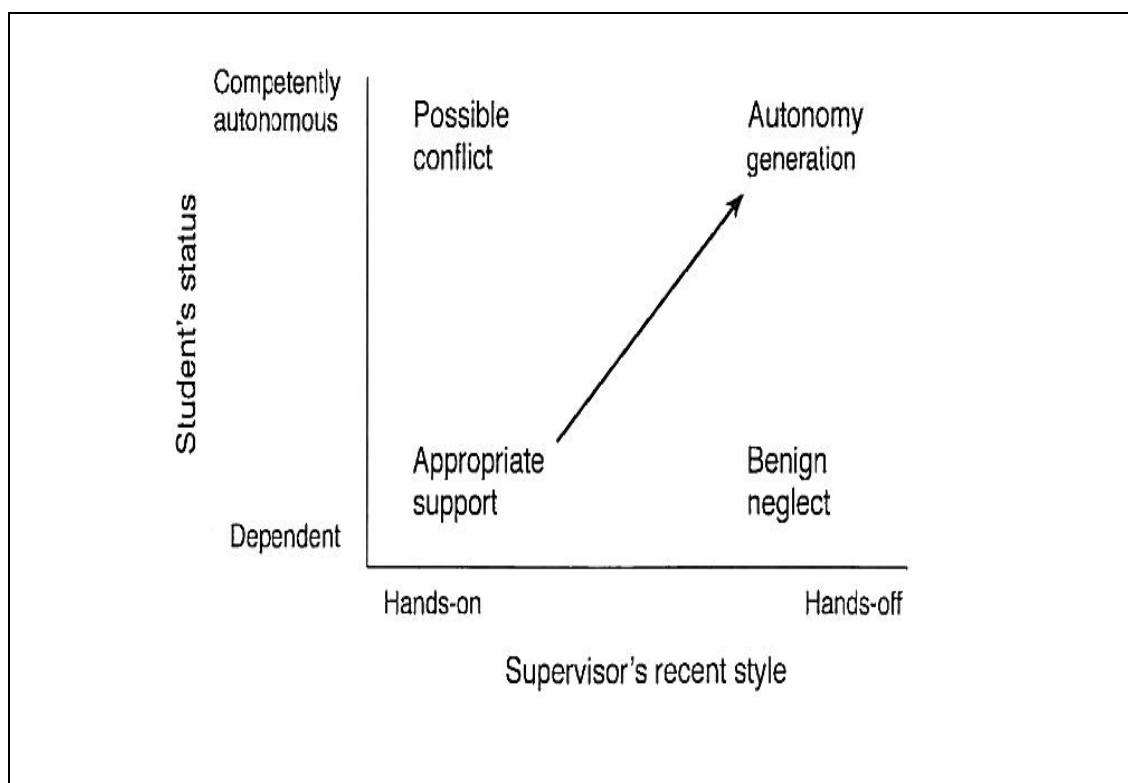


Figure 2.1 Supervisor/Student Alignment Model (Gurr, 2001)

Green also asserts the existence of a relationship between supervision and identity formation, arguing that doctoral education is 'as much about identity formation as it is about knowledge production' (2005, p. 153). He believes there is a particular relationship between the practice of supervision and the production of subjectivity. For him subjectivity:

refers to a post-humanist, constitutive understanding of the human subject, as formed in and through discourse, or discursive practice. That is, subjects are formed as an ensemble of knowledges, capacities, identities and dispositions through the interplay of specific social relations and social practices, mediated by language. (2005, p. 161)

Elaborating on this notion, Lee and Green argue for reconceptualising doctoral supervision as a 'shared responsibility' (2009, p. 616). Their discussion of metaphors adopted by the supervisors in their study to describe the dynamics and processes of supervision highlights the complex and

contradictory notions often held by individuals. For example, one supervisor refers to his role first as that of a 'coach' (someone who stands on the sidelines and encourages his students) and later as a 'goalie' (someone who positions himself between the student and their goal). In the first instance, the role involves assisting the candidate; in the second, it is inhibiting. While there is no doubt that both metaphors characterise the supervisor's role at different times, the difference between the two highlights the tensions inherent in the process of doctoral supervision.

A number of collective models of supervision have also begun to appear in the doctoral research literature in recent years. Interventions such as that described by Parker (2009) and discussed (in section 3.2.3) above propose a learning community approach to doctoral education incorporating participation in scholarly writing groups. Malfroy (2005) reports on two profession-linked doctoral programmes in Australia which incorporated seminars for groups of research staff and students as a strategy for providing a forum for discussing research projects and methods. While the seminars did not replace individual supervision sessions, they were considered equally valuable by many of the participants, and viewed as an important opportunity for networking beyond the supervision team, gaining feedback and growing in confidence. However, the innovation was not an unqualified success. Special characteristics in the cohort created unique tensions. Since most of the doctoral candidates were more mature and more senior in their paid roles than traditional doctoral students, many were sensitive to their positioning as students by their supervisor and the university. Consequently the researcher perceived the participants' relationships with their supervisors as significantly different from those of younger, less experienced doctoral researchers:

This relationship remained hierarchical, but not in the master/expert and apprentice/novice model. Students in the programs were not viewed as apprentices, as most had no intention of aspiring to work in academia, but were viewed as professional practitioners who will continue to work in their profession and who come to doctoral study with a comparable, but different, set of skills and knowledge to academics. (Malfroy, 2005, p. 177)

Nevertheless the unequal power relations caused one senior professional to report with some distress a session where her supervisor critiqued her work harshly in front of colleagues, an event she referred to as the 'postgraduate version of eating your young' (2005, p. 169). Nevertheless, Malfroy (2005) concludes that her project provides evidence of the value of conceptualising postgraduate pedagogy more broadly than simply in terms of the relationship between a single supervisor and a candidate.

Other studies have also uncovered tensions associated with the supervisor's role. One interview-based study of UK supervisors of doctoral researchers identified an overwhelming perception that graduate supervision involved a delicate balancing act between providing support and encouraging independence:

At all stages [of the research process] supervisors expressed a tension between tight control and non-interventionist supervision (Delamont, Parry, & Atkinson, 1998, p. 159)

Most of the study informants felt that they had been badly supervised during their own PhDs and claimed they wished to provide a better supervision experience for their students than they had had. One US-based study which sought the views of 25 exemplary advisors (supervisors) on their responsibilities, the functions of advising, characteristics of the advisor-advisee relationship and of advisors' behaviours (Barnes & Austin, 2009, p. 302). Those interviewed identified the advisors' key responsibilities as helping their students be successful, develop as researchers and develop as professionals, but also acknowledged and referred to four functions which helped them meet their advising responsibilities: collaborating, mentoring, advocating and chastising. This final function points to the sensitivity of the advisor's role and the existence of tension in the relationships. Ultimately Barnes and Austin conclude that 'effective advising is complex rather than formulaic' (2009, p. 311) which may suggest it is not easy to impart these exemplary behaviours.

This consideration of relevant research suggests that a number of different models of supervision exist. However the fact that doctoral researchers and their supervisors are likely to bring diverse motives, personalities and preferences to their encounter suggests that any attempt to be prescriptive about the way supervision is to be carried out is unlikely to be helpful. A more productive approach might be to encourage supervisors and their doctoral candidates to actively negotiate their relationship and method of working. Grant (2003) argues that graduate supervision is an inherently complex and unstable process which is subject to new pressures associated with the recruitment of more diverse students, the intensification of staff workloads and university management's drive for programme expansion. As a result, 'the complex and potentially fraught pedagogy of supervision may not be withstanding these pressures particularly well' (Grant, 2003, p. 189). These tensions highlight the need for supervisors and doctoral researchers to explicitly discuss their respective understandings of and expectations of supervision.

The quality of research supervision is of concern not only to doctoral researchers and the universities where they are studying, but also to governments and employers due to global competition in higher education and the link between research and national economic growth. However some researchers argue that employers' and governments' demands to improve the quality of graduate attributes are resulting in 'an increasing commodification and marketisation of higher and research education' (Cumming, 2010a, p. 412) by encouraging a focus on short-term training initiatives. In reflecting on the type of professional development which supervisors might benefit from in these changed circumstances, Pearson and Brew focus on the desired characteristics of doctoral researchers at the end of their research training:

what is needed is a complex outcome; i.e. a skilful performer rather than someone who can list their skills; someone who not only knows about what to do but knows how to apply that in practice.' (2002, p. 137)

Pearson and Brew's detailed discussion of the components which might contribute to a course of supervisor development — including conceptions of research and supervisory practice, the components of a productive research learning environment, the pedagogy of supervision and strategies for negotiating the candidate's research programme — attest to the fact that considerable knowledge, knowledge expertise and reflexivity go into the mentoring of accomplished researchers.

International students and supervision

Recent studies of international student experiences in higher education suggest that the first six to twelve months are a crucial period during which cultural perceptions of the new environment are formed (Hellstén, 2008). During this period broader processes of intercultural adaptation are salient together with students' introduction to the experience of supervision (Burnett & Gardner, 2006; Chik & Benson, 2008). However Bartram (2008) rejects the 'chronological' approach to student adjustment and proposes a hierarchy of international students' support needs which emerged from a qualitative research project involving students enrolled on a joint degree course delivered by universities in England and the Netherlands. Bartram found international students' principal needs to be sociocultural (e.g. cultural and social integration, personal and emotional support), academic (e.g. language support, academic advice) and practical (such as information on accommodation, and financial and careers advice) in that order of priority, regardless of background and length of time on the course.

In the case of international doctoral researchers, language, academic literacies and awareness of sociocultural practices are all areas of potential challenge. In particular, the supervision relationship represents a prime site where misunderstandings can emerge. In a harrowing account of unsatisfactory supervision, Mei, a doctoral researcher from China studying in Australia, complains of feeling ‘pedagogical alienation’ in working with a supervisor who appears unable to explain what is expected of her in her role as a research student (Aspland, 1999). Fortunately, after finding the courage to seek and obtain an alternative supervisor, Mei experienced a more participatory approach to supervision in which differences in learning approaches became the subject of discussion, rather than the cause of alienation. However, negotiating a change of supervisor is likely to pose considerably more pragmatic difficulty to an international student than to a local.

International students’ expectations of the nature and frequency of supervision meetings may differ from those of local students. A large-scale study in a mid-size Canadian university which drew on graduate students’ exit surveys over a nine-year period revealed that international students rated the provision of supervision time more highly than domestic students and that this influenced their overall experience of supervision more than it did for domestic students (Egan, et al., 2009). For some international students, regular meetings with the supervisor may represent the only guidance they receive on both academic and personal matters. A study of the perceptions of supervision of doctoral researchers enrolled at one Australian university revealed that international students met with their supervisors significantly more often than Australian students both in the early and late stages of their candidature (Heath, 2002).

A key focus of international doctoral researchers’ interactions with their supervisors is likely to be the written texts they produce as part of their doctoral studies, whether these are manuscripts for publication or chapters for the thesis. The quality of the relationship that researchers have been able to negotiate with their supervisors is therefore likely to play a critical role in determining the nature and extent of the support their supervisors provide in the development of their writing.

Access to research cultures

One of the most important dimensions of supervision is the opportunity it offers doctoral researchers to come to understand the research culture of their discipline. The term ‘academic research culture’ refers to:

disciplinary or interdisciplinary ideas and values, particular kinds of expert knowledge and knowledge production, cultural practices and narratives (for

instance how research is done, and how peer review is exercised), departmental sociability, other internal and external intellectual networks and learned societies. (Deem & Brehony, 2000, p. 158)

Experiences which can help make research cultures more transparent to students include discussing the values and beliefs associated with particular fields of academic study, ‘unpacking’ shared institutional knowledge, providing access to networks which provide academic and social support and sharing experiences related to being a researcher and research student. It is possible that ease of access to academic research cultures may differ in terms of the discipline in which a student is enrolled. Students who work in the sciences and belong to a team of researchers may find it easier to access this kind of discipline-specific knowledge. Furthermore, supervisors may differ in the amount of time they allocate to introducing their students to such practices and knowledge. Where a supervisor perceives the student’s timely completion of the project as the central priority, broad exposure to elements of the discipline’s research culture may be more limited.

There are a number of ways that research students can take the initiative in obtaining access to academic research cultures, such as by participating in discipline-specific research training, attending and giving seminar presentations, writing for publication, and establishing their own academic networks (Becher et al, 1994 cited in Deem & Brehony, 2000). However in order for learning to occur from such events, most research students also require the opportunity to reflect on and discuss their experiences, and so value the guidance and feedback that supervisors are able to offer. It is therefore a matter of concern if doctoral students’ access to such experiences rests on a matter of chance.

Peer, family and friendship networks

In addition to learning within the context of their supervision experiences, doctoral researchers also learn through informal networks made up of peers, friends and family members. The main distinction doctoral researchers make when talking about assistance they receive is between the *formal* support they receive from their supervisors, which is often directive in nature (Jazvac-Martek, et al., 2011) and the *informal* support they obtain from peers, friends and family in dealing with research-focused, practical and emotional issues. This section first considers the nature and range of doctoral researchers’ interactions with members of their personal networks and then discusses the way those different relationships contribute to their learning.

Nature of lived experiences

Doctoral researchers engage in a wide range of daily activities as part of their doctoral studies. In order to gain a clearer picture of the experiences representing doctoral work, researchers at two Canadian universities collected weekly progress logs from doctoral researchers over a two and a half year period (Jazvac-Martek, et al., 2011). The doctoral researchers reported participating in a wide range of academic-related activities and commented that personal matters often competed for time. The academic work that the researchers reported was principally focused around writing and reading activities, with one third of the 300 logs including both reading and writing. More surprising however, was that 75% of the activities the students reported represented informal learning, which the authors define as 'learning as a by-product of experiences that are not designed as educational' (Jazvac-Martek, et al., 2011, p. 22). Some of these informal learning experiences included giving presentations, reading the literature, having conversations with peers, preparing for student group meetings and completing a variety of writing tasks (from drafting abstracts to completing funding grants). A recent survey of Australian doctoral researchers complements this picture by indicating that most (78%) have been engaged in some paid academic work at one time during their candidature (Pearson, et al., 2008). Typically this work involves either tutoring or demonstrating, marking, research assistance and lecturing, or some other kind of academic activity. Such work is also likely to contribute (indirectly) to learning, and to the formation of the researcher's academic identity.

Another interesting finding from the Canadian study was the broad range of individuals with whom the doctoral researchers interacted. When asked to identify those individuals they had drawn on for support, only 20% identified the supervisor, whereas 45% identified family members, friends or other students. This finding may be related to the pressure many doctoral students feel not to disclose difficulties to their supervisors (Manathunga, 2005b). When asked to identify the person who most influenced their sense of progress during the period covered by the log, 32% of participants named the supervisor but 44% named peers, family, friends and others. Supervisors' contributions were most often 'directive' in that they provided information about institutional requirements or successful completion of the dissertation. Family and friends, on the other hand, were valued for their efforts at motivating and 'enabling' (for example, by making it possible for the student to attend a talk), whereas peers were appreciated for their feedback, support and for challenging the researchers in positive ways. This study provides valuable empirical evidence of the way that peers, family members and friends contribute to doctoral students' learning.

There is some evidence that gaining access to informal student research networks may be more difficult for international students than locals. A study conducted in two UK universities investigated doctoral researchers' access to research cultures including student-based networks. The authors considered that research student cultures included:

the sharing of symbols, values and beliefs about academic areas of study; shared ideas about politics, sport or leisure ... shared experiences of being a research student ... shared narratives about that experience; shared organisational ways of doing things; shared networks which are primarily about academic support and friendships; and finally, social networks and activities for both academic support *and* sociability. (Deem & Brehony, 2000, p. 153)

Deem and Brehony discovered that international and part-time students found it more difficult to access student research cultures than on-campus and local students. Issues which inhibited international students' access to these experiences included needing to adjust to the difference in their status (particularly for those who were university teachers in their own countries), adjusting to cultural differences and coping either with living apart from family members, or with the responsibility of managing the needs of family members who had accompanied them.

However, previous research provides some evidence that where supportive student research networks do exist, their role in contributing to student success may not always be recognised by the institutions where they are located. A group of doctoral researchers at an Australian university (Devenish, et al., 2009) described the positive contribution of their self-initiated peer study group which met to discuss methodological issues, provide mutual support and encouragement and create opportunities for collaboration in writing and presenting ideas. The researchers (all Australian students) note, however, that their meetings failed to rate a mention in the institutional annual report, suggesting that participation in peer networks is an invisible behavior and an area of 'strategic silence' in the institutional discourse. The researchers maintain, however, that participating in the student group was an integral part of their successfully completing their degrees (which four of the six were undertaking part-time), demonstrating that peer learning can make a salient contribution to individual doctoral students' learning processes.

Hockey refers to such peer support as part of the 'subcultural context' (Hockey, 1994, p. 185) of doctoral study and identifies an important benefit as being the potential for sharing and thus 'normalising' difficulties. When doctoral students discover that other students are experiencing the

same problems as they are, they come to realise that these difficulties are not due to their inadequacies but to aspects of the situation. However, not all doctoral students have equal access to a thriving and supportive research student subculture. A recent study which employed social network analysis techniques explored patterns of participation in doctoral student networks in a UK Management school (Pilbeam & Denyer, 2009). The authors reported that relationships formed by doctoral students fulfilled both instrumental (information seeking) and expressive (pastoral) purposes and tended to be formed by students who had enrolled in the same year and were studying in the same mode (e.g. full time versus part time). These networks were not affected by either gender or nationality. However in contexts where doctoral researchers enrol at different times of year and do not experience being part of a cohort, personal attributes such as confidence and agency (as well as practical factors such as student proximity resulting from shared office space) are likely to play a more significant role in the formation of peer relationships.

Contribution of peer, family and friendship networks

As the discussion above suggests, peers, family members and friends support doctoral researchers by motivating them and providing emotional and social support. Peers often help by providing practical information on a range of institutional and project-related topics and can assist with methodological and technical expertise and conceptual support. Doctoral researchers' preference for seeking support from these sources and reluctance to disclose difficulties to their supervisors appears to be linked to the complex power dynamics operating in supervision relationships (Manathunga, 2005b). The findings of a study of thesis acknowledgements (Hyland & Tse, 2004) supports what is common knowledge: many doctoral researchers attribute their successful completion to the support and encouragement of family and friends along with their own efforts and the support of their supervisors. The wide range of functions performed by members of a study group and its immensely positive contribution are clearly documented in the account by Devenish and her colleagues (2009). However the benefits of such groups are not easily reproduced by institutions which wish to extend such experiences to all their research students.

In their longitudinal study of doctoral researchers' experiences in two Canadian universities, Jazvac-Martek and her colleagues (2011) characterise researchers' relationships with their peers as offering motivation and feedback, whereas family and friends provide emotional support and practical assistance (such as by helping care for family members who are ill). Many doctoral researchers find it easier to seek advice from peers than from their supervisor, principally because peers are likely to be supportive and non-judgmental. Peer networks, therefore, are likely to provide

significant opportunities for growth in research confidence. While informal learning experiences are difficult to quantify, they are likely to constitute a highly significant site of learning for many doctoral researchers. While it is true that '[p]eers do not necessarily learn as a natural outcome of their being peers' (Boud & Lee, 2005, p. 515), it is also likely that for some, the more accepting nature of peer interactions may privilege that setting as a site for learning.

A recent study of doctoral researchers at four UK universities (Hopwood, 2010c) which explored the role played by the students' relationships with others in mediating their experiences, identified four salient themes in interviews with the students. First, relationships were used to meet students' learning, practical and emotional needs; second, in some cases relationships were themselves the focus of attention, such as when students invested time and energy developing close friendships with peers; third, sometimes the students deliberately used relationships to influence their learning, emotions or behavior such as when they scheduled supervision meetings before they felt they were ready, in order to motivate and accelerate their performance. Finally, the interviews provided evidence of students actively resisting or managing their relationships at different times, including, for example, the decision to avoid discussing personal issues with the supervisor. Hopwood's study demonstrates the range of ways in which doctoral researchers' relationships contribute to their learning.

Finally, there is some evidence that doctoral researchers' relationships with family members and their impact on learning need to be understood in a nuanced way. While, it is doubtless true that having access to support from family members is beneficial for doctoral researchers in terms of what Pilbeam and Denyer refer to as 'expressive support' (2009, p. 302), family commitments and responsibilities can also inhibit students' ability to integrate themselves in student culture (Deem & Brehony, 2000). International students who are accompanied by family members who require support in order to live comfortably in the host society may face particular challenges in this regard. Different challenges were observed in a study which explored the experiences of a small group of postgraduate international research students in Australia. This study found that not only did the students feel a strong sense of obligation towards family and colleagues back home, they also felt more anxious due to the absence of regular feedback, support and encouragement from family and friends (Ingleton & Cadman, 2002). Finally, a study which explored difficulties that can arise during doctoral candidature reported one student's belief that students who revealed they were having problems with family commitments were perceived as 'weak or less serious' by others in the

department (Manathunga, 2005b, p. 225). Findings from these studies suggest that the ways in which family relationships influence doctoral researchers' learning is complex and highly variable.

Disciplinary community

The previous two sub-sections considered the nature of doctoral researchers' learning experiences in the context of supervision, and in relation to their peer, family and friendship networks. This third section discusses doctoral researchers' opportunities to interact with members of their disciplinary communities, first through their departmental and institutional experiences, and then through their experiences beyond the institution.

Departmental and institutional experiences

The departmental culture and environment where doctoral researchers complete their formal work are important influences on their learning experiences. Pearson (1999) argues that researchers have failed to pay adequate attention to the department's role in ensuring the quality of doctoral candidates' experiences due to a persistent view of doctoral education as 'an aggregation of individual arrangements within an institutional policy framework' (p. 279). Indeed, the department where doctoral researchers are enrolled has the potential to play a much more significant role in their experiences than this characterisation would suggest. Boud and Lee suggest that the research education environment be viewed as a 'pedagogical space' (2005, p. 503) which affords participation in different networks of learning relationships at different times and for different purposes, including peer networks. One relevant theme in some research into student perceptions of the research environment however is the contrast between students' appreciation of peer networks and their feelings of exclusion in interactions with academic and other staff. A doctoral researcher in Boud and Lee's study, Claire, a former academic, spoke of:

disempowerment within the broader faculty environment by virtue of her position as a student. She spoke of feeling silenced in public forums, of being 'wiped out' in the physical, social and intellectual spaces of faculty life ... In contrast ... she spoke in detail of the relationships developed among the other full-time, on-campus students as a source of mutual assistance and support. (2005, p. 506)

In discussing these comments and the more positive ones of the other participant in their study, Boud and Lee conclude that the two students adopted radically different views of what 'doing a doctorate' represented. Whether this interpretation adequately explains the two candidates'

contrasting experiences or not, it is clear that the way doctoral researchers are treated in the research environment will impact on their possibilities for learning there.

Boud and Lee (2005) go on to advocate expanding the notion of 'peer learning' in the interests of developing a more elaborated theory of research learning as social practice:

Learning with and from fellow students as peers, learning to participate in faculty-based seminars alongside academics and visiting scholars, learning to participate in the research, presentation and publication and learning to network internationally with fellow researchers, for example, all involve complex notions of 'becoming peer'. (2005, p. 514)

In their use of the term 'peer', Boud and Lee evoke the possibility of doctoral researchers developing non-hierarchical relationships with their supervisors and other academics as well as with their doctoral researcher peers. However Claire's comments (above) signal that such experiences are far from the reality she experienced. Indeed, within a hierarchical institution such as a university, it may be unrealistic to believe that doctoral researchers can develop peer relations with academic staff members while simultaneously being positioned as students in institutional discourses and activities. Claire's comments underline the importance of academic staff paying attention to the departmental research environment into which new research students are welcomed.

A recent study, drawing on an extensive review of UK-based research in doctoral education, provides a rich account of the relationship between the academic unit (department, faculty) and doctoral researchers' experiences and outcomes (Leonard & Becker, 2009). The authors observe that despite the existence of a range of central services which could be helpful for research students as well as facilities and activities provided by the student union:

postgraduate research students are generally less involved in the social life of the university as a whole, and more embedded in ... their academic units' provision and processes. (2009, p. 74)

One possible reason for this is that postgraduate students may wish to be distinguished from the institution's undergraduate population, preferring to be treated as researchers rather than 'just students'. This may be the case particularly with international doctoral researchers who hold academic posts in their countries. Furthermore, different cultural perceptions of the appropriateness of discussing personal issues with a stranger can prevent international students

from taking advantage of institutional services such as professional counselling when they encounter personal difficulties (Okorochoa, 1996 cited in Leonard & Becker, 2009).

The provision of departmental resources and facilities has also been shown to impact on doctoral researchers' experiences. Leonard and Becker's (2009) review also observed significant variation in the provision of facilities such as office space, computers, photocopying and telephone access in different research institutions. Doctoral researchers who are allocated office space within or near the department tend to feel more involved in the departmental community, are able to network informally with staff and can more easily be included in research, teaching or other academic-related projects (Humphrey & McCarthy, 1999). Leonard and Becker (2009) also reported that short-term research training courses were valued more highly by international students than locals. In a finding which may be related, the authors also reported that international students appreciated being identified with a student cohort during their first few years of the degree (see also Deem & Brehony, 2000). Leonard and Becker conclude that many academic departments 'could and should do more to help their research students (2009, p. 83).

In discussing doctoral researchers' experiences within their academic departments, Leonard and Becker (2009) cite the familiar distinction (Becher, 1994) between science students, who typically belong to a research group and a laboratory, and students in the humanities and social sciences, who tend to work on individual projects and interact principally with their supervisor. Leonard and Becker's (2009) review of published research found that doctoral students in the sciences generally feel less isolated and complete their degrees in shorter time. Non-science students, in contrast, often feel isolated and therefore make greater demands on their supervisors. However the authors also caution that 'this dichotomy probably needs some questioning' (2009, p. 76).

Interactions with administrative staff can also impact significantly on how doctoral researchers feel about the department where they are enrolled. For example, the way that decisions affecting students are communicated to them, and the way they are positioned in (or omitted from) institutional reports and on websites can be interpreted as signalling a lack of respect. Furthermore, where administrative matters are not handled efficiently or sensitively, this can create a negative impression of the department. For instance, one student was shocked at the department's casual response to her request for advice on identifying an appropriately qualified academic adviser to supervise her project:

I was given the names of three possible supervisors. I wasn't introduced to them, I was just given the names. I just wandered around and knocked on people's doors to introduce myself... (Hockey, 1994, p. 184)

This example and others demonstrate doctoral researchers' vulnerability in relation to the culture of the departments where they are studying. One US study of doctoral student attrition found that students attributed other students' decisions to discontinue their studies to problems with 'advising, lack of financial support, faculty attrition, and departmental politics' (Gardner, 2009, p. 106) whereas faculty members in the same study suggested that the students concerned were 'lacking in ability, drive, focus, motivation or initiative' (p. 104). This tendency amongst academics to blame students who end up leaving the doctoral programme suggests a disturbing unwillingness to accept at least partial responsibility for the quality of students' experience.

For some doctoral researchers, participation in the life of their departmental community includes opportunities to teach graduate and undergraduate courses and to participate in departmental or faculty-based committees. One study found that students who were members of a faculty committee reported enhanced confidence in expressing their views and interacting with others with one commenting:

I can see myself later in my career in the university trying to do things like that, to improve ... the quality of life of the students, to improve the sense of belonging.
(McAlpine & Amundsen, 2007, p. 69)

Some researchers have emphasised the importance of doctoral candidates gaining experience as part of their research training with the different kinds of work that academics typically do (Pearson, Evans, & Macauley, 2004). As an example of this kind of work, one study (Hopwood, 2010b) investigated doctoral students' experiences in editing journals. Hopwood reports a wide range of learning processes adopted by the UK-based student participants while highlighting the range of prior skills and knowledge which they brought to their tasks, endorsing the claim made in a recent national survey of the doctoral population in Australia:

The data supports the contention that candidates ... bring a range of useful skills into their doctorates from their current or previous work experiences ... (Pearson, et al., 2008, p. 106)

One ubiquitous aspect of graduate student experience which operates at the departmental, faculty and institutional level is the seminar. It has been argued that the seminar has an important role to play in introducing students to central academic practices:

The seminar is a powerful means whereby what counts as academic-intellectual work is represented and authorised. This does not just involve the presentation itself ... but crucially also the exchange afterwards, in the manner in which individuals of varying authority and expertise engage with the presenter or with each other and the manner in which the presenter responds to and transacts with others in the session. It is for students a matter often of watching and learning how to be, how to interact and intervene, how to introduce and develop a commentary, however attenuated it might need to be in the circumstances, how to work with difference and disputation, how to speak and when ... (Green & Lee, 1995, p. 41)

This lofty elaboration of the functions of the academic seminar contrasts starkly with student decisions not to attend departmental seminars because they are inappropriate for their needs and deal with irrelevant topics (Leonard & Becker, 2009). It also fails to recognise the fact that departmental seminars are 'often perceived by ... students as occasions fraught with danger, in which their less than solid academic selves are likely to be exposed' (Hockey, 1994, p. 186). While it is easy to dismiss the students' comments as reflecting an unwillingness to commit time to activities which contribute only indirectly to their doctoral projects, their stance warrants consideration. The reasons students give for not attending seminars suggest that the rhetorical function of the seminar and its potential for modelling crucial academic practices are not well understood by all students.

Disciplinary community experiences

Doctoral learning can also occur when students interact with members of their disciplinary community beyond the department and institution where they are studying. Such exchanges occur when they participate in seminars and workshops at other institutions, present at conferences, submit manuscripts for publication and network with other researchers through email or face to face. These interactions are extremely important because they represent an opportunity for doctoral researchers to participate in the conversations of their discipline as community members, free of the institutional tag of 'student'.

Jazvac-Martek and her colleagues (2011) reported that the doctoral researchers they interviewed found their interactions with other academics more *collaborative* whereas their supervisory relationships produced more *directive* interactions. However it is not clear what proportion of the interactions the doctoral researchers were referring to were with other academics in their departments as opposed to academics from other institutions. Another paper however provides multiple instances of positive interactions where doctoral researchers' academic identities were confirmed, although 'the "confirmer" in these instances was very rarely the supervisor' (Jazvac-Martek, 2009, p. 260). This finding raises the possibility that doctoral researchers may benefit in particular ways from encounters with academics who are *external* to their supervision experience, since this is a means of 'testing' the legitimacy of their claim to an academic identity. It may also suggest that the institution-imposed identity of student can never be fully transformed in doctoral researchers' relationships with their supervisors.

When doctoral researchers present their results at conferences and receive positive feedback, this can have a very positive effect on their confidence. One student in a Canadian study described the impact of her interactions with academics at a conference in the following way:

The fact that I had confirmation from well-known experts in my field that the literature I had identified so far for my topics was pretty complete ... gave me confidence in my research skills and knowledge that I've acquired so far. (Jazvac-Martek, et al., 2011, p. 24)

Feedback from an academic other than the supervisor may be particularly important for international doctoral researchers for whom all the familiar markers of success (such as exam marks, recognition from colleagues, scholarships and prizes, support from family) are unavailable (Ingleton & Cadman, 2002). However previous research also indicates that conference participation can involve awkward identity-related tensions for doctoral researchers due to their being treated as a student by their supervisors but as a fellow researcher by other academics (McAlpine & Amundsen, 2009).

Other opportunities to collaborate with academics from outside their departments can also provide rich learning experiences for doctoral researchers. These experiences might include, for example, reviewing journal articles or conference papers, contributing to publications, organising conferences or participating in collaborative research projects. A recent national survey of doctoral candidates in Australia found that 72% had given presentations at domestic and 39% at

international conferences (with many having given more than one), and 50% had produced one or more refereed publications, with 26% having produced between two and nine (Pearson, et al., 2008, p. 105). Doctoral researchers' contributions in these different settings add to the nation's research enterprise, with one estimate suggesting that research students contribute 65% of Australia's university research output (Siddle, 1997 cited in Pearson, et al., 2004, p. 348). What is not known is how equitably opportunities and encouragement to engage in such activities are distributed.

Activity Theory

The three learning contexts discussed above — supervision, the doctoral researcher's peer, family and friendship networks, and the wider disciplinary community — should not be thought of as discrete environments. Cumming argues that a broader and more holistic conception of doctoral education is required which acknowledges the 'diverse range of relationships, networks, resources and artefacts within which doctoral work is embedded' (2010b, p. 33). Since doctoral researchers operate simultaneously in all three contexts discussed above, these environments are automatically interconnected. The three contexts also share other elements, such as the research culture of the candidate's discipline, and the goal of completing the degree (which is usually a key focus of researchers' institutional learning and their family's goals). Furthermore, events that occur in one setting impact on individuals and events in another, such as when pressure to complete a task by a supervisor-imposed deadline generates stress which the researcher expresses by losing patience with family members. What is needed is a theory which can allow the idiosyncratic experiences of individual researchers in different settings to be viewed systemically, so that the relationships between elements within each context and their impacts can be explored. This section explores the potential of Activity Theory for addressing this need.

Activity theory facilitates the examination of complex situations which involve the interaction of different 'systems' or entities (Engeström, 2001). As such, it is well suited to conceptualising the different forces which motivate and impact on doctoral researchers' learning experiences. Activity theory was first developed out of Vygotsky's psychological theory by one of his main collaborators, A.N. Leont'ev (Russell, 1997). However it has subsequently been adopted by researchers in many different countries and applied to studies in a range of fields including education, language socialisation and computer interface design.

Like social constructionism, activity theory traces cognition and behaviour, including writing, to social interaction. Like dialogism, activity theory does not

posit some underlying conceptual scheme or deep structure for explaining behaviour ... but it does look at the reciprocal mediation of behaviour in mutual exchange and negotiation. Both dialogism and activity theory move from the social to the individual in their analyses. The object of analysis is neither texts nor minds nor conceptual schemes per se but what is in between – the social intercourse. (Russell, 1997, p. 509)

What is of most interest to this study is the potential of Activity theory (AT) to 'link individual experiences with wider systemic elements and tensions' (Hopwood & Stocks, 2008, p. 196) by exploring the relationships between individual researchers' behaviours, their resources and the communities in which they are situated. Furthermore, AT provides a way of explaining the tensions and contradictions which arise within and between the elements of an activity system since it is an 'inherently ... dynamic structure, continuously undergoing change in its parts, its relations, and as a whole' (Roth, 2004, p. 4).

Mapping doctoral learning onto Activity Theory

Activity systems are described in terms of relations amongst six elements (Engeström, 1999): a *subject* is engaged in an activity whose long-term goal (*object*) requires the adoption of various *artifacts* (cognitive and material resources, concepts etc.). The subject's activity occurs within a *community* governed by *rules* and is characterised by various *divisions of labour* (see Figure 2.2).

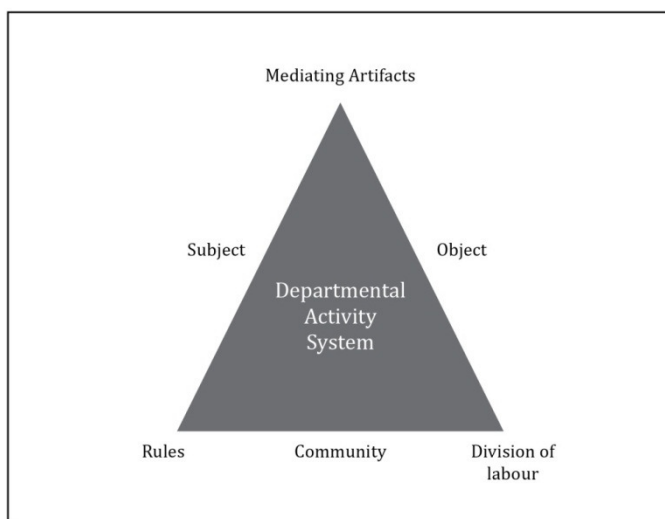


Figure 2.2 Doctoral student's departmental activity system.

When AT is applied to doctoral learning, the PhD researcher can be considered as the *subject* of a departmental AS who is focused on the *object* of obtaining a doctoral degree (as well as many sub-*goals* along the way). Importantly, however, the activity which the *subject* is pursuing depends on other individuals also performing their roles according to *rules* and *division of labour* operating in the AS (Hopwood & Stocks, 2008). In seeking to achieve their *goals*, doctoral researchers draw on a range of *artifacts* including supervisors, research paradigms, theoretical concepts, previous research studies and computer software. In order to expand their involvement with others in the activity system, newcomers must learn to appropriate the activity system's *artifacts* including, in the case of doctoral learning, academic literacies. AT, therefore, can help illuminate different levels of access to such *artifacts*. The doctoral researcher's *community* in the departmental activity system is made up of supervisors, peers, technicians, administrators and other academics. Various explicit and implicit *rules* dictate how the doctoral candidate should function within the departmental activity system; these rules include, for example, institutional regulations concerning the conduct of research (ethical guidelines) as well as tacit conventions regarding supervision arrangements. The *division of labour* describes the different roles that *community* members (e.g. students and their supervisors) adopt in carrying out the tasks which are the *object* of the system. This final element — *division of labour* — is particularly helpful in discussing different expectations of the roles, relationships and responsibilities which the doctoral researcher, her supervisor and others might adopt at different stages of the doctoral learning process. All the elements in the activity system are subject to change over time. Importantly, as we have seen, doctoral researchers participate simultaneously in multiple activity systems, including those of their academic department, their disciplinary community, their family and their friends.

Adopting an AT perspective to explore doctoral learning makes it possible to capture and explore interactions between doctoral researchers' experiences in their departments, in the wider disciplinary community and in their dealings with peers, friends and family. When an individual enrolls in a doctoral degree, many competing motives and forces are at play. AT allows those different elements and forces to be examined in relation to each other. In addition, AT captures the dynamism which is characteristic of all learning:

Activity systems are not static ... Rather, they are dynamic systems constantly re-created through micro-level interactions. Each of the ... aspects of an activity system changes historically. The identity(ies) of subjects, the focus and direction

(object/motive) of their actions, and their tools-in-use are historically (re)constructed over a few seconds or many centuries. (Russell, 1997, p. 512)

Within AT, changes are represented as 'expansive transformations' in the original activity system. In this view tensions are seen as catalysts for change, rather than problems or constraints. The next section explores in greater detail insights which an AT perspective can contribute to understanding the doctoral learning process.

Strengths of an Activity Theory approach to doctoral learning

Viewing doctoral learning as the interaction of intersecting activity systems facilitates 'a focus on complex interrelations between the individual subject and his or her community' (Engeström, 2001, p. 134). Given that doctoral researchers typically participate in a number of different activity systems with competing goals, rules and roles (*division of labour*), it is important to adopt a conceptual framework which can account for such complex interrelationships:

Activity systems and individuals in them are pulled between the object/motives of the multiple activity systems with which they interact. Y. Engeström (1987, 1993) calls dialectical pulls within and among collectives *contradictions* and the deep conflicts individuals experience as a result of these contradictions psychological *double binds*. (Russell, 1997, p. 519)

When individuals experience 'double binds' as a result of their participation in different activity systems, changes to their identity can arise. This might occur in the doctoral education setting, for example, when an individual successfully presents their work to a departmental audience. This performance involves the appropriation of some of the activity system's *tools* – notably here, its discursive practices – and results in incremental changes to the researcher's academic identity. Because each activity system entails its own *rules*, *mediating artifacts* and *division of labour*, misunderstandings can occur at the margins of those interactions. However, 'the idea of internal contradictions as the driving force of change and development in activity systems' (Engeström, 2001, p. 135) assigns a positive, formative role to the tensions which emerge from the individual's engagement with the processes and outcomes of learning. In fact, these tensions are viewed as the mechanisms by which development occurs, rather than as problems or conflicts.

Tensions might occur within the departmental activity system, for example, when doctoral researchers work as colleagues alongside their supervisors in a teaching role one day, and are

positioned as novice researchers in their supervision meeting the following day. A more concrete outcome of these tensions might occur if the candidate needed to complete the marking of assignments for the supervisor's course by a certain deadline and to produce a piece of writing in relation to the doctoral project by the same date. Tensions can also emerge in the interactions between different activity systems such as when doctoral researchers' goals in their departmental and family activity systems are not well aligned, resulting in competing claims on their time. According to AT, when tensions occur in this way, rather than disrupt the system permanently, 'expansive transformations' can result, allowing the system to accommodate the new or modified element:

As the contradictions of an activity system are aggravated, some individual participants begin to question and deviate from its established norms ... An expansive transformation is accomplished when the object and motive of the activity are reconceptualized to embrace a radically wider horizon of possibilities than in the previous mode of the activity. (Engeström, 2001, p. 137).

However where tensions are not reported or acknowledged, 'the subject ... may internalise the contradictions and attribute them to themselves without being aware of it' (Roth, 2004, p. 6). For example a doctoral student who is unable to reconcile competing study and family demands may perceive this as a failure in personal organisational skills rather than as evidence of a need for the system to be adjusted.

A second strength of AT for conceptualising doctoral learning experiences is its ability to capture change, since an activity system is 'inherently a dynamic structure continuously undergoing change in its parts, in its relations, and as a whole' (Roth, 2004, p. 4). Consequently, tensions and contradictions within the system are ever-present (Beauchamp, Jazvac-Martek, & McAlpine, 2009, p. 268) and are considered the source of growth and development. For example, structural changes to the Australian doctorate since the first PhD was awarded in Australia more than 60 years ago can be viewed as the result of tensions having been identified in the system and resolved through the implementation of various changes (Evans, Evans, & Marsh, 2008).

If the process of doctoral learning is viewed as a trajectory which inevitably involves change, then contradictions and conflict can be viewed positively as catalysts for transformation and growth. In the context of doctoral learning, instances of this kind of transformation might occur when a researcher decides, knowingly, to deviate from conventional discourse practices in presenting her

ideas (as the Indonesian graduate student described in Phan's (2009) article did). This transformative aspect of AT can be contrasted with the more conservative expert-novice relationship conceptualised in the community of practice framework, where the novice is expected to unquestioningly reproduce the practices of the established experts in the field.

By illuminating the multiple *objects* of doctoral education — completing a research project, establishing a research profile, constructing a scholarly identity, developing a future career — AT also emphasises the complexity of the endeavour and the multiple relationships and roles it entails. In fact, the *object* element of the model makes it possible to tease out some of the doctoral researcher's different tasks, and to analyse ways in which they intersect, and at times conflict. It also makes it possible to identify instances where the doctoral researcher's *object* and that of other elements in the relevant activity system are at odds, perhaps by surfacing invisible or opaque expectations, practices or *rules* present in the system. This might occur, for example where the researcher wishes to extend the project in order to achieve a particular conceptual goal, but her supervisor pressures her to finish so he can meet his departmental and institutional guidelines for timely completion. Similarly, AT can be invoked to explain a situation where a researcher experiences tension as a result of competing impulses to explore the topic further and to complete in timely fashion.

A central claim of AT is that the motive and goal of an activity frequently change as the activity is being carried out (Lantolf & Genung, 2002). Consequently it is likely that doctoral researchers may represent the same goal to themselves in different ways at different stages of their learning, and their motivation for achieving those goals may fluctuate at times. AT is able to capture this dynamic characteristic of learning. It is also possible that different individuals who appear to be engaged in the same task (for example, completing a literature review for their thesis) can view that task and carry it out in very different ways (Coughlan & Duff, 1994). Activity theory makes it possible to explore some of these differences. AT also has the potential to illuminate changes which arise as a result of doctoral researchers needing to fulfil different roles and obligations in relation to the different communities in which they participate: common (potentially conflicting) roles occupied by doctoral researchers include scholarship recipient, family member, experienced academic, author, conference presenter and researcher. As priorities and circumstances change, doctoral researchers may experience conflict in fulfilling each of these roles.

Limitations of an Activity Theory approach to doctoral learning

While AT is able to capture significant *external* elements which impact on doctoral students' learning experiences, it is less well able to illuminate the *interior* world of the learner. When the focus is on exploring individuals' feelings about their learning, or the degree of personal agency associated with their decisions and behaviours, AT is less well-developed (Hopwood & Stocks, 2008). Nor can it account for the reasons why some individuals react to events in particular ways. Despite these weaknesses however, AT offers an important system-focused complement to exploring individual learner trajectories as idiosyncratic experiences.

Second, activity theory is unable to provide an analysis of the workings of power in relations within and between elements in different activity systems (Hopwood & McAlpine, 2007). Whereas universities attempt to regulate supervision by producing codes of practice (*rules* in AT) which outline the responsibilities of each of the parties, 'most codes are ... silent on the structured power inequality' (Grant, 1999, p. 6). Unfortunately, therefore, although AT can surface the *rules* which codify practices and relationships and identify the tensions that emerge within particular relationships, it is unable to account unambiguously for the causes of these tensions or the ways in which they are resolved.

Applications of Activity Theory to studies of doctoral learning

The potential of AT for illuminating the nature of doctoral learning experiences has been explored in a number of related studies by McAlpine and her colleagues:

In our view, Activity Systems theory attends to the recurrent, embedded and historical nature of human activity, the assumption that higher mental processes have their origins in social practices ... Examining 'practice' as a communicative and interactive process highlights the purposefulness of interaction and the tools that mediate this ... Humans create and use tools such as language to coordinate with each other and also to self-regulate: this allows for both repetition of activities but also the creation of qualitatively different events. 'Activity' links mind and society; preserves the coherence of different actions; and incorporates motivation, contexts of action and mental processes used to enact activities. (McAlpine, et al., 2008, pp. 118-119)

This emphasis on the historical and social nature of the processes in which individuals engage highlights the importance of the individual's efforts (often privately) to make sense of the interactions, tensions, roles and responsibilities which populate their doctoral experiences. Much depends on the way individuals respond to experiences of tension or confusion. There is some evidence to suggest that doctoral researchers may choose not to acknowledge difficulties (Grant, 1999; Manathunga, 2005b) in their learning in order to avoid conflict and maintain an image of successful, fluent progress. Over time, as doctoral researchers process the different experiences which constitute their learning and determine their personal stance in relation to those experiences, they are also contributing to the construction of their scholarly identity.

Another study which adopted AT explored the systemic tensions associated with a course offered at a UK university which set out to provide doctoral students with experience of teaching (Hopwood & Stocks, 2008). The authors argue that 'activity theory offers a useful theoretical framework for understanding tensions arising across an institution' (p. 187) before identifying a number of tensions arising from their analysis. First, they illustrate a tension between the *object* of those students who wish to gain teaching experience during their doctoral studies and the availability of teaching opportunities (*division of labour*). Second, they report that students were unclear as to how teaching opportunities were allocated, suggesting a lack of clear guidelines (*rules*) to determine this *division of labour*. Furthermore, those students who did have the opportunity to teach during their studies felt that they lacked training (*mediating artifacts*) in how to teach suggesting that there was a conflict between the students' *object* and the *artifacts* available to support them in their learning. The authors also adopted AT in analysing students' experiences of a teacher training programme offered by the university, arguing that it helped in finding evidence that the course eased some of these systemic tensions.

The potential of AT for exploring the tensions which can emerge across the multiple activity systems in which doctoral researchers participate is also demonstrated in a study which investigated the dissertation writing experiences of a group of PhD students in the USA (Lundell & Beach, 2003). The study sought to examine the dissertation writers' 'negotiations across a range of different activity systems: the Graduate School, the department, the advisor, the committee, employment, and potential job market' (p. 483). The authors identified five principal tensions experienced by the students' as a result of conflicting *objects*, *rules*, *tools* and *division of labour* including their having to:

[1] conform to the practices of advisors, particularly the lack of helpful advising, even though those advisors may not be following the rules of the Graduate School and department, rules which were often not made explicit to students ... [2] cope with limitations on the amount and number of years of financial support, limitations designed to encourage timely completion of the degree [and 3] frame the dissertation to position oneself for employment at a research institution, when students may have been more interested in working at an institution that valued teaching. (Lundell & Beach, 2003, p. 507)

The authors reported that, in some cases, students overcame these 'double binds' by creating new and productive activities. For instance, students overcame the difficulty of having to please their advisor without receiving much guidance by establishing their own student writing groups which provided support and encouragement. However, 'in most cases, students were not able to create new activities that would address their binds' (Lundell & Beach, 2003, p. 507.) This study and a related one which explores a PhD student's experience of navigating competing activity systems with the support of her supervisor's mentoring strategies (Thein & Beach, 2010) provide convincing evidence of the potential of AT for exploring systemic tensions in doctoral students' learning experiences.

AT has also been integral in a series of Canadian studies aimed at exploring the range of activities in which doctoral researchers engage (Beauchamp, et al., 2009; Jazvac-Martek, et al., 2011). Doctoral researchers at two Canadian universities (and a small number of students in a UK university (McAlpine, Jazvac-Martek, & Hopwood, 2009)) were asked to complete a weekly log (designed around the key concepts of AT) for a period of 30 months. The logs revealed the extensive range of individuals with whom the researchers interacted every day as well as the diverse activities in which they engaged. The authors claim that examining doctoral researchers' interactions with their peers, supervisors and others revealed their 'negotiated agency' (2011, p. 32) as they went about seeking resources and support in the pursuit of their goals. The authors also found that when researchers sought to resolve their difficulties, they tended to view this solely as their responsibility and not to seek assistance from others. In seeking to explain this behaviour, the authors suggest:

[It] could be that their reliance on the self ... was possibly a form of self-isolation, one built around a cultural narrative of academic individualism (Deem and Brehony 2000) picked up through interactions with academics in their

departments, in conjunction with the cultural narrative of student deficiencies as the core lack of progress (Gardner 2009). (Jazvac-Martek, et al., 2011, p. 34).

This application of AT therefore provides an alternative to the 'cultural narrative of student deficiencies' by suggesting that structural elements in the contexts where students are studying are also potential sources of confusion and difficulty. However, in order to explore individual researchers' motivations, agency and attributions of success, a methodology is needed which enables in-depth personal conversations about learning to be carried on over an extended period of time.

Summary

This section has identified three different contexts where doctoral researchers engage in formal and informal learning experiences and has explored variables which influence their access to those experiences. It first considered the learning that occurs within the context of supervision and some of the tensions associated with the supervision relationship. It then reviewed the previous research into the learning afforded by doctoral researchers' interactions with peers, family members and friends. It then considered the learning opportunities available to doctoral researchers through their contact with members of their wider disciplinary communities. This section also discussed the potential of Activity Theory for conceptualising doctoral researchers' experiences in those different contexts (activity systems) and the tensions which can emerge as a result. The next section introduces the process of (scholarly) identity construction and explores the way in which agency and affect are implicated in that process.

Scholarly Identity

At the same time as doctoral researchers are managing their research projects and engaging with the academic literacy practices of their disciplines, they are also constructing a scholarly identity for themselves. While the identity dimension of the doctoral trajectory may not be particularly salient to candidates, as this final section of the chapter will demonstrate, it is a persistent theme in the research literature on doctoral learning.

A growing number of researchers now argue that identity construction lies at the heart of doctoral learning (Baker & Lattuca, 2010; Green, 2005; L. A. Hall & Burns, 2009; Holley, 2009; Jazvac-Martek, 2009; Kamler & Thomson, 2006; A. Lee & Boud, 2003; McAlpine & Amundsen, 2009, 2011a). These scholars claim that the thinking and learning processes in which doctoral researchers engage are

bound up with their unfolding understanding of who they are, who they wish to be — their possible selves (Markus & Nurius, 1986) — and who they are becoming. Identity construction has been described as ‘embodied practice ... which ... involves thinking like, performing as and both being and feeling recognized as a member of or belonging to a particular community’ (McAlpine, 2009, p. 3). This dynamic view of identity is well suited to exploring the trajectories of individual doctoral researchers over time and, as we have already seen, is likely to become particularly salient in researchers’ writing experiences.

This final section of the chapter demonstrates the benefits of viewing the doctoral learning process as a narrative of being and becoming a scholar. First, a poststructuralist view of identity is outlined, emphasising the fluidity, fragmentation and multiplicity of identity. The second section discusses the findings of research into five different aspects of the process of scholarly identity construction in doctoral work. The section concludes with a discussion of the way in which taking account of doctoral students’ identity work is likely to contribute to understanding the progress of their learning trajectories.

A post-structuralist view of identity

The characteristics of a post-structuralist theory of identity need to be understood in the context of changes in the way that the individual has been conceived of in post-modern thinking. Post-structuralist writers such as Foucault, Derrida and Nietzsche suggested that:

the concept of the authentic human subject, autonomous from society and existing beneath a cultural overlay, should be understood as merely an effect, or a ‘fiction’, which emanates from humanist discourse itself ... individuals cannot be understood as having a fixed identity that is ontologically prior to their position in the social world. Identity is not to be found inside a person ... but rather it is relational and inheres in the interactions a person has with others.” (Elliott, 2005, p. 123)

The post-modern conception of the self therefore rejects the idea that the individual has an authentic core and an essential identity; instead it emphasises the ongoing production of identity within specific historical and discursive contexts. This change in thinking has been accompanied by a shift in the focus of research towards exploring the everyday practices individuals engage in as they constantly construct and reconstruct their sense of individual identity:

... much of this work uses the concept of the narrative constitution of identity to suggest an identity that is grounded in experience and temporality and has coherence without being static and fixed. (Elliott, 2005, p. 124)

Elliott argues that narrative provides individuals with the possibility of resolving the tension between a state of constant change and the need for stability. By telling stories about past events, individuals are able to actively reconfigure the events of the past in the light of the present, thereby achieving a sense of coherence. Individuals routinely use narrative in this way to construct and maintain a sense of their own identity. Crucially, narrative is a social activity which implies the cooperation of a conversation partner or audience.

Within a poststructuralist theoretical framework, identity is considered to be socially and discursively constructed, fragmented and plural –‘multiply constructed across different, often intersecting and antagonistic, discourses, practices and positions’ (S. Hall, 1996, p. 17). From this perspective, identity is theoretically associated with four characteristics:

identity is a project and entails (1) positionality – social actors position themselves in relation to others and in doing so make distinctions between self and others; (2) performativity – social actors perform their identities in different ways, or in other words identities involve action and can be viewed as sets of practices; (3) situation in a context; and (4) mostly discursive construction in narratives and other modes of communication. (Delanty, 2008, pp. 125-126)

Identity is therefore viewed as an ongoing process of negotiation which involves individual agency in decisions taken in relation to positioning. It is achieved by adopting certain practices and is expressed in speech, writing and other discursive modes which are adapted to specific situations and contexts. This process allows for overlapping or multiple identities and therefore creates the potential for conflict between the identity an individual claims for herself and that which is assigned by others, as well as variation between the identities individuals perform in different settings. Each of these four characteristics offers potential for interrogating the identity work of doctoral researchers.

Another characteristic of identity is ambivalence. This can be illustrated in the experience of individuals who migrate to new social, cultural and linguistic settings and feel confusion regarding their place and positioning in the new society. Eva Hoffman’s memoir of migrating from Poland to

Canada at the age of thirteen, and later relocating to the USA to take up university studies tells a painful story of her struggle to accommodate cultural differences in constructing her new hybrid identity:

My mother says I'm becoming "English". This hurts me, because I know she means I'm becoming cold. I'm no colder than I've ever been, but I'm learning to be less demonstrative. I learn this from a teacher who, after contemplating the gesticulations with which I help myself describe the digestive system of a frog, tells me to "sit on my hands and then try talking." I learn my new reserve from people who take a step back when we talk, because I'm standing too close, crowding them. Cultural distances are different, I later learn in a sociology class, but I know it already ... (Hoffmann, 1989, p. 146)

But ambivalence is not the sole prerogative of migrants. It occurs whenever human beings are obliged to negotiate the way others view them. In this study, doctoral researchers may be ambivalent about adopting an authoritative scholarly voice in their academic writing, feeling that this is more an act of bravado than an honest representation of their claims to knowledge. Acquiring a new identity is therefore often accompanied by feelings of ambivalence.

One final characteristic of identity is the need for recognition:

identity is neither contained solely inside the individuals nor does it depend exclusively on how others define the individual. Rather, one needs to consider both self-generated subject positionings as well as subject positionings that are imposed on individuals by others. (Block, 2007, p. 26)

This interactive, mutually constructed aspect of identity is contested in situations where the identity ascribed to an individual may be at variance with the identity she claims for herself. For example, a graduate student who presents her ideas at a conference or in a scholarly publication may be recognised either as a worthy contributor to the disciplinary community's academic debates, or as an "impostor" — an outside not yet deemed eligible to participate in the COP's practices.

From a poststructuralist perspective, identities are framed as socially constructed narratives that individuals perform, interpret and project. Identities entail an important temporal dimension and also the potential for conflict since they involve:

negotiating new subject positions at the crossroads of the past, present and future ... The entire process is conflictive as opposed to harmonious and individuals often feel ambivalent. There are unequal power relations to deal with ... that both facilitate and constrain interactions with others in the different communities of practice with which individuals engage in their lifetimes. (Block, 2007, p. 27)

These potentially conflictive, ambivalent, temporal dimensions of the process of scholarly identity construction therefore represent the invisible psychological and emotional counterpart to doctoral researchers' academic trajectories.

Identity and doctoral learning

What does a post-structuralist view of identity contribute to understanding the learning and socialisation experiences of doctoral researchers? First, the contested nature of identity and the ambivalence which accompanies it explain much of the emotion associated with doctoral work. As they manage their projects, doctoral researchers are engaged in realising their desires (to be academics and scholars) and needs; consequently, agency and affect are 'intimately intertwined' (McAlpine, 2009) in the process of constructing their identity as academics. Edwards and Mackenzie (2005) argue that agency should be viewed relationally, since intentions and actions emerge both from personal interpretations of purpose and from engaging with others in achieving those purposes. Affect is likely to be associated with doctoral researchers' experiences of tension as they participate in multiple activity systems. Their emotions might come into play, for example, when their personal values conflict with those of the academy or when the stress associated with simultaneously managing the demands of study, family and work becomes intense. Doctoral researchers' personal motivations for investing in their projects combined with the high-stakes nature of doctoral study help explain the intensity of 'the challenges and pleasures of the doctoral journey' (McAlpine & Amundsen, 2011a, p. 174).

Recognition plays a crucial role in identity work. An identity performance is only successful if it achieves recognition by significant others. Individuals' need for their identity to be recognised links them with the community they seek to join. In a longitudinal ethnographic study of the science experiences of 15 successful women of colour, a model of science identity was developed which consisted of three components: competence, performance and recognition (Carlone & Johnson, 2007). The researchers argue that successfully enacting a particular identity requires that one 'makes visible to (*performs for*) others one's *competence* in relevant practices, and, in response,

others *recognize* one's performance as credible' (p. 1190). Therefore, competence, performance and recognition are all essential for successful enactment of scholarly identity. An ethnographic study of student engineer identities on a US campus found that proven engineering skill was not sufficient to earn *recognition* from peers:

Identity is not merely something that people express about themselves, or shape in the presence of other forces; it is also and simultaneously something that learning communities make of people. (Tonso, 2006, p. 301)

In Carlone and Johnson's (2007) study, the affective component of identity was particularly marked in the participants' experiences of positive and negative recognition. Positive feelings were documented in relation to the women's evaluation of their role as scientists and others' recognition of their achievements. However, negative feelings emerged when the women were not recognised, resulting in their feeling invisible or out of place in meetings or seminars. Carlone and Johnson's findings reveal the wide range of affective reactions embedded in the women's experiences and the impact of those reactions on their perceptions of themselves as scientists.

Recognition also features in Gee's (2001) perspective on identity. He presents four ways of viewing identity: identity derived from forces in nature (for example, being an identical twin), identity authorised by an institution (for example, being a professor), identity produced in interaction and dialogue (discourse) with others (for example, being witty) and identity based on 'affinity' - the sharing of experiences and practices (for example, being a Star Trek fan). He argues that individuals have multiple identities and are able to negotiate and 'juggle' these so as to determine the way they are primarily seen by others:

What is at issue, though, is always how and by whom a particular identity is to be *recognized*. (Gee, 2001, p. 109)

When applied to doctoral study, Gee's perspective helps explain the resistance which occurs when an individual's institutional and discourse identities are in conflict. Institutions which systematically position their graduate students as novices might be accused of imposing an unwelcome and inappropriate identity. Students can choose to resist this positioning, but such a stance could produce negative affective outcomes of the type discussed by Carlone and Johnson (2007). Gee's perspective also suggests the possibility that the affinity-based identities which doctoral

researchers share with their peers offer rich learning opportunities because they reflect a desired identity based on shared experience.

Role identities

In attempting to understand the way in which identity transition occurs, some researchers recommend focussing on the micro level of role identities. Jazvac-Martek (2009) suggests that when doctoral researchers adopt different roles, such as teaching on graduate courses or contributing to seminar discussions, they are required to assume different role identities associated with those practices. She argues that this results in doctoral researchers adopting 'oscillating' role identities, and that this process 'foregrounds the incremental transition into academic role identities ... [demonstrating that] there is no definitive moment when student role identities are left behind' (p. 259). Jazvac-Martek's data provide multiple instances of positive interactions where doctoral students' academic role identities were confirmed, although 'the "confirmer" ... was very rarely the supervisor' (2009, p. 260). As suggested above, it is possible that the institution-imposed identity of student can never be fully transcended in doctoral students' relationships with their supervisors.

However assuming multiple role identities simultaneously can be stressful. Consequently it is important to encourage 'doctoral students to find the synergistic connections between their multiple academic identities' (Colbeck, 2008, p. 14). Colbeck illustrates her claim with an example of a doctoral student who is a member of a laboratory science team led by her doctoral advisor and in which she supervises undergraduate students. By focusing on the group's shared purpose of addressing a research problem, the doctoral student found a way of accomplishing multiple goals (teaching, learning and researching) within a single activity.

Voice and identity

Particular attention has been paid to the relationship between voice and identity in the experiences of academics, students and administrators (Barnett & Di Napoli, 2008a). Barnett and Di Napoli argue that each identity an individual adopts has a characteristic voice and that, in trying out different voices at different times, individuals may sometimes appear to 'mimic or "ventriloquise" the dominant discourses without identifying with them' (p. 201). The metaphor of ventriloquism neatly captures the feelings many less experienced researchers experience when attempting to speak and write with scholarly authority. In the early years of their research careers, researchers may feel they are ventriloquising rather than speaking or writing in their own voice.

Barnett and Di Napoli view identity in sociological terms, and voice as a more psychological concept:

Identity may be understood to be more a function of structure whereas *voice* may be felt to be more a matter of agency. Identity, indeed, may be understood precisely in structural terms, as a position in a network or a number of networks, with the connections between 'individuals' in those networks being stronger or weaker; and those connections are largely given. An identity, in this perspective, is nothing other than a position in networks ... *Voice* may be understood as the way in which an individual seizes or does not the opportunities that those networks open up ... identity is a more sociological concept and voice is a more psychological concept. (Barnett & Di Napoli, 2008a, p. 202)

Viewing the relationship between structural positioning and uptake of opportunities in this way reminds us that graduate students are automatically assigned an institutional identity as a consequence of enrolling. However a student's visibility and the extent to which they make their voice heard in the department where they are enrolled will vary according to their goals, resources and relationship to others. Individual agency comes into play in decisions about which groups they wish to contribute to and how they wish to be heard. For example a doctoral candidate who agrees to take part in a research project with more experienced peers may come to speak with a more confident researcher's voice, whereas the voice she adopts when interacting with her supervisor may remain more diffident because of her positioning in relation to the supervisor.

Trajectories of participation

When doctoral learning is viewed as a process of acquiring an academic identity, it is important to acknowledge that individuals negotiate different trajectories of participation for themselves. In noting that potential COP members can negotiate 'various types of trajectories' for participation (1998, p. 154), Wenger identifies four different trajectories - inbound, boundary, peripheral, outbound. Applying this idea to doctoral learning implies that some doctoral researchers may not seek to become full participants in the academic community of practice. Accepting that doctoral researchers may reflect a range of aspirations in relation to the academy acknowledges the contribution of recent findings on the diversity of doctoral student biographies, motivations and intentions (Pearson, et al., 2008). In analysing the identity formation of academic staff in a South African university's Design department, Jawitz (2009) identified different individuals who adopted each of Wenger's four trajectories and concluded that academic staff expectations, motivations and

aspirations in any department are likely to be diverse. It is also to be expected that doctoral researchers will diverge in the values they assign to research, scholarship, teaching and other aspects of the academic identity, and therefore in the identity trajectory they adopt.

A recent addition to uses of the term 'trajectory' to describe social learning practices and identity construction is McAlpine and Amundsen's (2011a) notion of the 'academic identity trajectory' as a process which integrates experiences of academic work over time. Their conceptualisation of the identity trajectory, which identifies three interwoven strands – intellectual, networking and institutional – 'recognizes that learning and identity are intimately linked ... [and] emphasizes the learning processes that emerge from a multitude of contexts ... [and] the individual's movement through time' (p. 178). The authors advocate using the academic identity-trajectory 'as a personal tool for reflection and analysis for early career academics' (p. 181), for example, as a way of evaluating the role of each of the three strands in terms of personal intentions. However the academic identity-trajectory could also be used as a heuristic to investigate the intellectual, networking and institutional strands in doctoral researchers' academic identity experiences, for example by exploring opportunities for and influences on networking.

Mechanisms of identity construction

As has been argued above, identity is discursively constructed 'through dialogue, writing and experience' (Kamler & Thomson, 2006, p. 18). Whenever doctoral researchers interact with others to express their understandings of concepts in the field, they are trying out their scholarly voices. As Starfield and Ravelli demonstrate, even the decisions that doctoral writers make about the structuring of their texts are important 'sites of identity negotiation' (2006, p. 226). Doctoral writers' texts and the feedback they elicit contribute in important ways to their emerging scholarly identities.

Writing may represent the most intense site for identity work in doctoral learning — a process which Kamler and Thomson describe as involving the 'mutual construction of text and identity' (2006, p. 66). The intensity of this experience can be illustrated by considering the high stakes involved when a novice researcher contributes for the first time to a scholarly debate by publishing her work in a journal or presenting at a conference. Such participation requires new contributors to command the attention of more experienced participants by asserting their authority to speak and be heard. This is no small feat for a novice, especially one who is writing in a language other than their first language. While not all will agree with Shen (1998) that non- native English speakers

who present themselves in academic written discourse in English are required to create a new self, the challenge is certainly significant.

But writing is only one of the practices by which doctoral researchers construct a scholarly identity. The informal stories that individuals tell about their experiences are also mechanisms for constructing identity since they reflect the speaker's perceptions of events and their preferred ways of being positioned. Other more formal discursive mechanisms are activated when students participate in seminars, discussions and conferences. Individuals signal their identity in the way they speak and write, the knowledge they draw on, the confidence they display in communicating their ideas and the ways they engage with others. A multitude of such activities contribute to the doctoral researcher's incremental construction of an identity as researcher and scholar.

Crucially however, identity is also constructed internally, in the way individuals think. Tonso's (2006) study of the identity construction of engineering students on a US university campus found that:

identity production was a complicated process that bound up *thinking about oneself* as an engineer, *performing* an engineer self, and ultimately *being thought of* as an engineer." [emphasis in the original] (2006, p. 273)

Tonso's tripartite view of the process of identity construction — thinking, behaving and being recognised — suggests that internal cognitive activity drives the process. In other words, becoming a scholar demands that an individual first thinks about herself as a scholar. Tonso's analysis also underlines the importance of recognition in the process of identity construction. The doctoral researcher who contributes to an online discussion forum and is met with resounding silence may be troubled in her perception of herself as a scholar. When a doctoral researcher's claimed identity is recognised by members of the target community, she is more likely to think of herself as rightfully inhabiting that identity. Each of these different mechanisms for constructing identity — thinking, behaving and interacting — therefore represent important sites to investigate in seeking evidence of the process.

Kiley (2009) adopts the metaphor of 'rites of passage' with its focus on transition to a new state, to capture the identity work inherent in doctoral education. She argues that research students are likely to experience rites of passage which incorporate three stages — 'separation from one's known state, entering a state of liminality, and culminating in "becoming"' (p. 296). This view

emphasises the ontological dimensions of doctoral work in which various experiences in the student's research process contribute to their 'becoming' someone different (the licensed Doctor of Philosophy).

The role of narrative in exploring identity

How then can such a dynamic, intensely personal, subjective process as identity construction be investigated? A number of researchers suggest that narrative is ideally suited to exploring identity construction since it is 'a fundamental means of making sense of experience [which] ... is simultaneously born out of experience and gives shape to experience' (Ochs & Capps, 1996, p. 19). Narrative provides the narrator with the opportunity to create a coherent story out of events and relationships in which they have participated. The stories people tell about themselves therefore reflect the identities they ascribe themselves and the ways they wish to be seen. While no single story can provide a complete account of an individual's identity, by listening carefully to multiple stories over time, it is possible to build up a constellation of images based on the narrator's own projections:

Narratives, whether oral or written ... represent snapshots of research participant identity construction. (McAlpine, 2009, p. 7)

McAlpine's term 'snapshot' highlights the transitory and partial nature of the identity that can be glimpsed in any particular instance of storytelling. Furthermore, narratives are influenced in the telling by the participant's relationship to the listener. Both features suggest the importance of gathering individuals' stories over an extended period of time, in an effort to obtain as rich a picture as possible.

One special affordance of narrative is the access it provides to narrators' emotions. In a longitudinal interview-based study of non-traditional (undergraduate) students' transition to an elite university (Christie, et al., 2008), researchers found that the emotional dimensions of participants' adjustment to their new environment were particularly salient. Writing of the use of narrative in educational settings, they argue:

biographical studies suggest that learners have inherently 'fragile' identities: they follow 'fractured' and 'disrupted' pathways through formal education; their engagement with new learning environments is often uncertain; and their disposition to learning, and eventual success (or failure), is affected by a range of

psychological factors. In this model, learning is a process of identity formation which is inherently risky and uncertain (Gallacher et. al. 2002; Jackson, 2003). And studies show that the difficulties of becoming embedded in a community of practice come into play precisely because of their emotional dimensions. (Christie, et al., 2008, p. 569)

If learning is viewed not only as the acquisition of knowledge and expertise and the outcome of participating in the practices of a community, but also as a process of becoming someone different, then 'significant learning is what changes our ability to engage in practice and understand why we do it.' (2008, p. 568). It follows that the emotional ups and downs that newcomers experience as they enter a new learning environment are likely to emerge in the stories they tell about their experiences. Narrative provides a flexible means of capturing those stories.

Contribution of Identity Theory

Viewing doctoral learning through the lens of identity has a number of advantages. Firstly, it emphasises the idiosyncrasy of the learning process and highlights the way in which different trajectories of participation reflect different types of investment in and commitment to the academic identity. It also makes useful links with researchers' other identities and experiences prior to and during their doctoral learning experiences. The identity of 'doctoral researcher' is, after all, only one part of the complex narrative of any individual's life.

Second, viewing doctoral learning as a process of academic identity construction focuses attention on the dynamic nature of the process. Identity can be thought of as a kaleidoscope whose perspectives shift each time an event or phenomenon is viewed anew. The dynamism of the identity framework explains the fact that doctoral researchers' confidence in their identity as scholars may fluctuate as circumstances change. Identity is constantly under construction and revision in the different contexts and settings in which individuals operate. Since the process of constructing a scholarly self is so central to doctoral learning, viewing researchers' experiences through the lens of identity illuminates aspects that other frameworks cannot.

Third, adopting identity as an analytical lens makes the role of affect more visible by focusing attention on the link between individuals' intentions and the emotional impact of their interactions with others (McAlpine & Amundsen, 2011a). In order to become more confident of their scholarly identity, doctoral researchers require positive feedback and recognition from disciplinary experts such as their supervisors. However, Paré's (2011) work demonstrates eloquently that students do

not always receive helpful feedback or recognition from their supervisors, and must therefore learn to navigate such tensions. Doctoral study is not simply a matter of cognitive and academic development. It also represents a profound challenge to the individual's sense of self and is likely to involve periods of anxiety, frustration and confusion, as well as satisfaction and achievement. In order to represent the complexity of participants' narratives of experience, it is important to remain sensitive to the affective threads running through their stories.

Finally, by focusing on ways in which the participants' identities are shaped by events, it is possible to explore the role of individual human agency in the process of doctoral learning because agency is:

intimately linked to significance. That is, things and events matter to people – their actions have meanings and interpretations. It is agency that links motivation ... to action and defines a myriad of paths taken by learners. (Lantolf & Pavlenko, 2001, p. 146)

By attempting to identify the values and significance that individuals attribute to events and ideas, it is possible to better understand the decisions and actions they take in relation to their learning. For example whereas one candidate may view the PhD principally as a means of improving her employment prospects, another may view the experience as an opportunity to develop thinking processes and explore ideas, with much less concern for formal outcomes. As a result, the different individuals' expectations of the learning process will vary considerably. While both are outwardly engaged in the same activity, their orientation to the process and their prioritisation of various activities will be different. Consequently, differences in participants' motivations, goals, commitment and action are likely to signal key differences in human agency.

Summary

This review of previous research into the nature of doctoral learning, the contexts in which it occurs, the individuals who contribute to it and the complexities of the identity work it entails serves as background to the study reported in the rest of the thesis. The theoretical frameworks outlined in this chapter (Community of Practice, Academic Literacies, Activity Theory and Identity Construction) provide the analytical tools with which the interview data will be analysed. The thesis now shifts its focus from the macro concerns of international doctoral education to its instantiation in the Australian context of today, and presents an account of the learning and socialisation experiences of six individuals who travelled to Australia between March 2008 and January 2009 to

undertake doctoral studies. The researcher's decision to focus on the learning experiences of international doctoral researchers was motivated by a conviction that international students' voices are too seldom heard in the discourse of higher education. While a small number of important studies of selected aspects of international graduate students' experiences in Australia have emerged over the last few years (Bullen & Kenway, 2003; Cadman, 2000; Ingleton & Cadman, 2002; Kenway & Bullen, 2003; L. Y. Li & Vandermensbrugghe, 2011; Manathunga, 2007a; McCormack, 2009a; Wang & Li, 2011), this study provides an opportunity to conduct an extended in-depth investigation into the experiences of six international PhD researchers studying in Australia. The three central questions posed by the study are:

1. What is the nature and quality of the participants' learning experiences?
2. What opportunities do the participants have to engage in the practices of their respective academic communities?
3. What is the nature and quality of support provided to the participants by their supervisors, peers, other academics in their department, the institution and members of their wider disciplinary community?

The next chapter outlines the way in which the project was conceptualised and conducted and presents the methodological rationale for the study's design.

Methodology

Overview

This chapter is divided into three sections. The first section outlines the way in which the project was conceptualised and presents the rationale underpinning the methodological decisions. The second section reports on the implementation of the first and second phases of the study and describes the data analysis procedures. The final section of the chapter reports the process of producing the five research texts which comprise the central chapters (4-8 inclusive) of the thesis.

Methodological Rationale

This section outlines the design of the study and presents the rationale for the methodological decisions taken. First the characteristics of narrative inquiry are discussed in relation to its potential for illuminating individual researchers' doctoral learning experiences. Next, the rationale for adopting a longitudinal design is discussed. The third part of this section explains how interviews were theorised in the study and the methodological implications of this approach. The final section identifies the principles underpinning the approach to data analysis.

Narrative inquiry

Since the study aims to uncover insights into international doctoral researchers' experiences, a qualitative research approach was chosen. Merriam notes that '[r]esearch focused on discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education' (1988, p. 3). Accordingly, the study adopts a narrative inquiry approach (Clandinin & Connelly, 2000; Riessman, 2008) in exploring the experiences of learning and academic socialisation of six international researchers as they undertake their doctoral studies. Narrative inquiry is based on the premise that we make sense of our lives through narrative (Bruner, 1990). The project therefore set out to explore the meanings that the participants attributed to events, people and ideas they encountered in their doctoral studies by inviting them to share their experiences in a series of interviews conducted over a two-year period. Given the central role of identity in doctoral learning (Green, 2005; Hockey & Allen-Collinson, 2005; A. Lee & Boud, 2003; McAlpine & Amundsen, 2011a), an

important criterion for the research approach adopted was its ability to yield insights into the participants' academic identity trajectories (McAlpine & Amundsen, 2011a). Narrative inquiry was considered an appropriate choice because of the fact that individuals construct their identities through the stories they tell (Riessman, 2008).

Narrative inquiry possesses a number of characteristics which make it a good methodological fit with the study's central concerns. First, narrative provides a nuanced means of exploring identity since, in talking about their experiences, individuals reveal who they are:

interview transcripts and oral histories provide contexts within which identities are rehearsed ... When informants share their sense of who they are and what their current experiences mean to them, they do so in ways that are collaborative acts of identity formation, involving both the researcher(s) and the respondent(s).
(P. Taylor, 2008, p. 29)

By choosing which events or experiences to report, and organising them in a particular way, narrators indirectly signal the meaning they would like the listener to take away from the story. Therefore, what individuals say during interviews provides important information about how they view themselves and wish to be viewed.

Previous studies of doctoral education have adopted narrative approaches with considerable success. Narrative methodology was adopted to explore issues of identity in a study of the experiences of fifty doctoral students enrolled in a PhD in Art and Design in the United Kingdom (Hockey & Allen-Collinson, 2005). This study revealed that many of the students experienced tensions between their identity as artists and their identity as doctoral researchers and documented the 'biographical change' (p. 77) which the students underwent during their doctoral studies. Another recent study combined narrative methodology with the use of digital video to encourage doctoral students to develop their research skills. The researcher argued that narrative approaches offer a number of advantages for exploring doctoral learning:

Narrative understandings of the doctoral journey ... facilitate greater attention to the affective, emotional, cultural and social dimensions of the journey; provide a means to consider how these personal dimensions intersect with institutional contexts; and make a claim for a better understanding of the relations between

narrative, biography, academic identity and the university. (C. A. Taylor, 2011, p. 443)

A second relevant characteristic of narrative approaches is that they are well suited to exploring processes which unfold over time (Murray, 2009). Since the study participants were interviewed over a two-year period — beginning shortly after their arrival in Australia in the case of Dev and Emily, and extending until close to their submission dates in the case of Jack, Mary and Journey — the narratives reflect significant shifts in the participants' perspectives and priorities. Rather than seeking an overarching coherence in stories shared at different times, a narrative approach acknowledges that different meanings may be attributed to the same events at different times. Consequently the participants' narratives are not treated as some kind of objective truth, but rather as reflections of their view of reality at the time of the interview. Narrative therefore provides a flexible means of accessing complex, elaborated accounts of participants' lived experiences and offers considerable advantages over the 'one-shot interview' (Riessman, 2008, p. 27)

The third feature of narrative which recommends it as a research method in this project is its sensitivity to a focus on the individual and the role of experience in their construction of knowledge. Webster and Mertova associate a heightened interest in the individual with a postmodernist view:

the move towards the use of the narrative approach has ... been influenced by a philosophical change of thought to a more postmodern view with its interest in the individual and acknowledgement of the influence of experience and culture on the construction of knowledge. Narratives are ... sensitive to the issues not revealed by traditional approaches. (2007, p. 4)

It is narrative's potential for accessing sensitive issues in individual participants' experiences which recommends its use in this study. Whereas national surveys provide valuable information about doctoral student populations and their characteristics, they are unable to 'represent the particularity of the doctoral experience' (Pearson, et al., 2008, p. 90). Narrative inquiry, on the other hand, is well suited to exploring the 'particularity' of individual doctoral researchers' lives and documenting their perspectives on their experiences.

The narrative approach adopted in the study relied on interviews with the participants (and a small amount of email correspondence) as the sole source of information on their experiences. The rationale for not seeking others' perspectives (such as those of their supervisors) was both

principled and practical. First, the researcher was committed to privileging the international doctoral researchers' perspectives, given that such voices are seldom represented in debates on doctoral education in Australia. Furthermore, while data from alternative sources might have provided a complementary perspective, it was felt that this could undermine the relationship of trust and confidence established between the researcher and the participants. Third, it was considered that gathering and analysing data from additional perspectives would threaten the researcher's ability to do justice to the data within the constraints of a research thesis. Finally, the researcher was motivated by a desire to research the particularity of the participants' experiences, rather than an interest in seeking general truths (Casanave, 2010).

Longitudinal design

Since doctoral students are likely to experience changes in their perceptions and understandings throughout their period of candidature, the decision was taken to adopt a longitudinal design. It was anticipated that changes in participants' views of their goals, their learning and their capacities would be reflected in their narratives. Furthermore, it was felt that by building a relationship with participants over time, the researcher was more likely to create an atmosphere where they felt comfortable sharing their insights:

If sensitively practiced, [narrative interviewing] can offer a way ... for investigators to forge dialogic relationships and greater communicative equality ... Towards these ends, it is preferable to have repeated conversations rather than the typical one-shot interview. Working ethnographically with participants in their settings over time offers the best conditions for storytelling. (Riessman, 2008, p. 27)

In designing the study, it was therefore essential that the methodology be capable of capturing shifts in participants' views of themselves, their competence, the academic community and other important aspects of their learning environment. Consequently, a longitudinal narrative approach was considered to provide an appropriate means of exploring the academic identity trajectories (McAlpine & Amundsen, 2011a) of the participants' lives.

Interview as social practice

This section first explains how the interviews were theorised in the study and discusses the implications of this approach for conceptualising participants' roles and relationships. Subsequently

it discusses issues associated with representing the interview data which the 'interview as social practice' orientation raises.

A number of recent studies in applied linguistics have critiqued the tendency of qualitative researchers 'to take research participants "at their word"' (Block, 2000, p. 757) without problematising interview data or participants' roles (Block, 2008; Pavlenko, 2007; Richards, 2009). Researchers argue that interviews which are inadequately theorised 'largely remain black boxes ... technologies so widely accepted that [researchers] can just feed in questions and get quotations for [their] publications without worrying about the complex pragmatics that make them work.' (Briggs, 2007, p. 555). Talmy (2010) claims that researchers need to be more reflexive about the interview methods they adopt and advocates the adoption of a 'research interview as social practice orientation' in which the interview is viewed as a fundamentally social encounter, rather than the 'commonsensical ... interview as research instrument perspective' (p. 129). Talmy maintains that when the latter orientation is adopted, interview data are treated as reports of objective or subjective reality, and the interview is considered a 'conduit' to interviewees' inner worlds.

In contrast, when the interview is viewed within a social practice orientation, the interview itself becomes a topic for investigation. Talmy's interview as social practice perspective has much in common with what Holstein and Gubrium refer to as 'active interviewing' (2003). Active interviewing is an approach in which researchers are committed to exploring both the *whats* and *hows* of interviews; in other words, their attention is focused not only on the ideas communicated during the interview but also the 'interactional and narrative procedures of knowledge production' (p. 68). In active interviewing, Holstein and Gubrium recommend 'activating' the subject 'behind' the respondent so that the interviewee is transformed from a 'passive vessel of answers' to someone who 'not only holds facts and details of experience, but, in the very process of offering them up for response, constructively adds to, takes away from, and transforms the facts and details' (2003, p. 70). Approaching research interviews in this way implies a fundamental change to the roles of interviewer and interviewee and to the attention paid to the process dimension of the interview.

Adopting the 'research interview as social practice' perspective in this study involved acknowledging the central importance of the researcher's relationship with the participants and fostering it. To achieve this, the researcher maintained contact with participants throughout the academic year by, for example, sending good wishes before they left for conferences, sending congratulations whenever they informed her of important milestones reached and providing

occasional assistance with proofreading. Adopting a social practice orientation to the interviews also entailed viewing the interviews as sites where meaning was actively co-constructed. In practice this required the researcher to assume an active role in the interviews by being willing to share her own experiences when asked, and abandoning the neutral interviewer stance sometimes recommended in conventional interviews. In this study, active interviewing (Holstein & Gubrium, 2003) helped create the circumstances in which participants were able to report and reflect on their experiences as doctoral researchers at different stages in their candidature and from different perspectives. Furthermore, the interviews provided a flexible communicative context in which participants' concerns were able to drive the discussion. While the interviews were semi-structured (Dörnyei, 2007), the participants were encouraged to raise issues they were confronting or experiences which they wished to report or discuss. Broad open-ended prompts at the beginning and end of each interview prompted participants to raise such issues.

Role of the researcher

Narrative research depends substantially on the relationship established between researcher and participants. Crucially, in this study, the participants and I share the status of doctoral researcher. This represents an important point of potential solidarity. Second, the fact that I, like them, had travelled to Australia in order to undertake doctoral studies provided another common bond. It is highly likely that our shared 'outsider' status influenced the participants' willingness to comment frankly on various aspects of their lives in Australia and their experiences at university.

However, at the same time, my perspective also differed from that of the participants in important ways. First, although I am not Australian, as a New Zealander I enjoy a number of advantages (in relation to health care, access to work opportunities and residential status) that the six participants do not share. Second, whereas I am a native speaker of English, all six participants are non-native English speakers operating in an English language academic environment. Third, I had worked as a university teacher and researcher (in several countries including Australia) for more than twenty years before enrolling in the PhD programme. There was therefore a significant difference between my professional background and that of the four younger participants; the difference was less striking with Journey and Ariunaa since both had worked as academics in their countries for a number of years before travelling to Australia. Finally, I am more than 10 years older than the oldest participant, and approximately 25 years older than the youngest.

Despite these contrasts however, the active role I played in the interviews, my empathetic responses to experiences reported by the participants and my willingness to share information and resources helped me develop a good rapport with all six participants. The nature of our relationship went beyond the traditional researcher-subject relationship in several cases, with three of the participants initiating social contact with me outside scheduled interview times, and one seeking an interview whenever he had experiences to report. All these factors indicate that, as researcher, I was crucially implicated in the meaning-making that occurred during interviews. My role during interviews consisted of posing questions, seeking clarification and, when invited to do so, sharing personal experiences. While all six participants at one time or another alluded to our shared status as doctoral students, often by asking me about the progress of my project, the younger participants appeared to view me more as a seasoned researcher than a peer. However, after my initial interview with each participant, our encounters resembled conversations between friends more than formal research interviews and were characterised by a relaxed, friendly atmosphere.

Role of the interviewee

In an 'active interviewing' approach (Holstein & Gubrium, 2003), interviewees are viewed as knowledgeable individuals who are actively engaged in creating meaning during the interview, as well as in the myriad communicative encounters in which they participate outside the interviews. In other words, they are recognised as having a life outside the confines of the research project which will inevitably impact on the self they bring to the interviews. As such, the interviewer's task is not one of "prospecting" for the true facts and feelings residing within the respondent' (Holstein & Gubrium, 2003, p. 69) but rather centres on creating an atmosphere in which the interviewees feel comfortable sharing their experiences and perspectives. In this approach to the research interview, interviewees' accounts are interesting not only for what they contain but also for how they are developed in collaboration with the researcher's questions, responses and other contributions.

This more dynamic framing of the participants' role contrasts with that assigned the 'subject' in more positivistic interview studies which sometimes claim to 'give voice' to interviewees. In this study, in contrast, no claim is made that the 'voice' that interviewees used when talking to the researcher was closer to their 'true self' than the voice they might adopt at any other time or in any other setting. Rather the conversations that occurred during the interviews were considered to be 'situationally contingent and discursively co-constructed' (Talmy, 2010, p. 132). Indeed, it is even possible that some of the participants might have exploited the interviews for their own purposes,

such as by using them as an opportunity to practise their spoken English or to boost their self-esteem.

Power in the interview

Interview situations involve complex relations of power which are reflected superficially in matters such as who chooses the topics to discuss, who asks and answers the questions and who decides when to move on to a new question. While the interview questions tended to establish the initial focus of interviews, the topics discussed were increasingly determined by the participants; some interviewees even routinely asked their own questions, either about research or writing resources, or the researcher's learning experiences. While such features of the interviews suggest a more equal relationship between researcher and interviewee, the asymmetrical power relations are reflected in the fact that the researcher has control over the way in which information produced in the interviews will be used (Briggs, 2007, p. 562).

Other important asymmetries which impacted on the interviews included, as mentioned above, differences in age, English language expertise, nationality and academic experience. While the participants appeared increasingly relaxed as the study progressed, it would be naïve to suggest that they felt completely unconstrained in participating. However, there is also some positive evidence that the relationships forged reflected genuine feelings of trust and friendship, such as when one participant sought the researcher's support during a period of personal distress.

Status of the interview data

Throughout the processes of participating in the interviews, transcribing the data and analysing the interview transcripts, the interviews were viewed as instances of collaborative social practice rather than simply as opportunities for gathering information. Accordingly, attention was paid both to the content of the interviews and to the way in which ideas were collaboratively produced through the ebb and flow of contributions by both parties:

The narrative process – from start to finish – yields an ever-emergent, pliant product that should be treated as something more dynamic than a more or less accurate, waiting-to-be-told text ... In practice, narratives are social to the core.
(Briggs, 2007, p. 42)

The interview data were therefore viewed as 'accounts' (Talmy, 2010) of experiences, events, attitudes, beliefs and feelings which were co-constructed by the interviewees and the researcher,

rather than reports of actual experiences. What participants said during interviews was occasioned or 'activated' (Gubrium & Holstein, 2008) in some way by the questions asked. Furthermore, it is acknowledged that during the interviews, participants were presenting a version of their lives in which they may have embellished some of their actions or achievements. Such are the dynamics of narrative positioning.

What participants reported during the interviews should therefore be construed as a representation of what they chose to convey on particular occasions about specific topics in the context of a co-constructed interview. Whereas a conventional interview study might assess the objectivity of interview responses by checking the extent to which the same questions produce the same answers on repeated occasions:

[w]hen the interview is viewed as a dynamic, meaning-making occasion ... different criteria apply. The focus is on how meaning is constructed, the circumstances of construction, and the meaningful linkages that are assembled for the occasion.' (Holstein & Gubrium, 2003, p. 71).

Consequently, the concept of data 'contamination' does not apply since the researcher is an active participant in the interviews rather than an external observer of the action.

However, differences are likely to remain between the participants' views of their lives and the researcher's views of those same lives. Researchers need therefore to 'take responsibility for the truths of their scholarly accounts' (Riessman, 2008, p. 198). This can involve delicate challenges, given that participants may not appreciate the researcher focusing on certain excerpts from the interviews or developing a particular interpretation of their words. Such issues arise because of differences between the participants' and the researcher's intentions in their telling their stories. These differences are also reflected in the way that participants position themselves in their narratives.

Finally, it is possible that participants may present contradictory accounts of events or their reactions to them at different times. These differences are likely to reflect their efforts at making sense of different events in their lives with shifts in attitude, memory and distance from the event all influencing the retelling. Shifting perspectives in narrative and a commitment to represent ambivalence are key features of narrative inquiry:

Always living in the midst of a yet-to-be-completed story in which we will live out the consequences of our multiple selves and ideal selves, we not only cannot expect one “truth” to be represented, we should be suspicious if we happen to find one. (Kouritzin, 2000, p. 5)

Given the longitudinal nature of the study, and the focus on participants’ developing sense of themselves as scholars and researchers, shifts in their perspectives on various aspects of their lives as doctoral researchers were expected to be a common feature of the interview data.

Ethical issues

Narrative research raises a unique set of ethical issues. Because personal narratives deal with the meanings that individuals attribute to their life experiences, the data gathered in such studies concern issues of personal identity. Such research can therefore pose particular challenges in terms of preserving participants’ anonymity. For instance, assumptions are often made in narrative studies about the likelihood of researchers recruiting participants from the institution where they are employed or enrolled, which poses a significant threat to the anonymity of the research participants:

once a combination of attributes and experiences is ascribed to a particular case in a research report it can be very difficult to ensure that the case does not become recognizable (Elliott, 2005, p. 142)

One strategy for overcoming this difficulty involves sharing research findings with participants and seeking their explicit approval for specific aspects of their stories to be made public. Consequently, in addition to obtaining the participants’ consent to take part in the study, approval was sought each time an extract from one of their interviews was being considered for inclusion in a written report the researcher was preparing. This suggests that in the case of narrative research, informed consent is not a one-off decision made on a particular day at a particular stage of the study. Rather it is more likely to form part of an ongoing conversation about the information which participants disclose during interviews and their willingness for it to be shared (Clandinin & Connelly, 2000).

The second ethical issue relates to the possibility that participants may be surprised at the way their stories have been presented in reports of the research. This can occur because of differences between the researcher’s goals in conducting the study and the participants’ motives in participating, and since the participants’ words will always be ‘filtered through ... [the researcher’s]

theoretical framework' (Elliott, 2005, p. 148). Given the small number of informants involved in most qualitative studies, the relationship between researcher and participants is likely to develop into something akin to friendship. This can complicate matters when participants are invited to read through researchers' reports of their stories and discover that the researcher has highlighted aspects of their experience that they did not discuss explicitly, but which have been interpreted from things they have said and things they have omitted to say.

Researchers are often advised to invite their participants to read transcripts and written reports in order to check their reconstructions of participants' narratives and comment on them. However with narrative studies, this procedure can be problematic (Duff, 2008). First, it may be viewed as a considerable imposition to ask research participants to spend time reading the researcher's draft text to check for accuracy. Second, as indicated above, participants may not agree with the researcher's interpretation and may request that material be removed from the text. But there is no reason to expect that the researcher's interpretation of the participants' narratives should coincide with the participants' perspectives since 'interpretations, as opposed to descriptions and transcripts, usually remain the prerogative of the researcher, even when they are negotiated with participants' (Casanave, 2010, p. 72). While the importance of respecting the participants' desire to be involved in the final outcome of the research is acknowledged, there is significant potential for their expectations of the nature of the final research report to be at odds with the researcher's intentions. Ultimately the researcher's prime responsibility is to gather and report data without exploiting the respondents (Elliott, 2005). Interpreting and reporting the data are separate issues which remain the responsibility of the researcher.

In this study, issues associated with the participants' reactions to the written reports did not arise since, despite the researcher offering to send both transcripts and draft reports to the participants, none of the participants took up her offer. While this was disappointing, it is also highly understandable since the participants were all experiencing pressures associated with their own doctoral project timelines. Five of the six participants did, however, respond to the researcher's occasional requests for clarification concerning excerpts from the transcripts. While the researcher was disappointed the participants were unable to confirm the accuracy of the transcripts and written reports, as the previous discussion has indicated, she did not expect her interpretations of the participants' narratives to coincide with their own. Furthermore, it would have been unethical for the researcher to insist that the participants provide feedback on the written reports.

Issues in data representation

The researcher's fundamental concern in producing the transcriptions was to achieve an accurate record of the interactive contributions of the interviewees and the researcher. Given that the participants' turns were usually prompted by questions framed by the researcher, it was important that the researcher's contributions to the conversation (verbal and nonverbal) were also faithfully recorded. Furthermore a substantial proportion of the affective and attitudinal content of the interviews was conveyed through non-lexical contributions to the conversations such as when the researcher expressed interest in what the interviewee was saying and encouraged them to continue.

However it is also important to acknowledge that the written account of an interview is a representation of what has been said and not a verbatim record (Riessman, 2008). Oral narratives of experience obtained through interview are inevitably transformed as the researcher turns them into a textual form. The process of transcribing and representing the voice and intentions of those interviewed is thoroughly interpretive with the researcher's values, attitudes, goals, and interests reflected in decisions about what to include and what to exclude. However it is certainly true that the researcher has an ethical responsibility to approach the process of transforming participants' stories into textual form as honestly as possible.

In qualitative research, transcription is viewed as both an integral part of data analysis and as 'an activity that is theory-laden' (Duff, 2008, p. 154). Duff argues that the transcribing process is not theoretically neutral because the decisions it entails are based on the researcher's epistemological underpinnings and have interpretive consequences. In this study, the decision was taken not to 'clean up' the transcriptions for two reasons. Hesitations, repetitions and grammatical errors were retained in order first to capture the detailed subtleties of spoken language, and second to provide an indication of the participants' communication skills and the ease with which they talked about their learning. The transcripts also retain important interactive features such as speaker emphasis, cut-off words, overlapping turns, unusually long pauses (indicated by the inclusion of a descriptive comment inside brackets) and significant non-verbal contributions such as laughter or expressions of surprise. Non-lexical indicators of attentiveness or understanding such as "uh huh" and "mmm hmm" (referred to as 'response tokens' by Gubrium and Holstein (2008, p. 93) and 'continuers' by Richards (Richards, 2011, p. 95)) were particularly frequent in the researcher's contributions. Richards claims that continuers represent important evidence of the co-constructed nature of interview discourse. He also argues that they are not always neutral features of discourse, but sometimes indicate agreement on the part of the interviewer. Both functions of continuers can be

observed in the researcher's contributions to the interviews, testifying to the genuinely co-constructed nature of the communication and to the researcher's willingness to express her own views. In producing the transcripts, it was considered unnecessary to measure pause length precisely or to report on nonverbal behaviours such as eye gaze or movement shifts. Duff (2008, p. 155) suggests three justifications for not recording such details: first, it is expensive in terms of time and effort; second, recording such behaviours is unlikely to result in theoretically interesting information; and finally, when reporting the findings, an overly-detailed transcription can make the text less readable.

The principal conventions used in the interview transcriptions (and in extracts included in journal articles and book chapters) are presented in Table 3.1.

Convention	Explanation
...	Indicates that the speaker's voice trails off with no signal that they intend to complete the utterance
=	Indicates that speakers' utterances overlap
uh huh, mmm hmm	These 'continuers' signal attentiveness and understanding, provide encouragement for the speaker to continue, or signal agreement by the listener
[points to the tape recorder]	Non-verbal cues (including laughter) and other additional information required to clarify meaning are presented inside square brackets
(Jack, 1, 234-267)	Details presented after a quoted extract indicate the name of the participant, the interview during which the exchange took place, and the relevant line numbers in the transcript

Table 3.1 Key to transcription conventions

Methods of data analysis

The analysis of personal narratives requires a rigorous analytical approach. Not only does the nature of the data generated in narrative analysis demand careful consideration; whichever method

of data analysis is adopted, the impact of the researcher's relationship with the participants needs to be taken account of:

Everything we say, and the way we say it, is affected by our relationship with the people we're talking to, the circumstances in which we speak, relevant past experiences, things we might already have said, and so on. If we ignore all this in analysing an interview, we fly in the face of our everyday experience. (Richards, 2003, p. 87)

Mishler (1995) proposes a typology of approaches to narrative analysis based on the three different functions of language — meaning, structure and interactional context. The first approach is primarily concerned with the content of the narratives, the second is concerned with the structure of the narrative and the third focuses on the way in which narratives are performed, paying attention to the contexts in which they are produced and attended to. Riessman's (2008) classification of approaches to analysing narratives adds a fourth — visual analysis — which focuses on interpreting images from different visual genres.

Talmy (2010) asserts that in studies which conceptualise the research interview as social practice, the data are unable to speak for themselves so that analysis needs to focus on 'how meaning is negotiated, knowledge is co-constructed, and [the] interview is locally accomplished' (p. 132). The data need to be examined to see how respondents' responses construct aspects of reality in collaboration with the interviewer. In active interview analysis, the 'focus is as much on the assembly process as on what is assembled ... The goal is to show how interview responses are produced in the interaction between interviewer and respondent, without losing sight of the meanings produced or the circumstances that condition the meaning-making process' (Holstein & Gubrium, 2003, p. 79). In such an approach, the researcher's goal therefore is to "'de-construct" participants' talk to show the reader both the *hows* and the *whats* of the narrative dramas of lived experience' (Holstein & Gubrium, 2003, p. 79).

In the present study, given its concern with complex phenomena such as learning and identity, analysis needs to attend both to the content of participants' narratives, and to the way they are produced in collaboration with the researcher. However Block argues that when the goal of narrative research is to capture the complexity of identity, what is needed is:

dialectic analysis which slides back and forth, between and among three general interacting levels: *micro*: at the basic level of utterances, examining how what is said is said; *meso*: at the intermediate level of positioning in the narrative, via the adoption of voices; *macro*: at the broader, more macro-level, whereby what is said is related to identities and social groups in society' (2010, p. 342).

Viewed in terms of Mishler's and Riessman's typologies, Block recommends that analysts pay attention to both the meaning (the *what*) and the interactional context (the *how*), as well as incorporating an additional layer of analysis which links participants' narratives to important phenomena in the broader social context.

Analysis of the interview data in this study therefore concerns itself both with the content of participants' narratives and the way they are produced in interaction with the researcher, paying particular attention to changes in the participants' perspectives across the interviews. However, it also seeks to address Block's third level of analysis by framing the participants' contributions within the wider social and cultural context in which they are operating (their department, the university, Australia). In some cases, this requires a great deal of contextual information. For instance, in order to understand Jack's comment —'and so two years out, you know like, I think there's been significant improvement in ... working with my supervisor' (Jack, 4, 775-776) — the reader needs to know that Jack initially had difficulty establishing a comfortable working relationship with his supervisor. It is also significant that, despite the normal practice at Jack's institution being to assign two or more supervisors to doctoral researchers, one of Jack's supervisors adopts a "passive" role and has never met with him. It is also important to know that, prior to coming to Australia, Jack completed his Master's degree in another country (not his own) where he worked with a supervisor with whom he had an excellent relationship. On several occasions in previous interviews, Jack spoke positively about his former supervisor and also about his difficulties with his current supervisor. As critical discourse analysts such as Wodak (1996) have shown, the production and interpretation of individual texts cannot be understood without reference to the entire context. In the written outcomes from the study, the contribution of the wider social and cultural context is brought into focus also by identifying resonances in the participants' narratives with findings from other research studies.

As this discussion suggests, the process of analysing the data therefore involved complex challenges. Interrogating participants' experiences of learning and identity and their understandings of those

experiences is inherently complex. Such an endeavour can only ever hope to be partially successful. Block argues that research which sets out to link what people say about their lives to issues of identity faces an 'inescapable problem ... [a]ny such example of analysis ... no matter how meticulously carried out ... will always be partial in that there will always be more that could be said ... identity is not only language mediated, but more generally multimodally/semiotically mediated'. (2010, p. 346). Notwithstanding these inherent limitations, the analysis sought to pay sufficient attention to the nonverbal and collaborative dimensions of the participants' narratives as well as to their contextual framing to produce a nuanced interpretation of their narratives.

Validity and reliability

Narrative researchers believe that the nature of the research they do demands that it be judged by different criteria to those applied to more traditional qualitative and quantitative research methods (Webster & Mertova, 2007). While narrative research involves the same careful consideration of research design as other methodological paradigms, practitioners recommend that studies be judged on the basis of the dependability, consistency and trustworthiness of the research process and interpretations rather than on conventional measures of validity and reliability (Duff, 2008). In a narrative inquiry into teacher identity, Liu and Xu (2011) report the two strategies they adopted to ensure the trustworthiness of their data. First, they established a relationship of trust with their participant to help ensure that 'the stories are told with fidelity' (2011, p. 591); and second they detailed their data analysis processes in such a way that readers could scrutinise them independently. Crucially, however, they remind their readers that '[o]ur goal, of course, is not to produce generalizable data, but a rich and nuanced understanding of one teacher's identity formation' (2011, p. 591).

Polkinghorne also argues for the need to re-orientate the measures adopted in evaluating the claims of narrative research:

Conclusions of narrative research are most often defended by the use of "informal" reasoning. The researcher presents evidence to support the conclusions and shows why alternative conclusions are not as likely, presenting the reasoning by means of which the results have been derived. The argument does not produce certainty; it produces likelihood. In this context an argument is valid when it is strong and has the capacity to resist challenge or attack. (1998, p. 175)

Clearly this is a very different understanding of the concept of validity from that adopted in conventional quantitative studies. However, since narrative research is focused on the reality of human experience, it cannot be measured by formal instruments or systems. Indeed, it differs from other research methods in both its object and its outcomes:

Narrative research does not produce conclusions of certainty. In narrative-based research, validity is more concerned with the research being well grounded and supportable by the data that has been collected. (Webster & Mertova, 2007, p. 90)

Likewise, the understanding of reliability as it applies to narrative research contrasts with conventional understandings of that concept. In empirical scientific research studies, reliability usually refers to the consistency of measuring instruments — their ability to return similar results when applied to different samples. However in narrative research, there is no expectation that one narrative will produce the same outcomes as another, or indeed that the same individual will produce the same narrative of events on different occasions. Reliability is achieved by a different means — ‘it is measured by the accuracy and accessibility of the data, so that any reader can get hold of the relevant text or transcript’ (Webster & Mertova, 2007, p. 93). Merriam argues that traditional standards of reliability cannot be applied to narrative research because the object being studied is in flux, the information gathered depends on the subject’s willingness to participate and the researcher’s skills and the emergent study design makes it impossible to impose a priori controls. Consequently, ‘achieving reliability in the traditional sense is not only fanciful but impossible.’ (Merriam, 1998, p. 206). As a result of these characteristics, certain aspects of reliability — such as the persuasiveness and coherence of the data — are uniquely associated with studies which adopt narrative approaches.

The strikingly different epistemological assumptions underlying narrative research are highlighted when considering methods that are routinely adopted in empirical studies in order to enhance validity, such as triangulation. Researchers who present data from a variety of sources in order to reveal outcomes which support similar conclusions assume the existence of an objective truth which can be identified and reported. However narrative researchers argue that there is no such thing as a single truth; rather there is a multiplicity of truths and multiple interpretations are valid:

If one subscribes to the view that the ‘real’ picture is context bound, that is to say the same set of interactions would have a different meaning in different contexts, there is a fundamental difficulty in trying to bring together data collected in

different contexts to make overall sense of a phenomenon. (Webster & Mertova, 2007, p. 91)

For narrative researchers, the real test of validity occurs when people read the research and find that the theoretical claims are supported with evidence from informants' accounts and alternative interpretations of the data have been considered.

Implementation of the study

The remainder of the chapter details the procedures adopted in implementing the study and concludes by outlining the steps involved in producing the five research texts (presented in Chapters 4-8) which present the main findings of the study.

Phase One - Online survey and focus group

The first phase of the study was exploratory in nature and set out to obtain a snapshot of the linguistic and educational backgrounds, perspectives and experiences of a group of international graduate students enrolled at the university where the data gathering was to take place. It involved first designing and administering an online survey to a group of international higher degree research students, and subsequently conducting a focus group discussion with a number of volunteers. This section describes the design and administration of the survey, the procedures adopted in organising and facilitating the focus group, and the method adopted for analysing the data obtained from the survey and discussion.

Survey design and administration

The survey sought data on the educational backgrounds of international higher degree research students, their motivations in deciding to study in Australia, their English language competence and the challenges associated with their first six months of residence in Australia. The 12-item survey was constructed using the software 'Survey Monkey' (see Appendix A). An email message was sent by the university's Higher Degree Research (HDR) office in mid-March inviting all international HDR candidates who had enrolled between 1 January 2008 and 1 March 2009 to complete the online survey. Approximately 200 invitations were sent out; by the end of the data-gathering period, 63 students had completed the survey, representing a response rate of 31.5%.

Survey data analysis

Survey responses included details of respondents' date of arrival in Australia, reasons for enrolling at the university, previous experience of living abroad, English language skills and the challenges they faced in their first few weeks in Australia. Details of the online survey respondents' nationalities and the total number of respondents from each country are provided in Table 3.2 (below). Descriptive data generated by the participants' responses to the objective items in the survey were tabulated and broad trends identified in the students' responses to open-ended items. (These data are reported in Chapter 4).

Country	Number of respondents
Austria	1
Bangladesh	1
Brazil	1
Canada	2
Chile	1
Colombia	2
Czech Republic	1
Denmark	1
Finland	2
Germany	8
India	2
Iran	3
Israel	2
Italy	2
Malaysia	4
People's Republic of China	4
Philippines	3
Republic of Macedonia	1
Saudi Arabia	2
Singapore	2
Taiwan	4
Thailand	1
The Netherlands	1
Turkey	1
United Kingdom	3
Ukraine	1
United States of America	5
Vietnam	2
TOTAL	63

Table 3.2 Online survey participants

Focus group discussion

The second stage of Phase One of the study involved organising and facilitating a focus group discussion. In addition to providing information on participants' experiences prior to enrolling in Australia, the discussion aimed to explore the challenges participants had experienced in adjusting to living and studying in Australia. The one-hour focus group was held two weeks after the online survey invitation had been mailed out. Participants were recruited through a survey item which invited volunteers to provide their contact details. Of the 63 survey respondents, 14 volunteered for the discussion and nine eventually took part. The discussion was facilitated and audio-recorded by the researcher, with excerpts later transcribed. Information obtained from the online survey guided the design of the discussion questions for the Focus group (see Appendix B).

Focus group data analysis

Since the first phase of the study was exploratory and aimed to provide the researcher with an indication of the range of experiences and perspectives of international graduate students at the university, it was decided to adopt a thematic analysis of the data focused primarily on examining the content communicated by the participants' narratives. However, in keeping with the principles of thematic narrative analysis, participants' stories were preserved intact for interpretive purposes since 'narrative analysts ... strive to preserve sequence and the wealth of detail contained in long sequences' (Riessman, 2008, p. 74). In preparation for analysing the discussion, the researcher listened to the audio-recording repeatedly in order to identify salient themes. After initially listing and grouping the issues raised by participants, these were consolidated into a more parsimonious list of four key themes (expectations, challenges, access to resources, cultural differences). Excerpts from the discussion were selectively transcribed to illustrate each of these themes. The focus group discussion proved helpful in formulating initial interview questions for participants in the second phase of the project. (Findings from the focus group discussion are reported in Chapter Four — *Identity and learner autonomy in an Australian university*).

Phase Two - Longitudinal narrative study

The second (major) phase of the study involved conducting a narrative inquiry into the learning and academic socialisation experiences of six international doctoral researchers. The principal source of data was the interviews conducted with participants between May 2009 and June 2011, however a small amount of email correspondence between the researcher and participants constituted a supplementary data source. Most email messages simply concerned meeting arrangements, but some clarified issues raised during interviews and not fully explored at the time. All interviews were

transcribed in full apart from the first background interview which was only partially transcribed since it included a significant amount of background material not immediately relevant to the study. A total of 35 interviews were conducted during the study, with minor variations in the number of interviews with each participant determined by their availability (see Table 3.3). This section outlines the procedures involved in recruiting the six participants, provides details of the scheduling and structure of interviews, and describes the procedures adopted in transcribing and analysing the interview (and email) data.

Participant	Number of interviews	Time remaining until thesis submission at end of data-gathering period (June 2011)
Jack	5	3 months
Journey	6	2 months
Mary	5	4 months
Emily	7	14 months
Dev	7	16 months
Ariunaa	5	18 months
TOTAL	35	

Table 3.3 Summary of interview data

Recruitment of participants

In recruiting participants for the second (major) phase of the study, the researcher sought individuals who would represent diversity in terms of gender, first language, discipline, thesis type and stage of enrolment (see Table 3.4). It was considered particularly important to recruit participants from different disciplinary perspectives since many researchers consider that discipline is the locus of the doctoral student experience (Gardner, 2009; Chris M Golde, 2005). Furthermore, since students from the People's Republic of China dominate the source country profile at the institution where the research was conducted, the decision was made to recruit at least one participant from China. The researcher decided to recruit a total of six participants so that, even if some attrition occurred, the number remaining would still provide 'multiple examples of the phenomenon under investigation' (Duff, 2008, p. 124). Attention was also paid to the period of time that the participants had been enrolled, so as to create the opportunity to gather insights from students at different stages of their doctoral learning experience. However the researcher was also careful not to recruit any participant who was close to submitting at the start of the study, since the time available for interviews would be too short and the student likely to have less time for interviews as the submission date drew near.

Participants were recruited with the help of administrative staff and through the researcher's social network. Emily² and Dev were recruited after responding to an email message (sent by a member of the administration staff from their department) which advertised the researcher's study and invited expressions of interest. Jack was introduced to the researcher by a friend and, after learning what the study involved, agreed to participate. Jack subsequently introduced Journey (a colleague from his faculty) who also agreed to participate. When it became clear that no participants from a Science discipline had been recruited, the Dean of Science was asked to send an email message to international PhD researchers in her faculty inviting expressions of interest. This resulted in the recruitment of Mary and Ariunaa, the final two participants. Comparison of the profile of the six participants with the wider population of international PhD candidates at the university revealed that they included representatives from the first (China) and fourth (India) largest source countries for PhD students (China and India), and from two of the three most populous faculties for PhD enrolments, Science and Human Sciences (Blinded Institution, 2010a).

Name	English status of Supervisors	Gender	Age	First language	Country of origin	Faculty	Time enrolled at start of study	Thesis type
Ariunaa	NES NES	Female	36	Mongolian	Mongolia	Science	7 months	Conventional
Dev	NES NES NES	Male	25	Tamil	India	Human Sciences	3 months	Publication
Emily	NES NES NNES	Female	30	Withheld	North America	Human Sciences	5 months	Publication
Jack	NNES	Male	29	Keiyo/ Tugen	Kenya	Business and Economics	14 months	Conventional
Journey	NES NES	Male	40	Bahasa Indonesia	Indonesia	Business and Economics	16 months	Publication
Mary	NNES NES	Female	20's	Mandarin	People's Republic of China	Science	17 months	Conventional

Table 3.4 Details of Phase Two participants

² All the names are pseudonyms chosen by the participants.

Each of the six participants came from a different country and spoke a different first language and had travelled to Australia in order to undertake doctoral study, enrolling shortly after arrival. The participants had different amounts of previous international experience. Journey, Jack and Ariunaa had completed their Masters degrees outside their home countries prior to coming to Australia whereas the others had completed theirs in their home countries. At the time of the first interview, the participants had been enrolled for a period of between three (Dev) and 17 months (Mary). Ariunaa and Journey were both permanent members of academic staff in universities in their respective countries, but all except Mary had previous work experience before arriving in Australia. The gender balance of three females and three males was a fortunate artifact of the recruitment process. Additional contrasts in the participants' profiles included the number of supervisors assigned to each candidate, the type of thesis which they were completing and the mix of native (NES) and non-native English speakers (NNES) amongst their supervisory teams.

By recruiting participants from different language and cultural backgrounds the researcher did not, however, expect to be able to generalise from the findings. Narrative analysis is fundamentally centred on the consideration of individual cases. While interesting similarities or differences between participants may be observed or commented on, narrative analysis is committed to exploring the idiosyncrasies of individual experiences rather than attempting 'to generate inductively a set of stable concepts that the researcher can use to theorize *across* cases' (Riessman, 2008, p. 74). Nevertheless, it was anticipated that by exploring the narratives of six participants, it might be possible to provide compelling evidence of particular phenomena that emerged in the narratives of more than one participant (Duff, 2008).

Scheduling and structuring of interviews

Mindful of the participants' doctoral project commitments, the researcher attempted to keep intrusions on their time to a minimum. Accordingly, interviews were scheduled at four monthly intervals for two years. At the end of each interview, participants were asked about their upcoming schedule and invited to suggest an approximate date for the next meeting. Prior to that date, the researcher sent an email inquiring how their work was going and asking if they would have time for an interview within the next few weeks. While some participants took several weeks to respond to the researcher's email messages (usually because of pressure from an imminent deadline), others tended to respond the same day. Interviews were conducted on campus in a quiet location to create optimal conditions for digitally audio recording the interviews. In order to maximise the opportunity to access the participants' perspectives over time and to accommodate their absences

due to conference leave, the interviews continued until three months prior to submission of the thesis.

The interviews were semi-structured and followed a broad three-stage guide prepared in advance (see Appendix C for a sample interview guide). The first stage of the interview generally consisted of a 'catch-up' on what the participant had been doing since the previous meeting. By asking an open-ended question at the start of each interview — 'How is everything going at the moment?' – the researcher provided an early opportunity for participants to focus on issues they wished to discuss. The second stage focused on any follow-up questions the researcher had about ideas discussed in the previous interview. The third part of the interview focused on new issues the researcher wished to explore. Each interview concluded with an invitation to the participants to raise any other issues they wanted to discuss. In practice, the interviews flowed more like conversations than conventional interviews. While some participants responded to questions at greater length than others, all appeared comfortable and relaxed during the sessions.

One important feature of the interviews not readily accessible to the reader is their 'intertextuality'. Whereas, in literature, this term refers to the ways in which the meaning of a given text is affected by the meaning of other texts, in narrative studies, 'intertextuality ... is a way of saying that individual accounts owe much of their structure and meaning to other accounts' (Gubrium & Holstein, 2008, p. 185). In this study, the term 'intertextuality' describes the fact that participants frequently referred back to ideas discussed in previous interviews, thereby cumulatively constructing meaning across the occasions on which they met with the researcher. For example, several participants regularly prefaced their remarks with words such as "We've spoken about this before, but ..." when they wished to revisit an issue previously discussed, sometimes because their perspective on it had changed. Likewise, the researcher frequently linked participants' contributions to comments they had made in previous interviews. This feature of the interviews provides compelling evidence that the narratives are 'as much socially constructed as they are individually composed' (Gubrium & Holstein, 2008, p. 185).

Researcher- participant relationships

Of key relevance to the researcher-participant interaction during interviews was the researcher's status as a fellow doctoral researcher. Rather than viewing the interviews simply as an opportunity to obtain data for her study, the researcher believed they also had the potential to provide an opportunity for participants to reflect on their learning experiences in a way that could be

productive. In order to create the circumstances in which this might occur, the researcher sought to highlight similarities between the participants' current situation and her own. Consequently, when invited to do so, the researcher expressed her personal views on issues such as the difficulties associated with academic writing and the value of networking. Given the likelihood that the researcher's dual status as researcher and fellow doctoral candidate might influence what the participants chose to say during interviews, 'biases resulting from this status were ... duly noted and recorded throughout the interview and analysis portions of the study.' (Gardner, 2007, p. 730).

The researcher was also open to contact with the participants outside the interviews. The researcher's initial meeting with each of the participants took place on their university campus in a cafe during which the study's aims and procedures were introduced and participants' questions answered. Once the participants had formally consented to participate, the first interview was arranged. On several occasions, participants accepted the researcher's invitation to have coffee together after the interview; however these interactions were not treated as part of the project data. In addition, the researcher socialised with three of the participants off campus once or twice and provided proofreading assistance to several participants at different times. When one of the participants was experiencing a difficult personal problem, the researcher offered to meet him for coffee and maintained regular email and phone contact for several weeks which he appeared to appreciate:

Hi Sara - I don't know how to thank you. I really appreciate your support. [Dev,
Email, Nov 18, 2010]

In another signal that participants viewed the interviews as more than just an opportunity for the researcher to gather data, two of the participants commented (off tape) that because they *enjoyed* the interviews, they found it easy to make time for them. This suggests that the interviews may have played a positive (if minor) role in the participants' experience of doctoral study by providing an opportunity for reflection. A similar finding was reported in relation to the role of research interviews in a study of graduate students' socialisation experiences conducted in the USA:

many participants reported the interviews to be their only opportunity for thoughtful conversation with an interested listener whose goal was to provide a venue for the student to reflect and explore dimensions of his or her graduate experience (Austin & McDaniels, 2006, p. 438)

Power relations

Despite the cordial and relaxed relationships the researcher established with the participants, 'it is somewhat naive to assume that open-ended or non-directive interviewing is not in itself a form of social control which shapes what people say' (Silverman, 2007, p. 572). Research interviews are constituted by complex relations of power. The fact that the researcher chooses when to turn the tape on, selects the questions to ask, determines when to move on to a new topic and decides which extracts from the interviews to report in published articles all reflect the power relations operating between researcher and participants. Furthermore, significant differences in the researcher's and participants' ages, cultural backgrounds, English language expertise and professional experience are likely to have impacted on interaction in important but unobservable ways.

Compensating participants for their time

One way in which researchers can attempt to compensate for the unequal power relations operating in their project is by acknowledging participants' generosity in agreeing to participate in the study. This is particularly important when the research involves a long-term personal relationship as in this study. One way of acknowledging participants' investment of time and interest involves the principle of *reciprocity*. In her qualitative study of Bosnian Muslim refugee families, Huisman writes of her efforts to 'assuage ethics concerns ... through reciprocity' (2008, p. 386) by tutoring family members in English and providing different kinds of assistance and advocacy. In this study, the researcher attempted to compensate participants for their time in various ways including by providing feedback on their oral English, proofreading abstracts, funding applications and formal letters, and providing editing assistance with draft articles. In addition, the researcher sent copies of all the interview sound files and transcripts to one participant who used them to 'review my progress'.

Member checking

Despite the desirability of participants checking the study's written reports, five of the study's six participants indicated that they did not have time to check the transcripts. While the sixth participant requested copies of the transcripts of all his interviews, at no time did he comment on their accuracy. Therefore, whenever the researcher was genuinely puzzled about the meaning of an extract from one of the interviews, she sent the extract to the participant by email asking them if they were able to clarify what their response had been. This did not always produce a response. In such cases, the researcher simply typed [unintelligible] into the transcript in the relevant section. While five of the six participants were happy to allow the researcher to use any part of their

interviews in written outcomes of the project so long as their anonymity was preserved, one participant asked that the researcher check with her each time an extract from one of her interviews was being considered for inclusion in an article. Because of the researcher's commitment to preserving the participants' anonymity, only one sample interview transcript is included in the thesis (Appendix D).

Data analysis procedures

In narrative research, data analysis begins as soon as data collection and transcription start. The notes that researchers routinely produce to summarise an observation or an interview represent the first attempts at analysis, in that these often draw attention to ideas and themes that may prove important in subsequent data collection. In this sense, analysis begins early and is iterative and cyclical in nature (Duff, 2008). While systematic, the data analysis process does not follow a linear sequence but moves 'in analytic circles' (Creswell, 1998, p. 142), characterised by recurrent revisions:

It would be tempting to view this overall process of analysis and interpretation in the move from field texts to research texts as a series of steps. However, this is not how narrative inquiries are lived out. (Clandinin & Connelly, 2000, p. 132)

Accordingly, the researcher's data analysis began with the notes she made after her first meeting with each of the participants. In contrast to the thematic analysis method adopted in analysing the focus group interviews, the researcher was committed to exploring both the *whats* and the *hows* (Holstein & Gubrium, 2003) of her interviews with the participants in the second phase of the study. Therefore the researcher's notes (referred to here as 'field texts' (Clandinin & Connelly, 2000)) included her impressions of the participants' demeanour, mood and tone of voice as well as records of email exchanges. While transcribing each interview, the researcher highlighted passages which were unexpected or appeared to relate to issues canvassed previously or themes discussed in the research literature. After transcribing each interview, the researcher created a brief file note summarising the main topics discussed and details of recent events in the interviewee's research life. Shortly after transcribing each interview and printing the written record, the researcher listened to the interview again to identify interesting topics and themes and produced a table which labelled these themes along with details of relevant line numbers in the transcript. This process entailed working with the sound file and the transcribed text simultaneously. This table was added to cumulatively for each participant across the period of the study (see Appendix E).

After the third interview had been carried out with each participant, the researcher listened to all the interviews again and reviewed all related email correspondence before beginning the process of coding the narratives. The themes previously identified for each interview and recorded in each participant's Thematic Interview Summary were either confirmed or modified and additional details noted. These included details of significant individuals mentioned in the field texts (transcripts, field notes and email correspondence), important events reported, story lines, gaps or silences that became apparent, metaphors used by participants, evidence of emotional reactions to events, evidence of continuities and discontinuities (Clandinin & Connelly, 2000, p. 131).

The next stage of analysis involved developing a thematic map of the entire data set (see Appendix F). A 'cross-story analysis' (Murray, 2009) was then developed which involved identifying issues that emerged in the experiences of multiple participants. This process consisted of six broad phases (Braun & Clarke, 2006):

1. Reading and re-reading transcripts and email correspondence
2. Generating initial codes (systematically coding interesting features of the data across the entire data set, collating data relevant to each code)
3. Searching for themes (collating codes into potential themes, gathering all data relevant to each potential theme)
4. Reviewing themes (checking if themes work in relation to coded extracts and entire data set)
5. Defining and naming themes (ongoing analysis to refine the overall story the analysis tells, generating clear definitions and names for each theme)
6. Producing the map

Braun and Clarke's (2006) nuanced discussion of the importance of researcher judgement in identifying themes informed the analysis undertaken in this study. They argue that prevalence of certain issues in the transcripts is only one criterion to consider in deciding what counts as a theme, and advise researchers to remain sensitive to themes which capture important information in relation to the study's research questions. This analytical process resulted in the identification of a broad range of themes and issues which were later returned to (and refined) in developing the research texts (Clandinin & Connelly, 2000).

From field texts to research texts

The research texts (Chapters 4-8) produced as part of this thesis represent the researcher's attempt to foreground the social significance of the study findings by focusing on analytical and interpretive matters — 'responses to the questions of meaning and social significance ... ultimately shape field texts into research texts' (Clandinin & Connelly, 2000, p. 131). This transformation of field texts into research texts corresponds to Block's (2010) advocacy of analysis at the *macro* level, where the participants' interview contributions are related to identities and social groups in society. In this process, the researcher was mindful of the need to move beyond the detail of the field texts and to contextualise the work socially and theoretically by considering the expectations of members of the academic community who would read the texts. This process generated a tension in the researcher between wanting to do justice to the complexity of participants' situated stories and wishing to locate their experiences within a discussion of the wider social structures. This tension emerged in relation to Chapter 8, for instance, when reviewers appeared to encourage the researcher to frame the participants' experiences of tension as products of cultural difference rather than idiosyncratic reactions to systemic features of the system. Throughout, the researcher endeavoured to remain alert to the context in which the practices reported by the participants were located so as to avoid making claims that 'may not hold up when applied to situations outside the one in which they were generated' (Benesch, 2001, p. xvi). The next section describes the steps taken in producing each of the research texts.

Chapter Four Identity and learner autonomy in PhD study

The first research text produced for the study was a book chapter entitled "*Identity and learner autonomy in doctoral study: International students' experiences in an Australian university*" which reports the findings of the online survey and focus group conducted in the first phase of the research project. This text aimed to draw on the Phase One findings in considering more broadly the challenges which confront international doctoral researchers in Australia as they negotiate their place in an unfamiliar university in a new country. This first research text provides a backdrop to the narratives produced in the second phase of the study.

The descriptive data generated by the online survey were first analysed numerically in order to present a summary of the 63 survey responses. Trends identified in responses to the open-ended items in the survey were identified, summarised and discussed in the first part of the text. The focus group interview was audio taped and listened to repeatedly to identify key issues raised by the participants. Initially, all issues mentioned by at least one participant were listed before grouping

them under three thematic headings — expectations, challenges and cultural differences. Next, sections of the transcripts were identified to illustrate each theme and examples incorporated in the text. The researcher acknowledges the tensions associated with this process of ‘reduction [of the data] downward to themes ... [which] yields a different kind of text with a different role for participants’ (Clandinin & Connelly, 2000, p. 143). However, it was felt that in order to convey the rawness of the challenges reported by students in their surveys and the focus group, this more rhetorical approach to composing the research texts needed to be adopted.

It is important to acknowledge that the conception of learner autonomy adopted in Chapter Four derives from research in the field of language learning and is therefore not to be confused with the ‘neo-liberal ideology of the autonomous self’ (Clegg, 2005, p. 159) regularly critiqued in the higher education literature (see for example Johnson, et al., 2000). The way the term ‘learner autonomy’ is used in Chapter Four overlaps significantly with the way the term ‘agency’ is used in the doctoral education literature. [This chapter is due for publication in October 2011]

Chapter Five – Doctoral students writing

The second research text is a journal article entitled “*Doctoral students writing: Where’s the pedagogy?*” which reports on the writing pedagogy to which two of the study participants had been exposed. The article framed doctoral learning as participation in a community of practice (Wenger, 1998). Journey and Mary were chosen as the focus of this paper since they had had the most experience with writing at the time the article was written. The goal of the article was to consider the assistance the participants received with their writing in the light of a survey of published research on doctoral writing pedagogy. Data for the study consisted of three interviews with each participant and two email messages they had sent to clarify points made during interviews. The researcher initially re-read the transcripts and identified all references to writing-related practices in the participants’ talk, and all instances where the participants expressed attitudes to or beliefs about writing. The aim was to produce case-centred accounts (Riessman, 2008) of Mary’s and Journey’s respective experiences of writing in the PhD.

Subsequently, stretches of the participants’ talk about writing were classified according to their principal focus. This resulted in the identification of a number of different topics including participants’ previous writing experiences, strategies their supervisors adopted to support their writing, aspects of their personal writing processes and challenges they encountered when writing. The next stage of analysis involved explicitly comparing the participants’ writing experiences with

the practices recommended in the research literature on doctoral writing pedagogy. This comparison found that Mary had been exposed to fewer than half of the recommended practices, and Journey just over half. In discussing the range, frequency and quality of the participants' writing experiences, the researcher attempted to highlight the relative poverty of their pedagogical affordances. [This article was published in May, 2011]

Chapter Six – Student perspectives on doctoral pedagogy

The third research text is a journal article entitled "*Doctoral pedagogy: What do international PhD students in Australia think about it?*" which investigates the participants' experiences of doctoral pedagogy. The article aimed to explore the 'mysterious activity' (Green, 2005, p. 151) of doctoral pedagogy and discuss participants' perspectives on the practices to which they had been exposed. The paper adopted a view of pedagogy which extended beyond the supervisory dyad and incorporated participants' interactions with peers, friends, family members and other academics including practices they initiated and carried out themselves.

The researcher began by reviewing previous research in doctoral pedagogy based on a search of all issues of three international journals of higher education published in the preceding five years and several recently published books. After identifying the key findings of these studies, the 22 interviews completed by the time of writing were examined to identify each occasion on which the participants referred to practices which promoted (or hindered) learning. These practices were then added to a database of pedagogic practices and classified according to who initiated the practice (e.g. supervisor, student, peer etc.), which phase of the research project the practice related to, and the participant's evaluation of the practice. Subsequently, supervisor-initiated practices were classified according to four categories of facilitative supervisor practices identified by Pearson and Kayrooz (2004). In order to test the representativeness of the participants' experiences of doctoral pedagogy, the researcher also interviewed five doctoral peers about their doctoral learning experiences. Although these interviews were transcribed and analysed, the findings were not incorporated in the journal article. The discussion section of the article considered shortcomings in the participants' experiences and their implications. [This article was published in September 2011]

Chapter Seven – Six outsiders and a pseudo insider

The fourth research text is a book chapter entitled "*Six outsiders and a pseudo-insider: International doctoral students in Australia*" which was invited by the editors of a forthcoming book on doctoral education in different international contexts. The researcher had been asked to focus particularly on

her participants' and her own lived experiences as doctoral students in Australia. Therefore, this was a significantly more reflexive text than the others. Given the requested focus, the researcher chose to highlight aspects of the participants' narratives which seemed to reflect issues peculiar to the Australian context. Furthermore, in the interests of sharing more widely views which the participants appeared reluctant to express to university authorities (largely for cultural reasons), the researcher chose to focus on stories of personal, academic and social tension which the participants had shared with the researcher.

The approach to crafting this text was the most selective of those so far discussed. Given the word limit of the target text, and the researcher's desire to give voice to some of the tensions the participants had spoken about so freely with her, the researcher chose to present a small number of stories which highlighted some of the personal, and academic and administrative challenges the participants had reported. This involved searching through the field texts and making use of the thematic map to identify stories which might illustrate significant themes before choosing the most powerful examples to incorporate in the written report. A third, more general theme, reported by all six participants — lack of contact with Australian students — was also discussed. In order to analyse the different ways in which the participants had discussed this issue, all instances of relevant talk were identified and considered in terms of the participants' attitude to the phenomenon and any potential causes they had identified. The researcher's reflection on her personal experience of each of the three main themes was also included at the end of the relevant section. [This chapter is due for publication in October 2011]

Chapter Eight – More than just a brain

The fifth research text entitled "*More than just a brain: Emotions and the doctoral experience*" began life as a conference paper and was subsequently developed as a journal article. The paper aimed to present a framework for understanding how emotions contribute to the doctoral experience and to argue in favour of including the affective domain in any conceptualisation of doctoral learning. The paper drew on Activity Theory in identifying structural elements within the participants' learning context which triggered their emotions in positive and negative ways. The data consisted of 35 transcribed interviews and a small number of email messages. Analysis was initially conducted on the narratives of each participant, identifying and coding all segments of text relating to emotion-related experiences and expressions, before exploring each episode in relation to emerging conceptual themes. The same process was then carried out across cases. The analysis of each

interview transcript was complemented by checks via email to clarify and confirm intended meanings with participants.

The analysis required for this paper demanded a 'cross-story analysis' (Murray, 2009) which involved identifying all emotion episodes that emerged in the narratives of the six participants. Once again the thematic map was initially consulted to identify all interview excerpts which provided evidence of the expression or experience of emotion. This process resulted in the decision to highlight salient positive and negative emotion episodes in the participants' narratives, as well as an evaluation of the strengths and weaknesses of activity theory for conducting this kind of analysis. [This article was accepted for publication in September 2011]

Interim texts

In addition to the five research texts included in the thesis, a number of *interim texts* (Clandinin & Connelly, 2000) were also produced in the form of oral conference papers and seminar presentations. These provided valuable opportunities for the researcher to clarify her thinking in relation to the project findings and to benefit from audience and reader feedback.

Summary

This chapter has outlined the way in which the project was conceptualised, presented the rationale for the methodological decisions taken and reported on its implementation. It has also reported on the process of producing the five research texts which immediately follow this chapter.

Identity and learner autonomy in doctoral study

Research Text 1

Introduction

Studying in an overseas university involves challenges ranging from adjusting to differences in food and climate to making sense of the local academic culture. Previous research into the linguistic and academic challenges overseas students face suggests that being able to solve learning problems independently is a prerequisite for survival (see, for example, Leki 1995, Skyrme 2007). The project reported on in this chapter investigates the experiences of a group of quintessential independent learners — international doctoral students — and concludes that negotiating their identities as legitimate members of their new community of practice (Wenger 1998) represents a considerable challenge for them.

The study frames doctoral learning as participation in a community of practice (COP) (Wenger 1998), viewing doctoral students as engaged in learning how to think, speak and write as expert members of their COP. The COP perspective is based on the notion that learning fundamentally changes who a person is, with novices transformed into more confident researchers over time. Since they are on a trajectory from novice researcher to licensed scholar – the successful outcome of which is symbolised by award of the title ‘doctor’ – identity is also central to the activity of doctoral students, with one researcher claiming that doctoral education is ‘as much about identity formation as it is about knowledge production’ (Green 2005, 153). If, as Chik suggests, ‘a coherent sense of one’s learner identity may foster the development of learner autonomy’ (2007, 58), exploring students’ experiences of negotiating their identities in the new learning context is likely to also reflect their efforts at managing the highly autonomous task of completing a doctoral degree.

Three concerns motivated this project. First, the target group appears to have been neglected in recent research on language learning and identity, much of which has focused on immigrants

(Norton 2000, Pavlenko et al. 2001, Block 2006). However, as indicated above, international doctoral students also need to construct new identities as they position themselves in relation to members of the local culture, other students, academic staff, university administrators and the wider research community. Second, the project seeks to investigate the processes by which novices are encouraged to participate in established academic communities of practice. Finally, it aims to explore the potential of a biographical narrative approach for exploring participants' experiences. The data presented in this chapter, however, relate only to the first of these three aims.

Previous research

The first stage of the project, which involved an online survey and a focus group discussion, draws on and contributes to the research literature in two different areas. First, it builds on previous research into the learning experiences of international university students. Second, it extends research on identity and learning by expanding the focus from language learning to the broader cultural, social and educational experiences which impact on international doctoral students' learning.

Challenges facing international university students

Early research into the experiences of international university students focused on their acquisition of second-language (L2) academic literacy (Belcher 1994; Spack 1997a; Lea and Street 1998). There is good reason for this. Successful university study in a second language requires advanced language proficiency and an ability to decipher the unwritten rules of disciplinary debate in the academy (Cohen 2009). Skyrme (2007) recounts the experiences of two Chinese undergraduates in their first semester at university in New Zealand. Whereas one was able to reflect on his disappointing results and determine how to adapt his learning strategies for the future, the other student had no idea why he had failed the course despite having sought advice from both his lecturer and other students. The study concludes that responsibility for identifying the purpose of learning activities and discovering how to achieve success in the new learning context lay entirely with the students.

Other research has focused specifically on the experiences of international graduate students. For example, Deem and Brehony (2000) report on doctoral students' access to research cultures in two United Kingdom universities, and conclude that international and part-time students have the most difficulty in accessing research and peer cultures. Problems arise for international doctoral candidates, they argue, because they are often older than their local counterparts, may suffer from changes in status and may have family members to support. Also, Morita's (2004) study of six

female Japanese students enrolled on a Master's programme in Canada explores both their academic socialisation and the way they negotiate identity. She reports that some students had difficulty being recognised as legitimate members of their classroom communities partly because of differences between their and their peers' learning behaviours.

Another strand of research has examined graduate students' socialisation into academic discourse practices. Writing at the graduate level poses a number of challenges including the need to develop a scholarly voice. As Duff (2007a, 1.4) points out:

Academic discourse socialisation ... involves developing ones' voice, identity and agency in a new language/culture. Learning scientific discourse, in this view, involves learning to think, act, speak and write like a scientist in a scientific community of practice.

However, it 'is anything but natural for a graduate student' (Li 2008, 48) to adopt an authoritative scholarly voice in writing about a field to which they are relative newcomers. This challenge may be felt more acutely by students who are writing in a language other than their first language. Shen, a Chinese scholar of English literature, writes of the identity transformation he went through when he first began writing in English at university:

In order to write good English, I knew that I had to be myself, which actually meant not to be my Chinese self. It meant that I had to create an English self and be that self. (Shen 1998, 126)

Identity and (language) learning

Since the early 1990s, identity has been investigated in the context of immigrant language learning. Norton (2000, 5) argues that identity is central to language learning in immigrant settings, emphasising that it needs to be understood 'with reference to larger, and frequently inequitable, social structures which are reproduced in day-to-day interaction'. Her case studies of five immigrant women in Canada highlight the role that social positioning plays in access to the new language. Another study has explored identity construction in the longitudinal narratives of four Japanese students whose families moved back and forth between Japan and North America (Kanno 2003). Kanno focuses on the changing linguistic and cultural identities of the students and the attitudes they encounter in both countries as a result of their 'hybrid selves'.

Identity has also been studied in relation to foreign language learning. Murphey, Chen and Chen (2005) report the benefits of using language learning histories with university learners of English in Japan and Taiwan to encourage reflection on language-related identities. A study of independent language learning at a Japanese university also found that encouraging learners to explore their future identities as users of English had a positive impact on their motivation (Cotterall and Murray 2009). Finally, an investigation of the relationship between agency, identity and autonomy in the English learning and teacher training of university students in China suggests that identity construction may both originate in and result from autonomy in EFL learning (Huang 2009).

The central role of identity in doctoral learning is acknowledged by a growing number of researchers (Lee and Boud 2003; Green 2005; McAlpine and Amundsen 2007), many of whom assign to writing a crucial role in the process (Casanave 2008). For example, Kamler and Thomson consider that doctoral researchers are engaged in the 'mutual construction of text and identity' (2006, 66) as they participate in a learning process aimed at inducting them into ways of thinking, behaving and expressing themselves like scholars.

What the participants said

The data reported here were generated in the first phase of a larger research project. The intention was to obtain baseline data on the initial adjustment experiences of a representative group of international graduate students. Data were gathered through an online survey of international Higher Degree Research (HDR) students³ at an Australian university and a subsequent focus group discussion. The survey was constructed using the online software 'Survey Monkey' (<http://www.surveymonkey.com/>). An email message was sent in mid-March 2009 by the university's HDR office inviting all international HDR candidates who had enrolled in the previous 15 months to complete the online survey. Approximately 200 invitations were sent out; and by the end of the data-gathering period, 63 students had completed the survey.

A one-hour focus group discussion was held two weeks after the online survey invitation. Participants were recruited through a survey item which invited volunteers to provide their contact details. Of the 63 survey respondents, 14 volunteered for the discussion and nine eventually took part. The discussion was facilitated and audio-recorded by the researcher, with excerpts later transcribed.

³ The term HDR includes M.Phil., M.A. by research, professional doctorate and Ph.D. thesis candidates.

Survey data

The descriptive data generated by the survey and trends identified in responses to open-ended items are presented below. Survey responses concerned respondents' reasons for enrolling at the particular university, their previous experience of living abroad, their English language skills and the challenges they faced in their first few weeks in Australia.

The majority of respondents (73%) had decided to enrol at the university because they had been awarded a scholarship, although some gave more than one reason. Other reasons included the reputation of the university's academic staff (38%) and of the university itself (27%). More than half of the respondents (58%) reported having lived abroad prior to arriving in Australia, with a total of 29 different countries listed.

The non-native speakers of English among the survey respondents reported high levels of English proficiency (Table 4.1). When asked about their impressions of Australian English on first arriving in the country, 23% responded that they found it difficult to understand, 47% found it okay to understand and 23% found it easy to understand. The respondents' confidence in their ability to *use* English was high with 90% feeling either confident or very confident about using English in social situations, and 87% feeling confident or very confident about using English in academic situations.

Finding accommodation proved the biggest initial challenge for more than half of the survey respondents (53%), with one-third (33%) indicating that understanding Australian English was the major challenge. In addition to difficulties with accommodation, language and homesickness, respondents identified a number of other challenges, which included the high cost of living, administrative problems, understanding how the university works, making friends outside the office and 'getting into my research project'.

Test name	Low	High
IELTS (out of 9)	6.5	8.5
Internet-based TOEFL (out of 120)	102	115
Computer-based TOEFL (out of 300)	263	263
Paper-based TOEFL (out of 677)	650	655

Table 4.1 Survey respondents' self-reported English language proficiency

Focus group data

Nine international doctoral candidates took part in the focus group discussion. Table 4.2 presents background information on the participants. Discussion topics included initial impressions of Australia, accommodation and living costs, HDR student resources and facilities, the university's communication with students, and relationships with university staff and peers. (See Appendix 1 for a list of questions which guided the discussion.) Following analytical procedures commonly adopted in qualitative research, the interview transcripts were scanned repeatedly to identify common conceptual themes. These themes and illustrative quotations from the data are presented below.

Name	Gender	Nationality	Length of residence in Australia	Degree, Department
Andreas	M	German	20 months	PhD, Geochemistry
Brigitte	F	German	11 months	PhD, Linguistics
Claudia	F	German	13 months	PhD, European Languages
Ferah	F	Turkish	8 months	PhD, Biology
Helen	F	North American	8 months	PhD, Linguistics
Marie	F	North American	1 month	PhD, Linguistics
Omeed	M	Iranian	12 months	PhD, Media Studies
Rajiv	M	Indian	12 months	PhD, Cognitive Science
Songsak	M	Thai	6 months	PhD, Linguistics

Table 4.2 Background of focus group participants

While it may seem a somewhat mundane issue, finding suitable accommodation turned out to be a significant concern for four of the nine participants (and over 50% of the survey respondents). Several participants commented on differences between the process of hunting for an apartment in their country and Australia, including the difficulty that recently-arrived international students face

in providing the personal references and bank statements required by leasing agents. Brigitte commented 'In Germany it's like you pick the place. And here it's they pick you.' [B, Line 447]. There was also a general consensus that the cost of living in Australia was high, especially the cost of transport. Some participants were disappointed with the resources and facilities made available to them. Andreas found it 'ridiculous' that the university allocated the same amount of money to each Ph.D. candidate regardless of their discipline, explaining that since students in the Physical Sciences needed to purchase equipment they were likely to require more money than other students. Marie was surprised at the lack of departmental facilities:

I thought I would have an office and a computer. I really thought I would have my place. That's how I saw it ... so okay we're sharing, but I don't even get my own computer. [M, Lines 378–80]

Instead, on arriving at the university, she was shown to a postgraduate student computer room and told that if she arrived early enough, she should be able to find a computer to work on.

The way in which the university communicated with students also drew comment. Songsak observed that 'the communication here is in written form rather than spoken' [S, Line 473], explaining that he was overwhelmed by the large amount of written information he received during the first few weeks. Rajiv was surprised that the airport pick-up arrangements had been 'outsourced' so that his first contact with the university was through an agent who had no personal relationship to the institution. He was also surprised that the university relied on agents for the scholarship and visa application process:

... so the early shocks which I received were how Australian universities require agents for everything, from applications to visa, which seems a bit strange. Given that they have some trust in my scholastic ability, the ability to do research, why can't they trust the student that he can lodge his own visa or even apply ... [R, Lines 255–9]

Participants had different experiences of initial contact with their academic departments and colleagues. Whereas Claudia benefited from participating in a Commencement Programme which involved regular meetings with other newly-arrived doctoral students, others had initially felt unwelcome and isolated. Rajiv explained:

People are too busy in their own thing it looks like, especially as regards to students. Most of the staff members and the university as such is quite okay, but because probably we start at different times of the year and only one student is a new student in the department, so not many people are available at that time for whatever reason to talk to the student early and make the student feel welcome and comfortable or help the student around or things like that. [R, Lines 40–5]

When asked about their relationship with their supervisors, all the participants reported that they were impressed with their supervisors' *academic* skills, but several regretted that they had no *personal* relationship with their supervisor. Brigitte explained:

... my supervisor now is a guy, and for my Masters back in Germany it was a woman and I've known her through my undergrad degree and stuff so that might have been a difference as well but I was having way more personal conversations with her than I could ever imagine having with my current supervisor now. [B, Lines 748–56]

Songsak commented that he felt uncomfortable addressing his supervisor by his first name, given the Thai practice of inserting the title 'Ajan' before teachers' names. Marie experienced a related problem in composing emails to her supervisor:

I still don't know when I write if I'm supposed to write 'Best regards' every time . . . I don't know how to start my mails, finish them. I have no idea (laughter). I'm guessing, and I've asked her and she said 'Well it's different for everyone but you've been fine up till now' (laughter) but I still don't know! [M, Lines 707–12]

Another issue raised by the participants was the level of bureaucracy in Australia. Andreas complained about the time and difficulty involved in preparing the budget for his doctoral project:

Yeah, doing the budget was quite a challenge because the way the university does it they don't really give too much information, you have to get all the information yourself once you know what you are going through, it makes it a little bit easier but still things don't work out and it takes ages until things are settled ... at the beginning you do so much stuff that's not related to your research at all ... [A, Lines 409–16]

Finally, a number of participants commented on the fact that they found it difficult to make 'real' friendships with Australians⁴. Helen provided the following example from her experience of socialising with Australians:

Like it's very easy to go drink with Aussies and they love to buy you beer but then you know I'm still not at the point where I can call anybody other than my flatmate to go watch a movie ... [H, Lines 954–6]

Rajiv offered a possible explanation for the difficulty some international students experienced in making friends with local students:

Oh probably it's a language thing because they know that you speak their language so they don't make any effort on their part to include you and unless you do certain types of things like drinking or certain activities only then it's easier, otherwise it's not so easy. [R, Lines 972–5]

Clearly, the identities newcomers project – the way they dress, the social activities they take part in, the language they use – affect their interactions with local students. The significance of these and other themes emerging from the data is discussed below.

Discussion

The survey and focus group discussion revealed that many of the participants had previously lived outside their home country, some had completed their Master's degrees abroad, and most were confident about their English language skills. Yet these multilingual, multiliterate, culturally sophisticated graduate students experienced a number of challenges in adapting to their new environment. In this section, three issues identified by the participants are discussed further, demonstrating how they foreshadow challenges which are central to doctoral study and are therefore important sites for the construction of identity.

Becoming an international student implies a significant shift in identity and status for individuals who may have been successful, highly regarded members of social and professional networks at

⁴ The participants' willingness to discuss this topic frankly may have been influenced by the fact that I am not Australian.

home. More specifically, assuming the status of doctoral student involves being positioned on the bottom rung of the academic ladder. The impact of this change in status is made clear in Andreas' frustration at discovering the university's 'one size fits all' policy of allocating funds for graduate student research. As a scientist, he depends on access to an adequate budget in order to complete his project. This university policy therefore both challenges Andreas' identity as a scientist and confirms that, in the eyes of the institution, he is 'only a student' and therefore powerless to object.

Another issue which foreshadows contested terrain for many doctoral students is highlighted in Brigitte's comment about her relationship with her supervisor, which apparently lacks a personal dimension. A similar concern is reflected in Marie's difficulty in finding an appropriate way to greet her supervisor in email messages and Songsak's reluctance to call his supervisor by his first name. The supervision relationship is a key site for identity negotiation since this is where doctoral students articulate and defend their ideas, observe scholarly practices and experiment with their researcher persona. Consequently, negotiating a mutually respectful, comfortable relationship with the supervisor is essential for effective doctoral learning (Deuchar 2008).

The third issue relates to the feelings of dislocation and isolation which several of the students experienced when they first arrived at the university. In commenting 'I really thought I would have my place' [M, Lines 378-80], Marie underlines the importance of physical and social positioning for newcomers and reveals the gap between her expectations and local conditions. In exactly the same way, novice researchers are required to create intellectual 'space' for their research in the community of practice they seek to enter. Positioning oneself within the institution and the disciplinary community represents a defining challenge of doctoral study.

The COP framework reminds us that doctoral learning essentially involves participating (with increasing confidence and decreasing support) in the scholarly practices which characterise academic work. These practices include activities such as drawing up and defending budgets, interacting with a wide range of people with differing levels of expertise and experience, and contributing to disciplinary conversations by writing for publication. Therefore, the issues raised by Andreas, Brigitte, Marie and Songsak relate to important dimensions of scholarly activity. As such, they represent an opportunity for the students to respond not as students but as *novice academics* by defending their claims and asserting their preferences. Surely Andreas has a right to the resources he needs in order to successfully complete his project? And why should Songsak have to address his supervisor in a way that makes him feel uncomfortable? However, in deciding how to

respond, students need to be aware that the power dynamics operating in university hierarchies mean that certain responses carry risks for novice researchers.

These examples suggest that the process of constructing an identity as a researcher and scholar is anything but straightforward. Despite the benign tenor of much of the research which invokes the COP framework, negotiating participation in an established community of practice is in fact inherently stressful. Block argues that identity work is about 'negotiating new subject positions at the crossroads of the past, present and future ... The entire process is conflictive as opposed to harmonious and individuals often feel ambivalent' (2007, 27). Many of the issues raised by the students represent contested territory (e.g. rights to equipment and resources, the nature of relationships, and the nature and quality of communication) which they will need to continue negotiating throughout their doctoral studies.

Ultimately, doctoral students must learn to participate confidently in new situations. Therefore, deciding when and how to participate, how much help to ask for and who to interact with are key decisions which help to construct the doctoral student's scholarly identity. These decisions will be influenced by the learners' willingness to take charge of different aspects of their learning. Autonomy in doctoral learning might be demonstrated by behaviours such as initiating contact with international experts or resisting suggested revisions to a paper. Such acts reflect the students' increasing confidence in their sense of themselves as researchers and scholars.

Conclusion

What can this study tell us about the relationship between identity and learner autonomy in international students' doctoral learning? In the unique context of doctoral education, where the construction of scholarly identity is both the means and the end of learning, a student's autonomy has a critical impact on their learning. Doctoral students who stick closely to their supervisor's direction will develop more slowly than those who view the supervisor's guidance as just one of many resources to exploit in charting their learning trajectory. This suggests that identity and learner autonomy are intertwined dimensions of the self. Doctoral students' research confidence unfolds in tandem with the exercise of their autonomy as learners; both contribute to the construction of their scholarly identities.

International doctoral students should be able to expect support from at least three different sources: English for Academic Purposes (EAP) teachers, supervisors and the university. EAP

teachers can help ‘unpack’ the scholarly practices in which the students wish to develop expertise, including the tacit conventions underpinning them (Elton 2010). Useful activities might include encouraging students to identify the language, style and rhetorical functions of academic discourse, or discussing pragmatically complex tasks such as interpreting and responding to reviewers’ comments on a paper. By understanding scholarly practices better, learners can engage with them more effectively.

Supervisors can support the development of their students’ autonomy by first establishing a comfortable, productive relationship with them. This might involve exploring expectations by openly discussing issues such as preferred terms of address and the respective roles of supervisor and student (Paltridge and Starfield 2007). In addition, by creating a rich range of opportunities for them to observe and participate in scholarly practices, supervisors can accelerate the development of their students’ research confidence and their autonomy as learners. For example, students who co-author papers with more experienced researchers can gain valuable insights into the composing process and practise presenting and defending their ideas. Supervisors can also encourage the development of student networks (valuable sites for the development of learner autonomy) and promote research-supporting activities such as student writing groups (Aitchison 2009).

Finally, institutions need to reflect on the quality of the welcome and support they provide to international doctoral students. While many of the focus group participants, like Rajiv, managed to ‘figure everything out on my own’ [R, Lines 288–9], their induction could have been made much smoother. By welcoming international doctoral researchers as new members of the academic community and recognising their potential rather than positioning them as ‘just students’, the university can contribute significantly to their development as autonomous learners and scholars.

Appendix 1: Focus Group Discussion Questions

Stories within stories: A narrative study of international graduate students' experiences of language, learning and identity at university

Introduction

You recently completed my online survey about your experiences and impressions associated with arriving in Australia and enrolling at university as a Higher Degree Research student. In this discussion I want to ask you more about your experience of the first six months in Australia and at university. The discussion will be audio-recorded but you will not be identified in the final research.

Expectations and experiences

- 1 Before arriving in Australia, what did you expect **living in Australia** would be like? In what way is Australia different from your expectations?
- 2 What was **the most surprising** aspect of your first month of living in Australia? Why?
- 3 What was **the most difficult** aspect of your first month of living in Australia? Why?
- 4 What did you expect **studying at university in Australia** would be like? In what ways is studying at university in Australia different from what you expected?
- 5 Do you have any other comments on your experiences so far that you would like to make about:
 - Accommodation, internet provision etc.
 - Business, service, transport
 - Finances – cost of living
 - University administration/welcome/orientation
 - Your department – getting started, meeting your supervisor, knowing what to do

Thank you for taking part in the discussion.

Doctoral students writing

Research Text 2

Abstract

Writing occupies a key role in doctoral research, since it is the principal channel for students to communicate their ideas, and the basis on which their degree is awarded. Doctoral writing can, therefore, be a source of considerable anxiety (Wellington 2010). Most doctoral candidates require support and encouragement if they are to develop confidence as writers. Drawing on interviews with two international doctoral students at an Australian university, this paper examines the writing practices the students have encountered and discusses them in the light of recent research on doctoral writing pedagogy. Analysis of the students' experiences in terms of Wenger's (1998) communities of practice framework suggests that this perspective fails to account adequately for the power relations which impact on the students' learning opportunities. Examining the students' experiences also highlights the importance of good pedagogy in supporting the development of scholarly writing in the doctorate.

Introduction

Doctoral study is a unique and paradoxical mode of institutional learning. It typically includes both formal and informal elements, proceeds through instruction as well as autonomous discovery, and can be both intensely individual and quintessentially social. Nowhere are these paradoxes more apparent than in doctoral candidates' experience of writing. Despite the challenges scholarly writing entails, not all doctoral supervisors provide helpful instruction in how to write; some seem to assume their students are able to write appropriately - the myth of the 'always/already' independent researcher (Johnson, Lee and Green 2000).

Writing within the doctorate therefore poses considerable challenge, most obviously, because it is such a high stakes activity. Doctoral writers need to familiarise themselves with institutional and disciplinary writing conventions, develop an appropriate 'voice' and learn to adopt an authoritative stance in their writing. Most doctoral candidates therefore require assistance if they are to become

competent and confident scholarly writers. But where should this help come from, and what form should it take? Recent research on doctoral writing pedagogy has identified a range of helpful practices, but it is unclear how widespread they are.

This paper was inspired by awareness of 'the paucity of information about the everyday practices in the life world of doctoral students' (Aitchison, Kamler and Lee 2010, 2) and a desire to share insights gained from examining the writing experiences of two doctoral students. The paper begins by framing doctoral learning as participation in a community of practice (Wenger 1998), before reviewing recent research in doctoral writing pedagogy. It then outlines the study and discusses the participants' writing experiences in the light of the highlighted pedagogical practices and the COP framework. This analysis suggests that the writing opportunities students experience are powerfully shaped by the relationship between student and supervisor.

Doctoral writing as a site of learning

Viewing doctoral learning as participation in a (scholarly) community of practice (COP) highlights the centrality of writing in scholarly activity and focuses awareness on how when and where writing is attended to in the doctorate. The COP perspective suggests that newcomers' writing expertise will develop as they observe experts writing and produce their own texts, supported by advice and feedback. Therefore doctoral students' access to such opportunities is critical. However, in addition to *practice*, writing expertise also depends on familiarity with the perspectives, discourse and resources of the COP. How are doctoral researchers encouraged to acquire this awareness? Finally, the COP perspective is based on the notion that learning fundamentally changes who a person is. If we accept that doctoral education is 'as much about identity formation as it is about knowledge production' (Green 2005, 153), how does doctoral writing contribute to the construction of scholarly identity?

Doctoral writing entails significant challenges since writing is 'not just a mopping-up activity at the end of a research project' (Richardson 1998, 345), but the means by which doctoral students' claims to scholarly identity are tested. Effective scholarly writing depends on familiarity with the discipline's characteristic discourse, debates and assumptions about knowledge (Lea and Street 1998) – the 'tacit knowledge' which Elton (2010) argues needs to be discussed explicitly by expert writers and their students. However, in addition to acknowledging the rhetorical demands of their discipline, scholarly writers are expected to develop their own 'voice' (Belcher and Hirvela 2001) and infuse their writing with a sense of personal identity (Ivanič 1998). This may be even more

challenging for researchers (like those in this study) who are writing in a second language. Shen, a Chinese scholar of English literature, writes of the identity transformation he experienced when he began writing in English at university:

In order to write good English, I knew that I had to be myself, which actually meant not to be my Chinese self. It meant that I had to create an English self and be *that* self. (Shen 1998, 126).

Furthermore, there is the challenge implicit in the convention that authors of academic papers adopt an authoritative stance in their writing – a position likely to feel ‘anything but natural for a graduate student’ (Li 2008, 48). On the contrary, doctoral writers are likely to consider themselves relative newcomers to the field and therefore to be troubled by this ‘novice-as-expert’ stance. (Sommers and Saltz 2004, 133).

In struggling with these challenges, some doctoral writers may choose to ‘mimic the language and behaviours they consider appropriate for the understanding with which they are struggling’ (Kiley 2009, 296). This mimicry strategy and the challenges discussed above suggest that novice researchers require a guide who can help demystify the writing process and provide opportunities to discuss and experience different ways of writing.

Pedagogical practices to support doctoral writing

A survey of recent research into writing-related pedagogies for doctoral students identified a number of practices likely to address the challenges outlined above. Most involve a combination of discussion and experience since ‘language by itself is inadequate to make tacit knowledge explicit’ (Elton 2010, 158). In a study of 45 doctoral students, Caffarella and Barnett (2000) found that critiquing their peers’ writing, and receiving feedback from professors and peers on successive drafts helped the students understand the process and produce better texts. Other researchers who highlight the benefits of doctoral students giving and receiving feedback on writing include Haksever and Manisali (2000), Simpson and Matsuda (2008) and Thein and Beach (2010). Critiquing writing in group settings has also been shown to benefit doctoral writers:

peer interaction in writing groups is doubly powerful because peers test and extend their conceptual knowledge as well as their capacity to communicate this knowledge through writing. (Aitchison 2010, 87)

Other research focuses on the supervisor's contribution as an expert writer. In discussing his mentoring of doctoral students, Matsuda identifies four roles:

(1) creating opportunities for attenuated authentic participation; (2) providing resources and support to help my collaborators succeed; (3) providing examples by sharing what I have done or by inviting mentees to observe what I do; (4) introducing my mentees to the social network of professionals in the field. (Simpson and Matsuda 2008, 93).

Matsuda cites three apprentice-like writing practices as examples of the first role: copyediting proofs, transcribing a scholarly conversation and collaborating in a research project. Both the relationship and practices evoked by Matsuda fit comfortably into the COP framework where community 'oldtimers' support newcomers as they engage in the community's practices.

Research has also highlighted the benefits of collaboration between expert and less experienced writers. Thein and Beach (2010, 122) discuss the benefits of 'mutual engagement in collaborative research', 'co-authored research', 'reciprocal review and evaluation' and 'networking' which their writing collaborations as doctoral student and supervisor yielded. The feedback which Beach (the supervisor) provided on Thein's writing 'modelled strategies for self-assessing her independent publishing' (2010, 124), reflecting the supervisor's goal of gradually transferring responsibility for revision to the student. But it is the *reciprocal* aspect of their collaborative review process which is most unusual, illustrated by instances of Thein giving feedback on her supervisor's writing in the context of a co-authored publication. Other researchers too (Kamler and Thomson 2006; Simpson and Matsuda 2008) have identified networking as an important supervisor strategy. Thein and Beach argue that by interacting with more experienced researchers, doctoral students can enhance their ability to engage with an audience, understand the role of argument and acquire confidence in their scholarly voice.

However, scholarly writing expertise involves more than just observation, practice and interaction. Paré (2010b) identifies three additional strategies for helping doctoral students develop confidence and authority as writers. The first is by providing them with opportunities to experience the 'heuristic power of writing (and speaking)' (31). The second involves studying the discourse of the discipline in which the student's work is located (see also Duff 2007a). Thirdly, Paré argues that doctoral students need to actually participate in their discipline's 'conversations' (2010b, 31). In order to take part in disciplinary exchanges (for example, by participating in conferences and writing

academic articles), doctoral students need to understand the ‘epistemology, background knowledge [and] hidden agendas’ (Tardy 2005, 327) of their discipline, but Paré cautions that:

Neither genuine rhetorical contributions nor explicit attention to rhetorical practices are common experiences for doctoral students, as the literature indicates ... (Paré 2010b, 32).

Kamler and Thomson (2006) discuss a number of other helpful strategies for supporting doctoral writers. These include representing sections of text graphically (sometimes called “conceptual mapping”) (see also Lee and Kamler 2008), joint texting, reading text as a writer, syntactic borrowing, encouraging the development of reflexivity and modeling strategies for locating the writer’s work within the discipline (see also Paltridge and Starfield 2007).

This survey is not exhaustive; rather it has identified a number of practices highlighted in recent research on doctoral writing pedagogy that are believed to support scholarly writing development. These practices provide the backdrop against which the study participants’ writing experiences will be viewed.

Study context and participants

The students whose writing experiences are discussed here — Mary and Journey⁵ — are participants in an ongoing narrative study of the lived experiences of six international doctoral students enrolled at an Australian university. Mary and Journey were selected as case subjects because at the time of writing they had had the most extensive experiences with writing. The study’s research questions were:

1. What writing experiences have the participants encountered since enrolling?
2. What roles do they and others adopt in these writing experiences?
3. What writing challenges do the participants identify?
4. How do these experiences impact on their confidence as writers and researchers?

⁵ The pseudonyms were selected by the participants

Data for the study consisted of three semi-structured interviews with each participant (each lasting approximately one hour) conducted over a seven month period, and two email messages sent by each in response to requests for clarification of points made during interviews. Interviews, which were audio-recorded and later transcribed, began in the second half of 2009 and are ongoing. Data collection and analysis were carried out simultaneously in a dynamic, recursive process (Merriam 1998) with writing emerging as an important site of learning. Thematic narrative analysis (Riessman, 2008) of each participant's interviews involved repeatedly reading the transcripts to identify all writing-related practices and related expressions of attitude or belief. The aim was to produce case-centred accounts (Riessman, 2008) of Mary's and Journey's respective experiences of writing in the doctorate.

Mary and Journey are full time doctoral students enrolled in a large metropolitan Australian university where 37% of doctoral students are classified as international (Blinded Institution Higher Degree Research Office, 2010a). Mary, who is studying Computer Science, was a PhD student in China for three years before enrolling as a doctoral student in Australia in April 2008. Journey, who is studying Business, is a mid-career academic at a university in Indonesia where he has worked since graduating in 1995. In 2001 he completed an MSc in the Netherlands and in March 2008 he enrolled as a PhD student in Australia. At Mary and Journey's university, students can complete the PhD either by submitting a conventional thesis (Mary) or a thesis by publication (Journey). A thesis by publication includes relevant papers published, accepted or submitted for publication during the period of candidature accompanied by a comprehensive and critical introduction and an integrative conclusion. (Blinded Institution Higher Degree Research Guide for Candidates and Supervisors, 2010b). Table 5.1 provides additional background on the participants.

Name	Gender	Country of origin	Subject	Thesis type
Mary	Female	People's Republic of China	Computer Science	Conventional thesis
Journey	Male	Indonesia	Business	Thesis by publication

Table 5.1 Participant details

What writing experiences do the students encounter?

This section presents an overview of the writing practices Mary and Journey encounter, the roles they adopt, the challenges they identify and the way writing impacts on their confidence as researchers. The numbers which appear after the participants' names in quoted extracts indicate in which interview the exchange occurred. The letter [R] precedes questions from the researcher.

Mary's experiences of doctoral writing

Mary claims to have acquired most of her knowledge about writing in English from reading journal articles. In China, she published three papers in English, relying on the feedback of senior students in her research lab. Since enrolling in Australia, Mary has co-authored three academic papers with members of her supervisory team. While she is confident of her ability to write a logically argued academic paper, she is aware of weaknesses in her academic English skills. When drafting an article, Mary first discusses her ideas with her supervisor's post-doc student (in Chinese). She then runs a computer simulation and looks at the data. Once she has some results, Mary discusses these with her (principal) supervisor (in Chinese) before starting to draft a full paper. Once she has a complete draft, Mary sends her paper to her supervisor for feedback:

Basically ... I done all the writing first, then my supervisor change it, edit. [Mary 2, Lines 98-99]

Subsequently Mary and her supervisor work collaboratively on revising the paper. When a deadline is approaching, Mary works intensively with her supervisor, either receiving handwritten feedback on her drafts, or letting her supervisor revise it electronically (Email message from Mary, March 10, 2010). Once her supervisor is satisfied with the draft, Mary sends it to her adjunct supervisor for comment. Her adjunct supervisor (who lives in another city) provided handwritten comments on Mary's first paper, but more recently has preferred to use Skype to discuss Mary's drafts.

In addition to finding it challenging to express some of her ideas clearly in English, Mary finds it particularly difficult to write the introduction to her articles:

But to me it's all about the first paragraph because you have to use a few sentences to ah picture the whole area and ah in my supervisor's view, you can't use plain language because you should use some fancy words (laughs) and – [Mary 3, Lines 186ff]

This difficulty is usually resolved by Mary's supervisor writing the first few sentences of each of her papers, since 'she will never satisfied with my written of the big picture' [Mary 2, Lines 741ff].

However Mary reports feeling anxious about depending so heavily on her supervisor. One day she asked her supervisor how she could become more independent as a writer:

... she said that "You have problem with your writing ..." and I said "Yes, yes, I just wondered what if I graduated without you? What should I do ...?" She told me ... after this paper I will write some journal papers so during that stage she said writing a journal paper will help me a lot. Though I don't know what it will help me but I hope so (laughs) [Mary 2, Lines 133ff]

Mary's comments throughout the interviews suggest that she has little understanding of how writing competence is acquired. Unfortunately, her supervisor's explanation does little to demystify the process.

Mary is reluctant to seek feedback on her writing from anyone outside her supervisory team. When, during an interview, she asked for advice on how to improve her writing and the strategy of peer review was mentioned, Mary raised a series of objections. She believes that other students do not have time to read her drafts and that, if they lack expertise in her area, their feedback would not be helpful. She also reported that there was no culture of peer review in her department.

In sum, Mary views her principal difficulties in writing as lexical and grammatical. She receives significant conceptual and writing support from her supervisory team but still lacks confidence in her writing ability.

Journey's experiences of doctoral writing

Journey produced course papers and a thesis in English for his MSc in the Netherlands. However in doing so, he explains that he tended to follow his first language (L1) (Bahasa Indonesia) writing practices and feels that his writing was probably not "what is known as internationally standard ... academic writing" [Journey 3, Lines 187ff]. (In saying this, Journey appears to equate internationally standard academic writing with an *English* international standard, reflecting the hegemony of English in academic exchange.) He believes that culture affects his tendency to express ideas indirectly when he writes:

I think it's also probably it's culturally bound ... So sometimes if you ... ask an Indonesian and probably ... not go straight to the point but yeah we give you flanking answer to the question [Journey 3, Lines 229ff]

Journey also describes differences in the way that English writers and writers of Bahasa organise their texts. Whereas he considers that English writers state their main idea first and then follow it with supporting arguments, in Bahasa he reports that there is no strict rule about where the main idea should be located. [Journey 3, Lines 209ff].

Journey faces a number of challenges when writing in English. He claims to have difficulty organising his ideas and says that to produce writing that is 'concise, clear but sharp, that's a struggle' (Journey 2, Lines 741ff). He also comments that it is difficult for him to express ideas using complex language and that he often needs help reformulating his ideas in the way a native speaker of English would express them. On several occasions, Journey has sought assistance from his faculty's writing specialist with editing his drafts.

Journey also reveals awareness of some of the rhetorical choices available to him when writing academic English:

I'm a kind of person that sometimes just say what I want to say, not consider what is the rule of the game here in this field of study, so for instance it is probably not well accepted using yeah "I" or "us", "we" – in the way we write

R In some disciplines it's *encouraged* now ...

In some disciplines. That's, yeah, so that's also make me confused. Can we, it's probably for me not important, the most important thing is probably when we write probably the content, how robust our argument is – [Journey 3, Lines 300ff]

Later in the same interview, Journey comments that he would like to experiment with a different way of reporting his research, trying to develop a more 'story-like' approach, but he feels that this is problematic:

but yeah that's a problem of I think first the tradition in certain fields, and second ... also with myself, what the narrative writing actually is and how do I formulate

my papers into a writing narrative writing style ... I am still yeah struggling with this and finding ways to to represent myself into that kind of writing [Journey 3, Lines 1035 ff]

In addition to using personal writing (in both L1 and L2) to clarify his ideas (experiencing what Paré (2010b) calls the 'heuristic power of writing'), Journey has produced three conference papers since enrolling, two of which he subsequently revised as journal articles in collaboration with his supervisor. He enjoys a collegial relationship with his principal supervisor whom he finds supportive and approachable. Journey identified four of his supervisor's practices as particularly helpful for his writing: first, posing questions about parts of the text which need clarification or greater support; second, highlighting points to discuss at their next meeting; third, reformulating sections of Journey's text; and finally, suggesting the use of graphs or tables to communicate particular ideas. (Journey 3, Lines 653ff).

In an email message Journey described the collaborative process he and his supervisor engage in when co-authoring a paper:

... when he adds his parts into the draft I submitted to him, he will ask my opinion on that ... I respect his way of letting me be in a strong position to decide what would be best for the papers ... He also changed the formulation I made on another part of the paper. And, he asked me whether I am happy with what he added and whether the change doesn't take away the main message I want to deliver. [Journey, Email message, February 25, 2010]

Journey has also had the experience of engaging with reviewers' feedback and having a journal article rejected. In the latter case, he reported that the feedback was 'tough, critical but it's very helpful' (Journey 3, Lines 535ff) and explained cheerfully that in the meantime another avenue of publication for the article had opened up.

Journey is aware of cultural differences in rhetorical organisation and genre, disciplinary conventions and of his rhetorical choices as a writer. He is also open to the idea of experimentation in writing. However it is not clear to what extent he discusses these issues with his supervisor. Journey has twice initiated contact with international experts in his field to seek feedback on his draft papers, reporting that their positive responses boosted his confidence and reassured him of the relevance of his work. [Journey 2, Lines 666ff]

How do the students' writing experiences measure up?

In this section, Mary's and Journey's doctoral writing experiences are discussed in the light of the pedagogical practices reviewed earlier. The first column of Table 5.2 lists the practices highlighted in the review of doctoral writing pedagogy and indicates which were talked about by the participants during interviews. However, a number of important points need to be made about this table. Firstly, it simply indicates whether each writing practice was *mentioned* by Mary and Journey (in their own words). Talking about writing is difficult; Mary and Journey may therefore have encountered additional practices that they were unable to 'name'. Secondly, Table 5.2 gives no indication of the *frequency* with which the participants encountered each practice. Thirdly, practices highlighted with an asterisk (*) were initiated by the participants, not by members of their supervisory teams. For example, while both Journey and Mary reported spending time studying the structure and style of journal articles in their fields, neither mentioned discussing 'disciplinary discourse' with their supervisors.

Writing Practices	Mary	Journey
Expert critique of own writing	Yes	Yes
Review of others' writing	No	Limited
Co-authorship	Yes	Yes
Attention to disciplinary discourse	Yes*	Yes*
Participation in disciplinary conversations	Limited	Yes
Experience of 'heuristic power of writing'	No	Yes
Supported networking	No	No*
Fostering reflexivity	No	No
Modelling – locating own work within the discipline	No	No
Reading text as a writer	No	No
Conceptual mapping	No	Yes
Joint texting	Yes	Yes
Syntactic borrowing	Yes	No

Table 5.2 Recommended writing practices identified in participants' accounts

* An asterisk denotes a practice initiated by the student, not the supervisor

Discussion of Mary's writing experiences

Mary appears to have encountered a narrower range of writing experiences than Journey, and only a limited number of those highlighted in the review of doctoral writing pedagogy. While she no doubt benefits from co-authoring papers with her supervisors, she has little opportunity to observe more expert writers at work and no chance to critique others' writing. Furthermore, Mary's principal supervisor seems to adopt a deficit view of her abilities, telling her 'you have problem with your writing' and appearing 'never satisfied' with Mary's article introductions. The 'joint texting' (Kamler and Thomson 2006) technique which Mary's supervisor adopts 'if time is [not] tight' [Mary, Email message, March 10, 2010] has the potential to contribute to Mary's writing expertise by making 'the process of knowledge production 'hands on' (2006, 53). But when Mary's supervisor edits her drafts in her absence, she is denied an important learning opportunity and her ownership of the text is threatened. This, combined with Mary's resistance to seeking feedback outside her supervisory team, indicates that Mary's opportunities for participation in the wider COP are limited.

A more disturbing feature of Mary's experience is the absence of opportunities to experience the heuristic power of writing and speaking (Paré 2010b). Mary rejects the strategy of using writing to clarify her thinking, explaining that supervision sessions are her chance to explore ideas. Indeed, Duff argues that a great deal of 'high-stakes academic discourse socialisation takes place orally' (2007a, 1.8). However, given that Mary's supervision sessions take place in Chinese, her opportunities to practise the kind of academic discourse in which she needs to gain expertise are limited. When asked how she feels about this Mary explains:

Yeah of course it's negative because you don't have time to, don't have opportunity, much opportunity to practise your English. But you can't ask for your supervisor to change her way (laughs) [Mary 3, Lines 960ff]

Lillis (2001) recommends that supervisors create opportunities for dialogue to enable "talk as apprenticeship" (158) within which students can contest and query their engagement with new forms of literacy. Denied access to such opportunities, it is not clear how smoothly Mary's ability to communicate effectively in academic English is likely to develop. This example also illustrates the invisible tensions in doctoral learning which make it difficult for students to challenge their supervisors' suggestions or practices.

Finally, Mary seems to have encountered some unhelpful attitudes to writing in interactions with her supervisor. During one interview, Mary explained that she wanted to improve her writing but was reluctant to ask her supervisor for this kind of help:

I think in my supervisor's point of view ... writing papers is the first priority, to write conference papers and journal papers, so I think that if I ask her [for help with writing] she will ... agree ... but ... I don't think she's happy with that I'm spending time particularly on writing, but not on writing ... papers. [Mary, 3, Lines 460ff]

The message Mary seems to have understood from her supervisor is that it is important to produce papers, but not to spend time learning how to write better papers. While the logic may be difficult to follow, Mary's unwillingness to challenge her supervisor's position is understandable.

Discussion of Journey's writing experiences

Journey's doctoral writing experiences have been both more varied and productive than Mary's. The reciprocal reviewing process he describes in co-authoring papers with his supervisor reinforces his sense of authority as first author, and expands the range of linguistic and rhetorical options available to him. However he has no experience of peer review, probably due to the small number of students in his department engaged in related research. Interestingly, while Aitchison (2010) highlights the benefits of doctoral students' giving and receiving critical feedback, in an email message to the author on January 4, 2010 she reported that international students are under-represented in the student writing groups she has organised.

Journey has had more opportunities to participate in disciplinary conversations than Mary, having presented his ideas at several conferences, submitted papers to international journals, received reviewers' reports on submitted articles, and networked with international colleagues regarding his work. It is difficult to determine the extent to which Journey's exposure to a richer range of opportunities is due to his greater maturity and professional experience. However, what is clear is that all doctoral students can benefit from guidance with writing:

a doctoral pedagogy devoted to helping students move from apprenticeship to professional participation requires teachers with a deep understanding of the rhetorical practices of their disciplines ... who are also able to induct students into their discipline's discourse practices. (Paré 2010b, 36)

A key attribute of doctoral supervisors therefore is their ability to talk about the rhetorical practices that students are expected to master. It is unclear from the interview data to what extent Journey has had the chance to discuss such topics, but his comments about wanting to experiment with other writing genres suggest that he would value this kind of debate.

Conclusion

Consideration of Journey's and Mary's writing experiences suggests that both could benefit if more attention were paid to *writing as a practice*, for example by encouraging Journey to explore different written genres within his discipline, and engaging with Mary's questions about how to enhance her writing skills. Both would likely also benefit from opportunities to critique other students' writing; participating in a student writing group would provide Mary with a valuable opportunity to discuss her ideas in English, rather than doing so only in the high stakes context of papers for publication.

Examining Mary's and Journey's writing experiences has also revealed that by focusing on the practices in which they engage, the all-important power relations which shape those practices might be neglected. Critically, the circumstances in which writing practices are embedded and the power relations enacted as student and supervisor engage in those practices must also be investigated. Journey's account of his experiences evokes a productive and respectful collaborative relationship with his supervisor. However, Mary's writing opportunities are constrained by her supervisor's preference for interacting in Chinese, tendency to edit Mary's writing herself rather than revise collaboratively, and failure to discuss how Mary might enhance her writing skills. Given the asymmetrical power relations involved, Mary's reluctance to challenge her supervisor is understandable, but the unfortunate impact on her research confidence is clear.

The analysis therefore suggests that when applied to doctoral education, Wenger's COP framework may offer an overly benign view of relations between participants (see also Lea, 2005). It cannot be assumed that expert community members will prioritise the induction of newcomers, or that they will generously (and skilfully) impart their understandings of the discipline. Consequently, newcomers cannot be expected to always progress smoothly from marginal participation to full membership of the disciplinary community. Instead, newcomers' learning trajectories will be powerfully shaped by the opportunities and resources they have access to. Where opportunities for participation are restricted because of decisions made by expert COP members, and where challenging those decisions is risky, learning is significantly impacted.

The study's inescapable conclusion is therefore that supervisors need to embrace their pedagogical role in inducting students into their discipline's writing practices. Although it is true that 'not all so-called experts are good socialising agents' (Duff 2007a, 01.6), universities should encourage doctoral supervisors to take up opportunities to develop their pedagogical repertoire. Ultimately, however, while this study has identified limitations in the writing pedagogy encountered by the students, pedagogy is not the only dimension demanding attention in doctoral education - 'technical virtuosity on its own cannot serve students' (Fitzmaurice 2010, 53). As this paper has demonstrated, effective doctoral learning depends as much on the quality of the relationship between supervisor and student as on the practices in which they engage.

Student perspectives on doctoral pedagogy

Research Text 3

Abstract

Despite recent research, doctoral pedagogy remains something of a 'black box'. This article explores the 'mysterious activity' (Green, 2005, p. 151) which transforms research apprentices into licensed scholars by drawing on longitudinal interviews with six graduate students who travelled to Australia to undertake doctoral study. The article first discusses difficulties associated with the term "international students". It then argues that, given the economic benefits to Australian universities of participation by increasing numbers of international students (Bullen and Kenway, 2003) attention needs to be paid to the quality of students' learning experiences. The article also incorporates the author's dual perspectives as full-time doctoral student/researcher and experienced academic. The findings suggest that effective doctoral pedagogy is based on a mutually respectful relationship between student and supervisor supported by a flexible learning structure which enables modelling of scholarly practices and opportunities for scaffolded participation and reflection. However, as good doctoral pedagogy cannot be guaranteed, PhD students need to develop sufficient understanding of the doctoral endeavour to enable them to manage their own learning.

Introduction

Despite having spent the last two and a half years researching the learning experiences of international PhD students in Australia, doctoral pedagogy remains something of a "black box" for me. What is known about doctoral learning centres on the 'mysterious activity' (Green, 2005, p. 151) of supervision, regarded by many as 'a private pedagogical space' (Manathunga, 2005a, p. 17). In the absence of an explicit doctoral curriculum, it seems that 'the student is supposed to absorb the necessary know-how by a sort of intellectual osmosis between great minds' (Connell, 1985, p. 38). It has been argued however that doctoral success or failure does not depend simply on the

instruction the student receives but concerns 'the relationships between students and the practices in which they and their teachers engage' (Goode, 2007, p. 589). If this is true, exploring doctoral students' perceptions of the practices in which they and their supervisors engage should generate insights into doctoral pedagogy.

First however, my decision to use the problematic term "international students" needs to be justified lest it inadvertently 'sanction an ethnocentric stance' (Spack, 1997, p. 765). In Australia, the label "international student" is an administratively convenient way of designating an individual who crosses international borders in order to study; however it also carries a number of unfortunate connotations. First, the term overtly 'others' the students it describes, constructing them by reference to what they are not, i.e. Australian. Second, it is associated with a 'discourse of deficit' (Candlin and Crichton, 2010) invoking stereotyped images of underprepared students with weak English language skills. However:

[s]uch constrained understandings of international students do not take into account the motivations, transnational identities and resources these students bring to the ... university, and how these resources may be exploited to construct less parochial, more global or internationalized educational spaces' (Doherty and Singh, 2007, p. 130).

Third, the label is associated with a tendency to treat international students as a homogeneous group. Writing in the context of higher education in the United Kingdom, Goode claims – '... it is not uncommon to hear talk about "international students" as a whole as "hard work", both deferential and demanding, and as having an "immature approach to study, leading to a generalised stereotyping of what is ... a heterogeneous group' (2007, p. 592). Where such negative attitudes and stereotypes exist, they are likely to impact on international students' learning experiences.

It is against this backdrop that I locate my narrative study of the learning experiences of six international doctoral students studying in Australia. I retain the term "international student" despite its negative connotations both because it is a formal descriptive category employed in the university where the study participants are enrolled, and because it features prominently in the higher education discourse in Australia. Despite education having become an increasingly significant export industry in Australia (Bullen and Kenway, 2003; Marginson et al, 2010), the quality of international students' educational experiences in Australia do not appear to have received much attention. This article addresses that gap by reporting on six international students'

perspectives on the pedagogy they encounter in their doctoral studies. First I review recent research on doctoral pedagogy before discussing the participants' accounts of their learning in the light of that research. I then draw on the participants' accounts and my perspectives as doctoral student, researcher, and former academic in identifying key dimensions of effective doctoral pedagogy.

Previous research

Fifteen years ago Green and Lee (1995, p. 40) described postgraduate pedagogy as 'radically undertheorised', suggesting that teaching-learning in higher education was not well understood. Why might this be so? First, pedagogy is highly abstract as both concept and practice, which makes it difficult to observe, analyse and describe. In addition, historically, higher education privileged research and knowledge over teaching and learning in higher education (Evans and Green, 1995), with teaching considered 'the poor relation' (Vardi and Quin, 2011, p. 39). While much has been done in the last fifteen years to redress the imbalance (in status, recognition and rewards) between research and teaching in higher education, 'many challenges remain to be addressed' (Chalmers, 2011, p. 35). The apparent lack of interest in pedagogy may reflect ambivalence about where to locate research supervision in the conceptual landscape of scholarly activity. According to Lee and McKenzie, 'supervision is neither simply "teaching" nor "research" but an uneasy bridge between both' (2011, p. 69). This ambivalence is reflected in university performance review policies which designate research supervision as a 'teaching' activity (Blinded Institution, n.d.) while treating the outcomes of student research (theses and research articles) as aspects of research activity.

The importance of pedagogy lies in the fact that 'it draws attention to the process through which knowledge is produced ... asking under what conditions and through what means we 'come to know' (Lusted, 1986, pp. 2-3). Gaining insight into how individuals 'come to know' is crucial if we are to enhance learning. Green and Lee argue that doctoral learning involves not only *coming to know*, but also *'coming to be'* in that the doctoral student gradually acquires an identity as researcher and scholar (1995, p. 41). This idea of transformation is also central to Lusted's understanding of pedagogy:

What pedagogy addresses is the ... transformation of consciousness that takes place in the interaction of three agencies – the teacher, the learner and the knowledge they together produce ... (1986, p. 3)

But Lusted's definition must be modified if it is to account for the complex relations at the heart of doctoral learning. First, the learner, teacher and their co-produced knowledge are not the only 'agencies' that contribute to pedagogy; they also interact with the academic discipline. Evans and Green argue that the *disciplinary* character of doctoral pedagogy distinguishes it from teaching at other levels: '[i]t is not so much what the supervisor literally 'transmits', pedagogically, as what (s)he enables by ... setting up a critical exchange ... between the student and the discipline' (1995, p. 4). In other words, the discipline is an invisible presence in the pedagogical relationship.

Second, any definition of doctoral pedagogy needs to incorporate interactions which occur beyond the supervisory team, whether in the wider discipline or closer to home. Doctoral learning 'is better conceived *ecosocially*, as a total environment within which postgraduate research activity ... is realised.' (Green, 2005, p. 153) and which encompasses students' relationships and experiences with a wide range of people (Hopwood, 2010c). Third, any model of doctoral pedagogy would be incomplete without including the institutional and social dimensions of learning (Green and Lee, 1995). Doctoral students' learning is impacted both by institutional policies and practices (such as funding arrangements and supervisor workloads), and by their social context populated by family, friends, peers, fellow researchers and others.

Within this relational exchange, what does the supervisor's pedagogical role consist of? One investigation of supervisory practice identified four categories of facilitative practices: (1) Progressing the candidature; (2) Mentoring (including personal support, career development and intellectual development); (3) Coaching the research project; and (4) Sponsoring student participation in academic/professional practice (Pearson and Kayrooz, 2004). Clearly some of these practices are more pedagogical than others. Recent research in doctoral pedagogy suggests that productive supervisor contributions include collaborating with students in co-authored research (Thein and Beach, 2010, p. 122), focusing attention on disciplinary discourse (Paré, 2010b), providing resources such as models of good writing (Kamler and Thomson, 2006), sharing professional networks (Simpson and Matsuda, 2008) and critically analysing students' work (Haksever and Manisali, 2000; Kamler and Thomson, 2006; Simpson and Matsuda, 2008).

The student's role, on the other hand, involves gradually adopting the practices modelled by their supervisors as they begin participating in scholarly activities such as giving seminars, writing papers and attending conferences. However this role is not unproblematic. First, different expectations of supervisor and student roles can create misunderstanding, particularly in cross

cultural contexts (Kiley, 1998). Second, not all supervisors are adept at ‘unpacking’ their scholarly expertise as they attempt to introduce their students to the history and practices of the discipline (Paré, 2010b). Furthermore, an implicit supervisor bias towards valuing independence can discourage students from asking questions and encourage them instead to present themselves as ‘capable of independent scholarship from the beginning of their candidature’ (Johnson, Lee and Green, 2000, p. 141). All three issues militate against effective learning.

Finally, peers can also contribute to doctoral students’ learning. By participating in activities such as doctoral writing groups, students gain opportunities to discuss and critique others’ texts thereby learning to speak and write as members of the research community (see for example Aitchison, 2010; Maher et al. 2008). But peer contributions extend beyond critiquing texts. Pilbeam and Denyer (2009) found that doctoral students helped each other with conceptual and administrative matters, research methods, technical problems and personal and social support. Acknowledging the contribution of peers and the wide range of contexts in which doctoral students learn suggests that ‘pedagogy be reconceptualised as significantly “distributed” and “horizontalized”, with an associated dispersal of responsibilities and of agency’ (Boud and Lee, 2005, p. 502). In other words, doctoral pedagogy exists in interactions and ‘arrangements’ (Cumming, 2010b) which operate beyond the “vertical” relationship of supervisor and student and crucially, can be student-driven.

Background

The research described in this article was carried out to investigate questions about doctoral pedagogy raised by reviewing previous research. It does this by examining the transcripts of 22 hour-length interviews with six international doctoral students studying in Australia and identifying episodes which refer to participants’ experiences of and perspectives on pedagogy. Interviews were conducted with each participant approximately every four months between May 2009 and August 2010. Data collection and analysis were carried out simultaneously in a dynamic, recursive process (Merriam, 1998). Thematic narrative analysis (Riessman, 2008) involved multiple readings of the transcripts to identify all references to practices identified by the participants as promoting or inhibiting learning. Table 6.1 presents biographical information on the participants who had been enrolled for between 3 and 17 months at the time of their (first) interview. The numbers following participants’ names at the end of interview excerpts indicate which interview the extract is taken from and the number of the first line in the transcript. In analysing the interview data, I drew on my multiple perspectives as concurrent doctoral candidate-researcher, and experienced academic, researcher and supervisor.

TABLE 6.1 Participant Details

Name⁶	Gender	Country	Faculty	Number of Interviews
Ariunaa	Female	Mongolia	Science	3
Dev	Male	India	Human Sciences	4
Emily	Female	Withheld	Human Sciences	4
Jack	Male	Kenya	Business and Economics	4
Journey	Male	Indonesia	Business and Economics	4
Mary	Female	People's Republic of China	Science	3

Results

This section first introduces *supervisor practices* which the six participants identified as contributing to their learning, and then ways in which they believed *other individuals* contributed. Subsequently, I present the unhelpful supervisor practices reported by the participants.

Positive supervisor practices

Table 6.2 lists positive supervisor behaviours reported by the participants grouped according to four sets of facilitative practices identified by Pearson and Kayrooz (2004). In their framework, **Facilitating the candidature** refers to guidance which enables the student to manage their programme of study and meet official requirements. **Mentoring** practices can involve both personal and professional support which aims to help the student develop 'in the context of their evolving personal and career goals' (Pearson and Kayrooz, 2004, p. 105). The authors cite the practice of introducing students to professional networks as an example. **Coaching** involves providing expertise on the research process and on writing the thesis. Finally, **Sponsoring** practices help students access resources and opportunities.

In Table 6.2, the names of the participants who mentioned each practice are shown in brackets to provide an indication of how widely the practices were distributed across the participants. This reveals, for example, that of the 17 positive supervisor practices identified, Ariunaa reported only one, whereas Emily reported eight. The fact that the majority of practices were classified as examples of Coaching may reflect candidates' prioritising of activities which focus directly on the research process. Interestingly, only two of the six participants reported any Mentoring practices.

⁶ All names are pseudonyms chosen by the participants

TABLE 6.2 Positive Supervisor Practices

Focus	Supervisor Practice
<i>Facilitating the candidature</i>	Monitors and provides regular feedback on progress (Dev) Helps structure ideas and plan research activities (Ariunaa, Dev, Emily)
<i>Mentoring</i>	Boosts confidence, encourages, motivates, provides emotional and personal support (Dev) Always makes herself available (Emily) Responds promptly to emails, requests (Dev, Emily) Provides access to professional network (Dev, Emily)
<i>Coaching</i>	Creates dialogue about ideas, provides intellectual challenge (Jack) Discusses theoretical problems (Mary) Discusses ideas for paper (Mary) Gives feedback on ideas/organisation/language in draft text (Emily, Jack, Journey, Mary) Revises and edits draft text (Emily, Mary) Writes collaboratively with student, helping reformulate draft text (Journey, Mary) Recommends specific readings for content (Journey) Recommends model articles to read in terms of structure, style etc. (Journey) Knows who to contact, how to ask, how to do things the right way (Emily) Suggests designing a table to summarise all relevant studies (Emily)
<i>Sponsoring</i>	Encourages student to publish and attend conferences (Mary)

Positive practices – beyond the supervisory team

Table 6.3 presents positive learning experiences identified by the participants which originated beyond the supervisory team. Some of these were initiated by the participants (indicated by an asterisk); the rest were opportunities provided by other individuals. Inspection of Table 6.3 suggests first that some participants have access to more learning opportunities than others, and second that some appear to demonstrate more agency than others in constructing their own learning experiences. Once again Ariunaa reported only one supportive practice, whereas Emily identified six different ways in which her learning had been supported, including two which she initiated. Surprisingly, none of the participants mentioned learning interactions with peers.

TABLE 6.3 Positive Practices – Beyond the Supervisory Team

Focus	Practice
<i>Facilitating the candidature</i>	Writing to clarify and reflect on ideas (Dev, Emily)*
<i>Mentoring</i>	Receiving positive feedback on conference presentation from international expert (Jack)
<i>Coaching</i>	Receiving positive feedback on project from senior academic (also research partner) at another university (Emily) Reading papers to study their organisation and style (Mary)* Receiving feedback on writing from conference paper reviewers (Journey, Mary) Receiving feedback on writing from faculty writing specialist (Journey) Receiving feedback on written papers from husband (Emily) Discussing ideas with husband (Mary, Emily)
<i>Sponsoring</i>	Taking part in Research Methods/Communication/Writing course (Ariunaa, Emily, Journey, Mary) Seeking feedback on writing from international experts (Journey)* Volunteering to review articles for journals (Emily)*

* Practices initiated by doctoral candidates

Unhelpful supervisor practices

In addition to the positive practices, four of the participants reported supervisor activities that they found unhelpful (see Table 6.4). However, none of the students were willing to challenge their supervisors in relation to these practices. For example Jack explained how stressful he found his supervisor's instructional style at first:

... he gives me a textbook which he thinks might be useful ... I have to read through it maybe like for three weeks, and probably it is a textbook which is 600 pages ... and then after that ... he quizzes me ... so you know I was opposed to that because ... I'm already past that level ... so there was a sort of friction for some time until I was just thinking should I just go back to [country where Jack did his MSc] and just continue with my professor ... so I just thought no ... I just got to do whatever he wanted me to do ... because you know when you're arguing with a professor anyway, the truth is you really have a lot to lose ... so I just compromised ... and then sort of we started developing a relationship ... (Jack, 1, 266)

Interestingly, all three practices in the Coaching category in Table 6.4 reported by Jack, Emily and Journey respectively, relate to the same issue. All three seem dissatisfied with their supervisors' feedback on their writing because it fails to provide direction for them as they revise it. Informal conversations with doctoral peers suggest that the modest inventory of unhelpful practices in Table 6.4 could easily be extended. However, regardless of the 'truth value' of the practices listed in Table 6.4 or the actual number of unhelpful practices the participants have experienced (some may have felt culturally constrained from 'criticising' their supervisors), these examples indicate that doctoral students have views on pedagogy, and suggest that their views are worth canvassing.

TABLE 6.4 Unhelpful Supervisor Practices

Focus	Supervisor Practice
<i>Facilitating the candidature</i>	Assigns substantial amount of reading (e.g. 600 page textbook) and then quizzes me on the content (Jack)
<i>Mentoring</i>	Uses Chinese during supervision sessions so I can't practise my English (Mary)
<i>Coaching</i>	Provides negative feedback on ideas without suggesting what kind of change is needed (Jack) Points out weaknesses in writing without suggesting how to 'fix' them (e.g. "too wordy" (Emily) Fails to provide adequate detail and direction in feedback on draft text (Journey)
<i>Sponsoring</i>	-

Discussion

What does investigating the participants' pedagogical experiences reveal? First, and most optimistically, many examples of good doctoral pedagogy reported in the research literature were also mentioned by participants (such as supervisors writing collaboratively with their students and providing access to personal networks). Second, practices related to writing dominate participants' accounts. This may reflect the centrality of text-related work in doctoral study or suggest that talking about text is a useful way of exploring knowledge claims. However, analysis also reveals significant variation in the pedagogical affordances of the six participants. This section first

discusses the quality and range of participants' experiences, and then, based on these reflections, identifies elements likely to contribute to effective doctoral pedagogy.

Supervisor contributions

The majority of supervisor practices identified by the participants were both helpful and supported by recent research in doctoral pedagogy. However, both the number and range of practices were relatively limited. Whereas Ariunaa reported only one positive supervisor practice, Emily and Mary both identified several different ways in which their supervisors supported their learning. But a number of the innovative practices discussed earlier did not figure amongst the practices reported by the participants. For instance, none of the participants reported having the opportunity to critique others' writing, to analyse written models or to consider the typical discourse features of their discipline. Furthermore, given that Journey, Emily and Dev had all elected to complete their thesis by publication, it is surprising that no instruction was provided in strategically conceptualising the research project in preparation for publishing. (See Kwan (2010) for a similar finding).

The fact that the participants identified a number of *unhelpful* supervisor practices indicates that some dissatisfaction with supervision exists. Yet, as Jack's example suggests, supervisors did not appear to negotiate pedagogical activities with their students, or to seek feedback on their usefulness. A study of doctoral students' experiences conducted in Canada and the UK reported a number of similar supervisor-related difficulties, including lack of encouragement and lack of feedback (McAlpine, Jazvac-Martek and Hopwood, 2009). However anecdotal evidence suggests that students seldom raise such issues with their supervisors. For instance, although Mary was frustrated at her supervisor's use of Chinese (their common first language) during their meetings, she did not challenge this practice:

Yeah, of course it's negative because you don't have ... much opportunity to practise your English. But you can't ask for your supervisor to change her way
(laughs) (Mary, 3, 960)

As supervisors are unlikely to deliberately adopt behaviours which inhibit their students' learning, this suggests they may lack insight into the way their practices impact on student learning. Whereas teachers in most educational settings routinely obtain peer and student feedback on their teaching, supervisors seldom seek feedback on their supervision practices. Instead, most tend to rely on the results of annual student questionnaires. Yet the type of information likely to result in improved

supervision processes 'will not come from institutional level surveys' (Pearson and Kayrooz, 2004, p. 101).

Participants' contributions

Differences were observed in the extent to which different participants took the initiative in their learning. Journey, Mary, Emily and Dev all instigated activities which extended their understanding of ideas or scholarly practices. This kind of agency is probably influenced by factors such as the participants' age, confidence and previous academic experience as well as their expectations of their and their supervisors' roles. For instance, Journey had worked as an academic in Indonesia for fifteen years before enrolling as a PhD student; it is therefore not surprising that he initiated contact with two international experts to seek feedback on a conference paper he had written. Ariunaa, on the other hand, seemed content to participate in the activities her supervisors proposed. Clearly, diversity in students' backgrounds demands that supervisors 'differentiate students, tailor supervision accordingly and enter into genuine dialogue' (Goode, 2007, p. 601) in the same way that experienced teachers adjust their teaching to cater for different types of learners.

Others' contributions

The participants reported a number of supportive practices which originated beyond their supervisory team. For example, Emily accessed a range of sources when trying to solve problems in her doctoral work:

So [if] I have a question, I go either in the papers and I find all the literature, for sure I learned a lot from the literature, but I cannot say this is more than all the professors I've met while they've been ... discussing it and confronting my ideas ... but I cannot say it's only with [principal supervisor], it's a lot larger. (Emily, 3, 1361)

Differences observed in participants' experience of obtaining assistance from members of the wider academic community raises the possibility that access to such opportunities is not equally shared. Whereas the examples reported in Table 6.3 suggest that Emily's doctoral experience is well supported by a range of individuals (Emily reported 6 of the 11 practices), Ariunaa and Jack seem more isolated in their academic interactions. Strikingly, none of the participants reported learning experiences with peers. This could be because they have no colleagues researching topics in the same area, they are reluctant to inconvenience other students by seeking help, or they believe their

peers are unlikely to contribute anything of value. Alternatively, local student networks may be difficult for international students to access (Sawir et al. 2008) or the departmental culture may discourage student collaboration:

M I kind of think it's a bit strange that we don't collaborate

S But is that your decision or do you prefer it that way?

M Not my decision because when I come here, others don't have no collaboration with each other and my supervisor didn't ask we to collaborate each other and I didn't bother to ask and I just -

S - sort of followed that pattern?

M Yeah, yeah (Mary, 3, 419)

Given the positive outcomes of peer learning (Maher et al. 2008), the participants' lack of opportunities to interact with peers about their learning is regrettable.

Good doctoral pedagogy

There is little doubt that PhD supervisors wish to support their students' learning. However, the accounts of the study participants suggest that not all their interactions with their supervisors constitute effective pedagogy. In this section I discuss critical dimensions of effective student-supervisor encounters revealed in the participants' accounts of their learning and infer important principles for implementing effective doctoral pedagogy.

Respect and concern

All six participants spoke candidly and overwhelmingly positively about their relationships with their supervisors, despite, in Jack's case, some initial difficulty adjusting to his supervisor's working style. Dev spoke appreciatively about his supervisor's concern for his general wellbeing:

... [Principal supervisor] is pretty cool ... he's a kind of person who really ... helps you sorting your problem, personal problems as well ... he nourishes me, pampers me ... so ... he asks me - "How are you?" ... "How is everything?" (Dev, 2, 424)

However Journey's account of co-authoring an article with his supervisor reflects most eloquently qualities in their relationship which support successful learning:

... when he adds his parts into the draft I submitted to him, he will ask my opinion on that ... I respect his way of letting me be in a strong position to decide what would be best for the papers ... He also changed the formulation I made on another part of the paper. And, he asked me whether I am happy with what he added and whether the change doesn't take away the main message I want to deliver. (Journey, Email message, February 25, 2010)

The respect, concern and genuine collaboration evoked in Journey's description represent key underpinnings of effective doctoral pedagogy. A successful supervision relationship recognises what both parties have to offer - 'successful pedagogy should not ... construct the student as an empty vessel' (Tsolidis, 2001, p. 108).

Negotiating a comfortable supervision relationship demands time and sensitivity and may require additional skill in transcultural relationships where communicative behaviours and styles can differ (Adams and Cargill, 2003). Flexibility and sensitivity to cultural practices is also important; for example, despite the apparent warmth of his relationship with his supervisor, Dev persisted in calling him 'Sir' because - 'It's an Indian thing' (Dev, Interview 2, 479). Positive supervisory relationships are a source of interpersonal and intellectual support for students (Pearson and Kayrooz, 2004) and are characterised by good rapport. Clear communication is essential for establishing rapport. Kiley points out that students and their supervisors may have different assumptions about issues such as who should call meetings, so that, as this Indonesian student in her study comments:

A supervisor should be understanding about the culture. Like here, if you don't ask anything then it means that everything is ok, but in Indonesia it means that everything is wrong. (1998, p. 197)

A relationship based on respect, concern for the student's wellbeing and good communication is a fundamental component of effective pedagogy.

Structure and support

In each interview, Ariunaa expressed anxiety about her progress, citing her lack of research experience, her weak English skills and her family commitments as obstacles. Her sense of insecurity was clear from our very first interview when Ariunaa explained how she had felt confused for the first three months of her candidature:

A ... from February I was very stressful and I didn't know what I had to do because ah supervisor means in Mongolia "conductor" ... and supervisor teach always give direction and do this, do this, and it's easy ... But here it's totally different and first time I didn't realise what I have to do and I was stressed and I thought I couldn't do my PhD, might be, I cannot finish it always think –

S That must have been a very uncomfortable period?

A Yeah –

S And so how did that become clear? Was it just over time talking to your supervisor that you realised it was a different style?

A Yeah, I talked to my supervisor what I had to try ... and ... after three months I realised what I have to do. During that time I discussed with my fellow students –

S Exactly and I bet that was helpful too?

A Yeah and also um discussed with Mongolian students who is studying in different states in Australia ... also they faced the same situation and ah read some books how to do PhD, what I had to do and that ... three months was very difficult, I am always busy, reading something but I have no direction ... it's very difficult – (Ariunaa, 1, 212)

Arguably, Ariunaa's supervisor could have helped more by providing more structured support during her first few months and making expectations explicit. Experienced supervisors recommend requiring new doctoral students to attend regular supervision meetings and complete small tasks

(such as summarising or critiquing text), as well as providing feedback from the beginning (Paltridge and Starfield, 2007). Furthermore, when seeking to provide doctoral students with additional support, the supervision relationship itself is also worthy of attention. Gurr (2001) recommends the use of a simple tool to track developments in the supervisory relationship and facilitate adjustments when, for example, candidates demonstrate the ability to operate more independently. Kiley (1998) includes a useful tool for making expectations about roles in supervision explicit. These and other tools may help provide the kind of explicit structure and support that some students need.

Engagement in scholarly practices

The heart of the pedagogy experienced by the participants seems to reside in the practices which Pearson and Kayrooz (2004) classify as *Coaching*. Whereas the students clearly appreciate the personal and emotional support (*Mentoring*) their supervisors provide, and depend on their practical and technical assistance in meeting official requirements (*Facilitating the candidature*) and accessing resources and opportunities (*Sponsoring*), the *Coaching* practices adopted by their supervisors model for the students typical researcher behaviours. When she describes her experience of co-authoring an article with her supervisors, Emily conveys a sense of the learning process proceeding in tandem with construction of the text:

E Yes but so I realised [Principal Supervisor]'s help was ... to go forward and that was very very useful –

S You say *forward*, what do you mean by that?

E Um I would give her all my idea and she would make it better and we could start from there, while for [Associate Supervisor] I needed to go back, look at my text and reflect –

S Oh I see!

E - and then I learned so much. I've realised when he said two words, I was "But how can I do this?", but then no, I breathed in and looked at my text and said, Yes, that's true, I can make this sentence a lot shorter. This is the point, I can take this away, I'm just repeating that part, and I've realised

how my text was improving following his comments even if I would have liked him from the beginning to tell me -

S To give more direction?

E - to do it! (laughs) Not all of it but to show me how he would have done it or to give examples.

S But in terms of learning, that's fabulous!

E Exactly. I did learn a lot by doing that. (Emily, 3, 710)

The participants appreciated opportunities to discuss their ideas, draft and revise texts and engage with their supervisors' feedback on their writing. However, as was noted earlier, practices aimed at supporting student writing were relatively limited for some. Simpson and Matsuda (2008) describe three other opportunities which graduate students might benefit from: copyediting proofs, transcribing a scholarly interview, and participating in a collaborative research project. While doctoral students initially exercise their research skills during supervision sessions, other opportunities can arise in departmental seminars, electronic discussions, student-mediated groups and conferences. For less confident students, opportunities to engage in such practices will depend on the extent to which their supervisors promote such activities and encourage them to participate. Previous research (Aitchison, 2010; Maher et al. 2008) indicates that peer writing groups also provide a positive environment for developing skill in a range of scholarly practices. Given the resistance some participants in my study demonstrated to interacting with peers about their work, the benefits of such opportunities may need to be promoted more actively.

Reflection

In a recent interview (not formally analysed for this paper) Emily explained that she valued the opportunity to reflect on her learning which the interviews provided:

I think that every PhD student should have um someone doing a PhD about PhD students [laughs] ... No, but a counsellor, someone who's there to show how is it going, and someone detached, not your supervisor ... not anyone in your department, that can just see how are you doing, and how are you feeling through

all that, because it is a long road ... and there's a lot of things attached to this road,
it's ... (Emily, 6, 1812)

In her research with graduate students in the USA, Austin noted a similar phenomenon - '... many respondents told us how much they looked forward to the interviews as the only opportunity for structured self-reflection with an interested professional.' (2002, p. 116). While Emily suggests creating opportunities for reflection *outside* the supervision relationship, an argument can also be made for viewing reflection as a component of effective doctoral pedagogy. In a landmark study of ESL learners, O'Malley and his colleagues cautioned:

Students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishments and future learning directions. (1985, p. 561)

The same is true of doctoral students. By reflecting on the way in which they are gradually acquiring confidence as researchers, they become better able to manage their future development. Both my study participants and my doctoral peers have been consistently willing to discuss their PhD learning experiences. This suggests that incorporating structured opportunities for *reflection* into doctoral pedagogies would benefit all PhD students.

Conclusion

This study has a number of limitations. First, it reports the views of a small number of doctoral students whose experiences may be unrepresentative. Second, it deliberately privileges the student perspective in an attempt to complement research conducted with supervisors. Third, it only discusses learning experiences mentioned by the participants; some practices may have been too implicit to detect, too complex to describe or may have seemed too 'obvious' to report. Finally, the article presents an aggregated account of pedagogical practice rather than profiling the experiences of any one participant. A case study treatment of the data would provide a more nuanced individual perspective on doctoral pedagogy.

Despite these limitations, the study provides some empirical support for reconceptualising doctoral pedagogy as 'significantly "distributed" and "horizontalized"' (Boud and Lee, 2005, p. 502). The participants identified learning as occurring in face to face settings, via computer-mediated communication, and in international academic meetings. These opportunities involved a 'diverse range of relationships, networks, resources and artefacts' (Cumming, 2010b, p. 33) confirming that

learning as participation can operate in settings other than the supervisory dyad. The study also confirms that doctoral students have useful things to say about pedagogy. Rather than rely on institutional surveys to obtain such critical information, supervisors could periodically review their practices with students using tools developed for this purpose. The results of this research also highlight the wide range of practices expected of skilled doctoral supervisors. While no supervisor can be expected to be expert in all aspects of supervision, some may need to 'increase their pedagogic repertoires' (Edwards, 2001, p. 176). Finally, the study provides some evidence to suggest that effective doctoral pedagogy is based on a mutually respectful relationship supported by a flexible learning structure which incorporates opportunities for scaffolded participation and reflection.

Examining the pedagogical experiences of the six study participants confirms that when it comes to pedagogy – 'one size does *not* fit all'. If students cannot count on access to good pedagogy during their doctoral studies, they must learn to understand and manage their own learning. Goode argues that '[i]nternational doctoral students are able competently to make "adjustments" once they understand the "rules of the game"' (2007, p. 601). Rather than expect students to painstakingly discover these rules for themselves, supervisors can help by initiating discussion about the what, why and how of doctoral learning from the first supervision session.

Six outsiders and a pseudo-insider

Research Text 4

Introduction

Australia is the world's third largest provider of degree level international education (Novera, 2004). Of the 30,110 full time PhD students enrolled in Australian universities in 2008, 25% were international students (Department of Education, Employment and Workplace Relations, 2009b) representing an increase of 15% in international PhD enrolments on previous years (Data snapshot, 2010). These statistics reflect the importance of international doctoral students to Australia's higher education industry and economy. But how welcome does Australia make its international students? While most PhD students experience difficulties of one type or another during their studies (McAlpine & Amundsen, 2007), research suggests that international doctoral students face particular challenges (Kuwahara, 2008; Morita, 2009) due partly to isolation from their normal support networks.

I approach this discussion from my dual perspectives as a full-time doctoral student and a researcher of doctoral education in both the Australian and international contexts. In the chapter I draw on interviews with six international PhD students studying in Australia in presenting a snapshot of their lived experiences. While most of what they say is positive, our conversations suggest their experience could be enhanced in various ways. Given that the students are unlikely (principally for cultural reasons) to express any concerns to university authorities, I have chosen to report here some of the stories of personal, academic and social tension they have shared with me. I hope these stories can illuminate aspects of the international doctoral student experience in Australia seldom discussed. First I discuss and justify my use of the problematic term "international students". Next I report particular tensions experienced by four of the students before discussing the surprising fact that none of the students have contact with any Australian students. I conclude

the chapter by speculating on possible reasons for their experiences, and suggest strategies the universities could adopt to enrich international doctoral scholars' experience in Australia.

Background

The experiences discussed here draw on my ongoing longitudinal study of six international doctoral students' lived experiences in Australia and my personal reflections on life as a doctoral student. Like the participants in my study, I travelled to Australia in order to undertake doctoral studies; in that sense, we are all outsiders. However, as a New Zealander, I am regarded as a local student by the university and the Australian government, which means, amongst other things, that I enjoy certain financial benefits (such as half price travel on public transport) which my international peers do not. In Australia, the term "international student" is used by the government and educational institutions to designate an individual who has travelled to Australia from abroad for the purpose of studying. However, clearly this term exemplifies the process of Othering which 'refers to the ways in which the discourse of a particular group defines other groups in opposition to itself' (Palfreyman, 2005, p. 213). Use of the term "international students" in Australia may therefore reflect an "Us and Them" worldview. The term is also associated with a tendency to discursively construct as deficient (Candlin & Crichton, 2010) the individuals it identifies. Writing about higher education in the United Kingdom, Goode reports that 'it is not uncommon to hear talk about "international students" as a whole as "hard work", both deferential and demanding ... leading to a generalised stereotyping for what is ... a heterogeneous group' (2007, p. 592). However, despite these negative connotations, I employ the term "international students" throughout this chapter both because it is a formal descriptive category employed in the university where the study participants are enrolled and because it is commonly used in the discourse of higher education in Australia.

I recruited the participants for my (wider) research project in early 2009 and have interviewed them approximately every four months since. All interviews were recorded and transcribed, with analysis involving repeated readings of the transcripts to identify major themes. Three female and three male students aged between 25 and 40 agreed to participate in my study. They come from six different countries and are enrolled in three faculties – Business and Economics, Human Sciences and Science. Four of the students are married and accompanied by family members; all are speakers of English as an additional language. Although their biographies are important for the main project, in this report details will not be matched to individuals in order to protect their identities. The

pseudonyms used in this chapter - Ariunaa, Dev, Emily, Jack, Journey and Mary - were chosen by the students.

All six students are linguistically and academically sophisticated. Four are multilingual, three completed Masters degrees outside their countries before coming to Australia, two are academics, two worked as professionals after completing their Masters degrees and one spent three years in a PhD programme in her country (where she published three papers in English) before coming to Australia. In terms of their exposure to different education systems and experience of varied cultural and social practices, these students are probably more sophisticated than many of their Australian counterparts.

Being an international doctoral student in Australia

In this section I first relate four stories which illustrate the kinds of personal and academic difficulties international doctoral students can face in Australia. Ariunaa talks about surviving a family trauma without a support network, while Jack, Mary and Dev discuss tensions in their relations with supervisors and administrators. I then discuss a more general theme identified by all the participants – their lack of contact with Australian students. Throughout this section, I compare the students' experiences with my own as a 'pseudo-insider'.

Personal tensions

In our third interview, Ariunaa told me a harrowing tale of travelling to hospital by ambulance with her two year old son after he suffered a major seizure, five months after arriving in Australia. In her rush to leave home, Ariunaa forgot her wallet and mobile phone. Consequently she spent three days in hospital unable to buy food or contact her husband. When her son was discharged on the third day, not having any means of getting home, Ariunaa asked a patient in her son's ward for help; this meant waiting until the patient's husband came to visit that evening. Ariunaa cried as she told me this story.

What does Ariunaa's distressing experience tell us? First, many international students are socially isolated. At the time of this crisis, Ariunaa and her husband knew none of their neighbours, were unfamiliar with the city and had limited financial resources. Stranded at the hospital, hungry and unable to contact her husband, we can only imagine Ariunaa's distress. Ariunaa's story also conveys the stress associated with having a child diagnosed with a serious illness while living abroad. As her husband speaks little English, Ariunaa manages all the communication with health professionals,

school authorities and childcare centre workers concerning their two sons. She often has to travel long distances (by public transport) to attend medical appointments with her son. While Ariunaa finds this tiring, she is appreciative of the excellent medical care her son is receiving in Australia. Her story also reminds us that doctoral students occupy a number of different roles. While Ariunaa is positioned as a student when at university, she must also maintain her roles as mother, wife, daughter, friend and colleague. When I asked if she had told her supervisors about her hospital ordeal, Ariunaa replied: “No ... because that’s just my life and I should ah manage my life” (Ariunaa, Interview 3, Line 2157). It is likely that Ariunaa’s desire to project a positive, confident professional image dissuaded her from relating this experience to her supervisors.

While I have experienced nothing in Australia which compares to Ariunaa’s trauma, we both struggled to find accommodation when we first arrived. This was partly due to our lack of familiarity with Australian procedures and, in her case, landlords’ reluctance to accept tenants with children. I spent two stressful months looking for somewhere to live, dashing from one 10-minute appointment to another, being physically jostled by rivals determined to inspect the property first, repeatedly completing detailed applications and always handicapped by being unable to provide local bank statements and references. However, unlike Ariunaa, I made sure my supervisors were aware of my difficulties, particularly since my accommodation problems delayed the start of my project.

Academic and administrative tensions

Jack initially experienced friction in working with his supervisor. In our first interview, he spoke about his supervisor’s practice of assigning him a large amount of reading (e.g. a 600 page textbook) and quizzing him on the content at their next meeting. Jack found this stressful and unhelpful, and seriously considered withdrawing and returning to the university where he had completed his Master’s degree. However, after about six months, he began to understand his supervisor’s approach and the relationship started to improve. When I asked why he didn’t object, Jack explained:

I thought it wasn’t of any point to keep arguing with him you know, like I just got to do whatever he wanted me to do, and just forget about it because you know when you’re arguing with a professor anyway, the truth is you really have a lot to lose. For them they have nothing to lose (Jack, Interview 1, Line 275)

While Jack alludes to the power relations operating between himself and his supervisor, he is unwilling to challenge his supervisor's approach. This may reflect a culturally-influenced deference towards authority, or simply represent a pragmatic calculation of the unlikelihood of his supervisor agreeing to modify his approach.

Mary also experienced tension in relation to one aspect of her relationship with her supervisor. She was frustrated by her Chinese supervisor's choosing to speak Chinese (their mutual first language) during supervisions. Mary had few chances to speak English in Australia since she lived with her Chinese husband, socialised exclusively with Chinese-speaking students and communicated in Chinese with her supervisor's post-doctoral student. (In fact, her principal reason for agreeing to participate in my research project was to practise her English!) However Mary was reluctant to challenge her supervisor:

Yeah, of course it's negative because you don't have ... much opportunity to practise your English. But you can't ask for your supervisor to change her way (laughs) (Mary, Interview 3, Line 960)

The tension Dev experienced occurred as a result of what appeared to be a deliberate miscommunication on the part of the administrator at a clinical facility where he hoped to recruit research participants. After delivering a number of documents related to his application for ethical clearance, to his surprise, Dev was informed that an additional (multi-page) application with signatures was needed. In our interview, Dev explained that he could not understand why the administrator had not mentioned the additional documents previously, especially since he had interacted with her via email several times while preparing his application. In addition, he found her comments about the importance of ethical standards in research conducted in Australia somewhat patronising:

I didn't speak anything there ... but I was really frustrated ... and she would have told that millions of times you know "Australian research works like this, are you going to be a researcher in Australia? ... blah, blah, blah", I was like – ok, I'm here for like ... two years now and I know how it works ... she was trying to um say, you know, ok, these are solely procedures here, not like your country where nothing is there [laughs]. (Dev, Interview 5, Line 650)

It is difficult to avoid viewing Dev's experience as influenced by his outsider status. While he was convinced that 'an Australian student ... would have ... asked the administrator "Why didn't you tell me before?"' (Dev, Interview 5, Line 612), Dev believed that if he had done so, she would have delayed the process further. Clearly, power plays an important role in all these situations (and possibly race in Dev's case). While Jack and Dev considered it risky to challenge authority, Mary thought it inappropriate; Jack also believed that challenging his supervisor was futile.

As a New Zealander living in Australia (and a mature age student), I may feel more comfortable challenging authority than my international colleagues. For example, I was recently interviewed by a panel of (Australian) academics for a funding grant, one of whom spent a considerable amount of time explaining how to behave at an international conference in order to derive the maximum benefit. It did not seem to occur to him that a doctoral student might have had previous conference experience. When he had finished, I thanked him for his advice and explained that I had been presenting at international conferences for many years. I believed it was important to resist the stereotype that all doctoral students are academic novices.

Lack of contact with Australians

Strikingly, not one of my six participants has an Australian friend. In our first interview, Emily commented on differences between the way people greet and integrate newcomers in her country and her experiences in Australia. For instance, she observed that staff and students in Australia tended to eat lunch in their offices rather than invite others to join them. This behaviour may be linked to Australians' high levels of individuality (Hofstede, 2009) or could simply indicate that locals prefer to limit their lunch breaks so they can finish work earlier. Emily also had difficulty establishing academic relationships with peers:

I've asked people here to read my abstract ... but no-one has asked me and I don't think they ask in between them. The cooperation here is difficult. (Emily, Interview 3, Line 901)

She also reported that there were no Australians in the PhD student discussion group she had established in her department. When I told her the same was true of the student seminar group in my department, Emily wondered if this might be because there were not many Australian doctoral students at the university. However, in fact, 67% of doctoral students at the university concerned are Australians (Blinded Institution Higher Degree Research Office, 2010c). I suspect local doctoral

students are 'invisible' because they prefer to work at home rather than on campus, and tend to maintain existing networks of family and friends rather than seek to develop new relationships.

Journey, Jack and Mary all reported that they did not know any Australian students. This did not prevent Mary from commenting that she believed she was 'more focused on my research than domestic students' (Mary, Interview 4, Line 1384); in the absence of contact, negative perceptions can develop. While Vijay did not explicitly state that he lacked contact with Australian students, all the contacts he mentioned were from overseas. Given her family commitments, Ariunaa did not seek contact with other students when she was on campus. However she did provide a clue as to why contact between international and local students might need to be facilitated:

A ... now from few months ago one Korean and one Chinese girls they are sitting the same room with me and both of them are studying Master degree.

S And are they friendly?

A Usually friendly but you know usually we are Asian countries and not so open (laughs) ... if I don't ask something, they never start" (Ariunaa, Interview 3, Line 1735)

In stark contrast to this lack of *social* contact, Emily was delighted at how warmly she had been welcomed into the local research community:

I feel I'm lucky, I feel I'm being um taken care of in this [discipline name] community very well in Australia. I don't know what happened where exactly it came but ... but I feel they they want to care about *me*. I don't feel it's everyone's case ... (Emily, Interview 4, Line 472)

In our fifth interview, Emily explained why she felt she was being so well cared for – 'I do think that the fact that I am white um helps me a lot compared to others ... I think I have more advantages than others.' (Emily, Interview 5, Line 451). A similar difference in the treatment of the only white student was noted in a study of the experiences of four linguistic minority students attending a research university in the USA:

We believe that it is not a coincidence that Elena was ... the only white student in the study. When comparing Elena with the other three students, it is clear that

linguistic minority students, such as Elena, who are phenotypically white, benefit from their Whiteness ... The white status means that Elena was not necessarily labelled as a “foreigner”, and when she was recognized as a foreigner, people would not immediately dismiss her because of her accented English. (Oropeza, Varghese & Kanno, 2010, p. 227).

Unfortunately, Journey, Ariunaa and Jack confirmed Emily’s suspicion that not all international students enjoyed her advantages. Journey spoke openly of his disappointment at the lack of researchers on campus working in his area and his difficulty forging academic relationships:

- J Yeah I also expected that ... those relationships that I have developed with people outside also available here ...
- S But are there ... many people in your area here at [name of university]?
- J Not really but I know some people use the same theory although in different fields.
- S And have you made an approach to some of those people?
- J Ah, only a few. But we ... didn’t really discuss, so we yeah like just work
(Journey, Interview 2, Line 591)

Ariunaa also would have liked to be part of a student cohort so she could compare progress and seek advice informally:

Yeah, if more students around I can more comfortable, because what they are doing now at this stage and comparing and discussion and I have the problem how to solve from where I can ask the help (Ariunaa, Interview 2, Line 958)

Jack characterised his PhD experience as studying ‘solo’ in contrast to the teamwork approach that doctoral students at an international conference had spoken of:

Ok of course working as a team is easier because I mean in most of the prestigious universities like ... Oxford, you know what’s happening there is people work as a research team, so if you have any question, you just ask your colleague, it’s easy ... but here I mean you go to ask your supervisor and at times you think “Well should I ask that?” even before going to ask him, because he might look at it like you’re stupid so [laughs] ... (Jack, Interview 4, Line 1371)

Jack's earlier comments about his supervisor explain why he might have felt more comfortable asking questions to fellow students. In fact previous studies indicate that students benefit from participating in peer networks in numerous ways (Deem & Brehony, 2000; Aitchison, 2010).

My experience as a student in Australia is similar to that of my participants. All the students I interact with, both academically and socially are either international students or immigrants. These stories testify to the difficulty outsiders can face in joining existing social and academic networks in Australia. Where my experience differs is in my contacts outside university. It is likely that similarities between my personal and cultural interests and those of Australians make it easier for me to meet locals than for my international peers.

Discussion

Universities can help international students adjust and settle in various ways. Experience suggests that all newcomers to Australia would benefit from practical assistance in searching for accommodation. In addition, life could be eased for students accompanied by their families if more generous financial support were provided. In Ariunaa's case, this would enable her to pay for childcare five days per week (instead of the current three), allowing her to spend weekends with her family instead of working at university. Instituting a buddy system that paired recently-arrived international students with local students, and introducing them to members of their own cultural community outside the university are other strategies which have been proposed for easing students' initial settlement issues (Sawir, Marginson, Deumert, Nyland & Ramia, 2008).

International doctoral students' orientation to the academic community needs to include opportunities to discuss cultural expectations surrounding supervision (Kiley, 1998). While international students' reluctance to challenge authority figures may not be surprising, they do need to know how to express their views appropriately should they feel unfairly treated. Supervisors (and administrators) on the other hand, should aim to be sensitive and respectful when communicating with students. This is no more than a statement of good doctoral pedagogy for all students, whether local or international.

The social isolation of international students in Australia is well documented (Sawir et. al., 2008; Owens & Loomes, 2010). A number of reasons have been suggested to explain this phenomenon. These include Australians' highly developed individuality and sense of privacy (Hofstede, 2009), differences in cultural knowledge associated with aspects of popular Australian culture such as

sporting codes and social practices surrounding alcohol, Australian students' 'comparative disinterest and/or inexperience ... in relation to overseas study and study of second languages' (Owens & Loomes, 2010, p. 276) and religious differences including the lack of prayer facilities for Muslim students (Novera, 2004). It has also been suggested that international students may be so focused on addressing their and their family members' fundamental physiological and safety needs that they have little energy to be concerned about social inclusion (Owens & Loomes, 2010). Recently, links have been made between the social isolation of international students and concerns about their safety following a number of violent attacks on Indian students in Victoria and New South Wales (Quiddington, 2009; Marginson, Nyland, Sawir & Forbes-Mewett, 2010; Nyland, Forbes-Mewett & Marginson, 2010). While none of my participants reported experiencing threats to their security, neither did they report having any Australian friends or contacts. I believe the unusual combination of exaggerated informality (observed in Australians' dress, speech and behaviour) and apparent unwillingness to engage with outsiders can be deeply confusing for newcomers. In such a climate, expecting contact between international and local students to occur without assistance is unrealistic.

International students' lack of social and academic contact with local students is worrying for several reasons. First, international students who choose to study in Australia should be able to expect to have contact with local students as part of their experience of studying abroad; much can be learnt about different ways of viewing the world from discussing theoretical frameworks and research approaches with colleagues from elsewhere. Second, the process of academic socialisation operates more effectively when students interact, formally and informally, with a wide range of individuals at all levels of the academic and research community (Duff, 2010). Students who relate only to their supervisors experience an impoverished scholarly apprenticeship. The community of practice (Lave & Wenger, 1991; Wenger, 1998) framework frequently adopted to theorise doctoral learning implies a far richer range of opportunities for participation than five of the six students in my study seem to experience. Finally, Australian universities and their students are likely to miss out on potential benefits if they fail to actively engage their international students in the life of their departments and the wider university. Denson and Zhang (2010) have shown that local students may benefit more from experiences with diversity than international students, but these benefits can only occur when members of the two groups interact.

Much of the academic isolation reported by the study participants may be due to the distinctive nature of the Australian PhD. Unlike the North American doctorate with its coursework structure

providing opportunities for interaction with classmates, the Australian PhD is a predominantly individual experience. While this may work well for many locals, it may suit some international students less well. Australian university departments therefore need to develop structured opportunities for their doctoral students (international and local) to interact with each other, local academics and the wider research community.

Conclusion

By highlighting some of the challenges international doctoral students face in Australia I do not want to suggest that my participants feel negative about their overall experience. All have commented positively on the excellent supervision and generous funding they benefit from. However, these benefits do not compensate for the absence of a stimulating learning community and vibrant social life. Furthermore, the singularity of Emily's positive integration in the local research community is disturbing. This chapter has sought to signal important issues which international doctoral students in Australia face but may be reluctant to voice. My interactions with the study's six participants confirm that efforts to create learning communities which genuinely welcome and value international researchers like them will benefit both the participants and the institutions that host them.

More than just a brain

Research Text 5

Abstract

While the epistemological and ontological challenges faced by doctoral candidates are well documented, the same cannot be said of the emotional dimensions of the journey. This paper draws on Activity Theory in exploring the role of emotion in the longitudinal doctoral learning experiences of six international PhD candidates studying in Australia. Analysis reveals that writing and supervision practices are common sites of tension but that the prevailing culture of silence militates against systemic change.

Introduction

Doctoral study involves numerous challenges. These range from the mundane pressures associated with living on a reduced income to the demanding task of constructing a scholarly identity. Consequently, many PhD students experience what has been described (in the context of tertiary study more generally) as a 'rollercoaster of confidence and emotions' (Christie, Tett, Cree, Hounsell & McCune, 2008, p. 225). Why then do we hear so little about the emotional dimensions of the doctoral experience? Perhaps this can be explained by the academy's historical distrust of emotion (Leathwood & Hey, 2009, p. 429), or the fear that discussing students' feelings might morph into a 'concern for the therapeutic rather than the pedagogic' (Beard, Clegg & Smith, 2007, p. 237). There is evidence that doctoral students suppress their emotions (Herman, 2010; Manathunga, 2005b), yet 'the emotional aspects ... [of] research practice and ... the formation of a scholarly identity ... [are] deeply embedded in being a successful doctoral student' (Thomson & Walker, 2010, p. 148).

This paper explores the emotion-infused experiences of six international doctoral candidates studying in Australia by analysing their participation in multiple interviews conducted over a two-year period. Despite claims that 'paralyzing pressure ... enormous stress and ... loneliness ... [are] the rule rather than the exception of doctoral student life' (Hadjioannou, Shelton, Fu & Dhanarattigannon, 2007, p. 161), the participants' narratives reveal a relatively balanced interplay

of positive and negative emotions. The rich data obtained in the longitudinal study exposed significant links between participants' heightened emotions and their interactions with key individuals and situations in their doctoral lives.

The paper first reviews relevant research into the nature and functions of emotions in educational settings before outlining the study's conceptual framework. The next section describes the study's research design and methodology. Next, the participants' accounts of the emotions they experienced during their doctoral trajectories are discussed. The final section considers the implications for doctoral students, supervisors and programmes.

Emotions and the doctoral experience

Emotions have been conceptualised in humanities and social sciences research in two main ways, first as 'inherent' and second, as socially constructed (Lupton, 1998). Proponents of the 'inherent' approach focus on the biological and neurological components of emotions, viewing emotional states principally as physiological responses to stimuli. However Lupton argues that this approach presents too linear a perspective on emotional processes by drawing an artificial distinction between emotion and thought while ignoring the sociocultural context in which they occur.

The second approach — the one adopted in this paper — views emotions as learned behaviours which are experienced and understood through social and cultural processes (Lupton, 1998). Accordingly, emotions change according to the historical, social and political context in which they are produced, experienced and expressed. Researchers therefore focus on exploring the implications of emotional experiences for individuals' sense of self, and their interactions with others and the environment (Dirkx, 2008).

Emotions are fundamentally implicated in all human behaviour. They shape perceptions, influence thinking, affect the ability to communicate and motivate action (Lupton, 1998). Recognition of the 'emotionally laden' (Schutz, Hong, Cross & Osbon, 2006, p. 343) nature of learning has prompted scholars in educational psychology to explore the role of emotions in educational settings. They identify the functions of emotions as:

preparing and sustaining reactions to important events and states by providing motivational and physiological energy, by focusing attention and modulating thinking, and by triggering action-related wishes and intentions. (Pekrun, Geotz, Titz & Perry, 2002, p. 96)

These processes are critical to the doctoral experience. Emotions provide doctoral students with the motivational energy to persist until graduation (McCormack, 2009). However, they can also inhibit thinking. For example, anxiety has been shown to interfere with doctoral candidates' ability to write (Castello, Inesta & Monereo, 2009). Emotions can also help in achieving desired outcomes as Hopwood's (2010c) account of doctoral students' experiences dealing with stress demonstrates.

Recent educational research views learning as a highly situated process in which emotions are treated not as 'side-effects ... [but] as an integral part of learning' (Eynde & Turner, 2006, p. 362). Schutz and his colleagues define emotions as:

socially constructed, personally enacted ways of being that emerge from conscious and/or unconscious judgments regarding perceived successes at attaining goals or maintaining standards or beliefs during transactions as part of social-historical contexts. (2006, p. 344)

Three aspects of this definition inform this study. First, emotions are fundamentally relational. Second, emotions are linked to appraisals which are made on the basis of criteria embedded in the educational context. Third, emotions are influenced by the social-historical contexts in which they occur. Context will influence both the appraisal criteria and the way emotions are constructed and expressed (Zembylas, 2004).

All three components of emotion are highly salient in students' educational experiences. Both interaction and appraisal were central to doctoral students' participation in the scholarly writing groups Caffarella and Barnett (2000) investigated. The students reported that the process of critiquing others' writing and having their writing critiqued was 'powerful and useful [but] it was also highly emotional and at times frustrating' (p. 39). However, despite the emotions triggered when receiving feedback, the students found the critiquing process 'the most influential element in helping them to understand the process of scholarly writing' (p. 39). The influence of the social-historical context on emotions was highlighted in a graduate student's reaction to being labelled a "first-generation student":

To this day ... I remain troubled and somewhat disturbed by it [the view that students whose parents did not go to university are disadvantaged] ... this was the first time I had ever come across such labels and ... the first time that I had ... been

seen, labelled and/or identified as being deficient in some way (Costley, 2008, p. 75)

One important aspect of the social-historical context in which emotions are produced is culture. Cross-cultural psychologists have identified significant cultural variations in emotions. These include differences in the rules that govern the display and expression of emotions and in the ways that events are interpreted (Zembylas, 2004). Differences have also been observed in 'appraisal propensities' (Mesquita & Frijda, 1992, p. 186) suggesting that some cultural groups have more of a tendency to, for example, attribute blame for situations than others.

However the researcher rejects an essentialised view of culture sometimes associated with 'opportunistic and speculative forays into the available literature' (Bond, Žegarac & Spencer-Oatey, 2000, p. 47) to explain differences in behaviour. Instead, the study aligns itself with intercultural communication research which advocates paying attention to the ways that individuals manage social relations when they interact. Managing rapport concerns the universal need for 'face':

Face ... is concerned with people's sense of worth, dignity and identity, and is associated with issues such as respect, honour, status, reputation and competence (Spencer-Oatey, 2000, p. 12)

Chang and Strauss (2010) report negative emotions associated with threats to 'face' perceived by Mandarin-speaking graduates studying in New Zealand.

As they face the challenges associated with PhD study, doctoral students look to their supervisors for support. Relationships which nurture learning create '[e]motional scaffolding [which] includes the gift of confidence⁷, the sharing of risks in the presentation of new ideas, constructive criticism and the creation of a safety zone.' (Mahn & John-Steiner, 2002, p. 52). Confidence is critical to the supervision relationship. A group of international graduate students studying in Australia identified 'interpersonal experiences of acceptance, validation and support' (Ingleton & Cadman, 2002, p. 110) with their supervisors and others as essential in building their confidence.

⁷ A term borrowed from Jean-Paul Sartre, cited in de Beauvoir, 1984, p. 168

This brief review suggests that emotions pervade the doctoral experience. The study reported in the rest of this paper explores situations where the participants' emotions emerged and the impact they had on their doctoral trajectories.

Conceptual Framework

In line with other socioculturally-framed studies of doctoral education (Beauchamp, Jazvac-Martek & McAlpine, 2009), this study adopts the theoretical lens of Activity Theory (AT) (Engeström, 1999). AT maintains that individuals construct their knowledge by interacting with others and the environment. AT therefore has the potential to 'link individual experiences with wider systemic elements and tensions' (Hopwood & Stocks, 2008, p. 196) by exploring the relationships between individuals' behaviours, their resources and their communities. Tensions occur when elements in an activity system (AS) interact since it is an 'inherently ... dynamic structure, continuously undergoing change in its parts, its relations, and as a whole' (Roth, 2004, p. 4). Activity systems are described in terms of relations amongst six elements (Engeström, 1999): a *subject* is engaged in an activity whose long-term goal (*object*) requires the adoption of various *artifacts* (cognitive and material resources, concepts etc.). The subject's activity occurs within a *community* governed by *rules* and is characterised by various *divisions of labour* (see Figure 8.1).

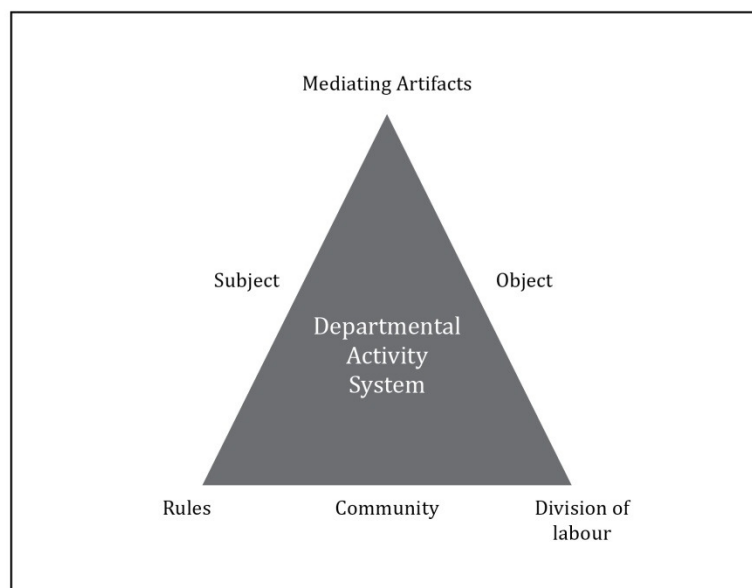


Figure 8.1 Doctoral student's departmental activity system.

When AT is applied to doctoral learning, the PhD student can be considered the *subject* of a departmental AS focused on the *object* of obtaining a doctoral degree. Doctoral students draw on a

range of *artifacts* including individuals, ideas, texts and machines. The doctoral student's *community* is made up of supervisors, peers, technicians and others. Various explicit and implicit *rules* dictate how doctoral candidates should function within the departmental AS. The *division of labour* describes the different roles that community members adopt in carrying out the tasks which are the *object* of the system. All these elements are subject to change over time. The way that *subjects* represent the *objects* of their different ASs motivates and guides their trajectories — '[t]he complex nature of the relationship between subjects and objects ... is characterized as "passion" ... "desire" [and] "contradiction,"' (Kaptelinin, 2005, p. 5). Doctoral students participate simultaneously in multiple ASs including their academic department, their disciplinary community and their family. Analysing doctoral students' interactions with other elements in the different ASs they inhabit can shed light on what triggers their emotions and how they influence their doctoral trajectories.

Research design and methods

This study is part of a longitudinal narrative inquiry (Clandinin and Connelly, 2000) into the lived experiences of six international doctoral candidates studying in Australia. The participants, who had been enrolled for between one and fourteen months at the time of their first interview, attend a large metropolitan university where more than 37% of PhD students come from abroad (Blinded Institution Higher Degree Research Office, 2010c). Given the study's goal of developing detailed longitudinal narratives based on multiple interviews, the researcher recruited six international doctoral candidates who were diverse in terms of gender, age, first language, discipline, stage of enrolment and family situation. Comparison of the participants' profiles with those of the university's international PhD population indicated that two (China and India) of the four principal source countries were represented and two (Science and Human Sciences) of the three most popular faculties (Blinded Institution Higher Degree Research Office, 2010c).

This article draws on the transcripts of 35 hour-long interviews conducted between May 2009 and June 2011 and a small number of email exchanges aimed at clarifying issues identified during the transcription process. The researcher conducted interviews with each participant on their campus three times per year for two years. The fact that the researcher was also a doctoral student helped establish rapport with the participants, despite differences in age and background. Details of the participants and the pseudonyms they created for themselves are presented in Table 8.1.

Name	Gender	Age	Country of Origin	Faculty	Family in Australia?
Ariunaa	Female	36	Mongolia	Science	Husband and two sons
Dev	Male	25	India	Human Sciences	No
Emily	Female	30	North America	Human Sciences	Husband
Jack	Male	29	Kenya	Business and Economics	No
Journey	Male	40	Indonesia	Business and Economics	Wife and daughter
Mary	Female	Twenties	People's Republic of China	Science	Husband

Table 8.1 Participant details

Data analysis involved repeatedly listening to the audio files and re-reading the transcripts to identify all emotion-related episodes. Each episode consisted of an antecedent (e.g. supervisor's feedback, revising an article) and one or more emotions. Episodes (which ranged from three to fifty-three turns) were identified using linguistic, non-linguistic and contextual cues. Linguistic cues included the use of explicitly emotive language ('I felt really *irritated*'; 'it was *humiliating*') and swearing since '[t]he main purpose of swearing is to express emotions, especially anger and frustration' (Jay & Janschewitz, 2008, p. 267). In a small number of instances (e.g. Emily, 5, 593-629) contextual cues were used to identify emotions participants conveyed *indirectly* by providing lengthy descriptions of challenges they were facing. Non-linguistic cues observed in the audio files included changes in intonation, sighing, crying and laughter (and corresponding notes in the transcripts). For instance, Dev's intonation when he commented — "nothing is really working out for me right now" (Dev, 6, 861-862) — signalled profound discouragement, thus qualifying this episode for inclusion in the analysis. Once all the emotion episodes had been identified, they were mapped onto the activity system in which they had emerged.

Research which aims to investigate emotions entails a number of challenges. First, people experience and describe emotions in different ways (Edwards, 1999); this phenomenon has been described as ‘the challenge of languaging experience’ (Sheets-Johnstone, 2009, p. 390). The fact that the participants discuss their emotions in a second language adds to the complexity. Second, it is not always easy to determine what is and is not an emotion. However, by attending to participants’ verbal and nonverbal messages as well as recurring themes, emotion episodes were identified in all six narratives. The final challenge concerns the fact that emotions are dynamic and often short-lived (Sutton & Wheatley, 2003). This paper may therefore under-represent the incidence of emotion in participants’ experiences.

Emotion episodes in participants’ narratives

This section reports emotion episodes which emerged in the participants’ (*subjects*) interactions with other elements in the ASs in which they operated. Numbers appearing in brackets after participants’ names indicate interview and transcript line numbers respectively; “R” refers to the researcher.

Objects

Almost one third of the emotion episodes reported concerned participants’ efforts to accomplish particular *objects*. One *object* which generated a lot of emotion was writing; given the salience of appraisal in writing activities, this is hardly surprising. The challenges associated with writing in English generated particularly strong emotions:

sometimes ... I know what I’m doing but it’s difficult for me to express in different language ... and sometimes I get angry with myself ah yeah you know ... you know what you want to say but it’s not actually there (Journey, 2, 747-753)

In addition to triggering anger, anxiety and frustration, participants complained that writing was time-consuming and took time away from other activities. Given these challenges, participants expressed joy and pride when their manuscripts were accepted for publication. Ariunaa described having her first journal article published as a ‘fantastic and amazing’ experience. This success surprised and delighted her, boosting her confidence and enhancing her motivation.

However the *objects* on which participants focused were not all directly associated with their research projects. A year before she was due to submit, Mary reported that she and her husband had started discussing job prospects:

M We started thinking about that [the future]. Yeah, for him I think, I don't worry about him at all. And ah for myself, there are some worries.

R What kind of worries?

M Ah, ah about what kind of job I can find and ah I have to get good publication to get a good ... academic career – (Mary, 4, 1556-1562)

Mary's anxiety about finding an academic post was exacerbated by knowing that her student visa would expire shortly after she submitted her thesis⁸. If she was to remain in Australia while her husband completed his PhD, Mary would need a job offer. This anxiety therefore compounded her concerns about producing high quality publications and completing on time.

Community

Almost one quarter of the participants' references to emotions concerned interactions with members of their different *communities*. Their experiences within their departments were uniformly negative, while their interactions in their respective disciplinary communities were (in all but one case) extremely positive.

Emily complained in three different interviews about her department's unfriendly culture and felt 'very very troubled' (Emily, 1, 741) at what she perceived as a lack of welcome and orientation when she first arrived. She was also disappointed at the lack of opportunities to share ideas with other PhD students in her department. Journey was surprised and disappointed at being unsuccessful in developing collegial relationships with other academics on campus despite initiating contact. Ariunaa, Dev and Jack also regretted the absence of peers with whom to discuss ideas. This lack of departmental community sent a powerful (unintended?) message that scholarly research is a solitary affair.

In contrast, participants' interactions with their disciplinary *communities* at conferences and in the publication process were highly positive. Jack's account of attending a 'very prestigious' international conference in Europe conveys his pleasure and pride:

⁸ Changes to government policy announced following the Knight Review will go some way to allaying these pressures (DEEWR, 2011).

that was really interesting because ... it gave me really good feedback ... during the break people were coming to me ... and they were telling me they are impressed about what I am doing ... (Jack, 4, 271-280)

By participating in this conference Jack experienced the satisfaction of being recognised as a researcher by others in his disciplinary *community*. Journey contacted two international experts in his field about a paper he was writing and was delighted to receive positive feedback on the work he was doing. In both cases, this emotional boost was converted into enhanced confidence and motivation.

Emily was the only participant, however, to speak about a strong sense of disciplinary *community* in Australia. By participating in conferences and co-authoring a journal article she obtained:

E ... good feedback ... it gives you this confidence and ... I feel I'm being ... taken care of in this [name of discipline] community very well in Australia. I don't know what happened where exactly it came but ... I feel they ... want to care about me. I don't feel it's everyone's case ...

R Don't worry about where it comes from! That's just positive because -

E No, I take it, but ...I'm realising that ... I'm in good hands and I have good people around me ... they must – they believe in me, that's the thing (Emily, 4, 473-490)

Recognition by members of her disciplinary community made Emily feel confident, secure and proud, adding momentum to her research trajectory. Interestingly, she observed that not all doctoral students received the same positive treatment.

Unfortunately Dev's interactions with members of his local disciplinary *community* triggered strong negative emotions. When he requested permission to recruit research participants at a clinical facility associated with his department, Dev was told he needed to complete new ethical consent procedures (*rules*) despite his having already obtained ethical consent from his university. When Dev hand-delivered his lengthy application a week later, the administrator suddenly requested additional documents. Dev felt frustrated and took offence at the administrator's

insinuation that, being Indian, he might not appreciate the importance of human ethics requirements in conducting research:

... she was trying to ... say, you know ... these are solely procedures here, not like your country where nothing is there [laughs]. Yeah it was pretty much like that ... (Dev, 5, Line 667-669)

These interactions and the subsequent delay to his data-gathering angered and frustrated Dev. Two months later, while giving an invited presentation at the clinical facility, Dev was interrupted by clinicians and questioned aggressively until:

... then they told yeah that's it, you can go now and we have to wrap up for another meeting, so ... I was really embarrassed and kind of really humiliated ... (Dev, 6, Line 208-210)

After the meeting, Dev received an email from the administrator containing a series of questions about his project for him to respond to. Dev felt it was inappropriate (*division of labour*) for the clinicians to question him in this way, viewing this as a challenge to his and his supervisors' competence — 'I was damn really irritated, frustrated and ... extremely cold in a profoundly disturbed way.' (Dev, 6, 224-226). Dev's swearing conveys the suppressed anger he felt at the way he had been treated. However, he was not just angry. His self-confidence had been seriously damaged — 'I'm right now having a very low esteem' (Dev, 6, 1195).

Division of labour

The third aspect of the participants' experiences which generated a lot of emotion was their interactions with their supervisors. Most of the participants' comments about their supervisors were positive with individuals acknowledging their efficiency (Emily), support (Dev), feedback (Mary) and friendly manner (Ariunaa). Journey explained that his supervisors' trust in his ability had given him the confidence to begin writing:

- J when ... you are a person from an environment that is not really value
 publication as it is here, and then you come to this place –
- R - to compete on an even footing –

J Yes ... I was very happy that my supervisors yeah they trust me, tried to motivate me – “Yes you can, you have experience” and ... when we discuss content-based knowledge, ah maybe they said – “Yeah ... you have”

R Mmm

J Then ah one of them at that time started to ask me to write a paper. I guess it's a kind of recognition that you ... can do that. So, yeah that's part of things that strengthened myself that I ... could do (Journey, 6, 720-738)

However differences in supervisor and student expectations generated some temporary difficulties. Ariunaa felt confused and stressed for the first three months because she did not know what was expected of her as a PhD student. Emily felt stressed and anxious trying to decide how to sequence her co-authors' names in a forthcoming article:

E Now on the second one I'm having some problems with it, because ... now my co-authors are giving very different amount of inputs ... and one of them is trying to keep the work just between me and him [laughs]. And it's very clear, like — “Let's just work, I know they are saying that, I know they think like that, but let's just keep it between you and I, we'll continue just sending it back and forth ... Ok? And I know they think differently, you think differently, but now this is what we're going to do.” [laughs] ...

R How do you feel about –?

E [laughs] So that's the situation. (Emily, 5, 593-629)

Emily's evasive response to the researcher's question may indicate her reluctance to blame her stress on her supervisor's behaviour (Mesquita & Frijda, 1992). Given the contextual variables of power, interactional roles and message context (Spencer-Oatey, 2000) at play in this situation, Emily was negotiating highly complex competing 'face' needs. This (abbreviated) excerpt illustrates how a detailed description of a problem can indirectly convey participants' unnamed emotions.

The most striking instance of sustained tension in the supervision relationship emerged from Jack's narrative. Whereas he had enjoyed an excellent relationship with the supervisor of his Masters degree in Europe, his relationship with his PhD supervisor in Australia was problematic:

OK, there was friction because ... he gives me a textbook which he thinks might be useful ... I have to read through it maybe like for three weeks ... probably it is a textbook which is 600 pages of Mathematics and then after that ... he quizzes me and ... I was opposed to that because ... I'm already past that level ... so there was a sort of friction for some time until I was just thinking should I just go back to [European country] and just continue with my professor ... and then I thought it wasn't of any point to keep arguing with him you know ... because ... when you're arguing with a professor ...the truth is you really have a lot to lose ... so I just compromised ... and then sort of we started developing a relationship ... (Jack, 1, 260-286)

Jack considered the role his supervisor assigned him (*division of labour*) inappropriate and face-threatening. However, conscious of the power dynamics at work, he chose not to resist. Instead he lowered his sights (*object*) and chose to focus on 'just finishing' the PhD:

I guess there was a lot of ambition, but ... you just reach a point where you don't really care anymore what happens, all you need to do is just ... try to see if you can have the results and try to finish [Jack, 2, 902-913]

Despite indicating that their relationship had improved, in three of his four subsequent interviews Jack mentioned that his supervisor was too busy to see him, explaining — 'it's easy to get discouraged ... there are days he was rough ...' (Jack, 4, 908-909). When asked to explain, the colourful way Jack paraphrased his supervisor's appraisal of his work revealed his suppressed anger:

J at the beginning well I could write stuff and ... he doesn't understand it so -
 "it's bullshit ...it's rubbish". Well I would like -

R Would he actually use that word with you?

J Of course he would say it doesn't make sense to him. [Jack, 4, 918-923]

Tellingly, Jack compared his PhD experience to an initiation ritual he experienced as a young man - 'a painful experience' which demanded 'endurance' (Jack, 5, 653-664) but which 'of course no-one will ever tell you about' in much the same way, he suggests, as 'a lot of PhD students hide the difficult part' (Jack, 5, 681).

Ariunaa's PhD experience is complicated by the fact that she is also a wife and mother. She therefore experiences tension when the *objects* and *division of labour* in her PhD and family activity systems are in conflict. Shortly after Ariunaa and her family arrived in Australia, her two-year old son began experiencing seizures. Ariunaa worries constantly about him but also fears she is not spending enough time on her PhD. One day Ariunaa recounted a harrowing story of having spent three sleepless days and nights at the hospital with her son following a severe seizure. During that time she was unable to contact her husband or to eat because she had left her phone and wallet at home in her rush to meet the ambulance. Through her tears, Ariunaa explained that she had not told her supervisors this story - "Because that's just my life and I should ... manage my life" (Ariunaa, 3, 2161).

Artifacts

The participants' interactions with *artifacts* generated few emotions apart from Journey, Mary, Ariunaa and Emily commenting positively on the valuable feedback they received from reviewers of their manuscripts. However one *artifact* which created anxiety for Ariunaa and Mary was their English language proficiency. Ariunaa's anxiety about her English was a constant theme in her interviews. Eighteen months after enrolling, she commented:

I feel my progress is of course always slow[er than] another PhD students ... I think the reason is first the family, the second is the English barrier (Ariunaa, 3, 566-568)

There is little doubt that Ariunaa's anxiety about her English (and her son) distracted time and energy from her project. Mary was disappointed that after three years of doctoral study in Australia she was still unable to speak 'normal' everyday English. Her situation was complicated by the fact that her supervisor (also from China) chose to communicate with her in Chinese.

Rules

A limited number of emotion episodes concerning participants' interactions with *rules* were identified. The most significant example (already discussed) concerned Dev's frustration at having to negotiate a second ethics approval process (*rules*).

Discussion

What can be learned about emotion and the doctoral experience from viewing the participants' experiences through the lens of activity theory? First, activity theory provides a useful tool for identifying systemic sites of tension. Writing practices and supervision encounters emerge as sources of considerable tension in the participants' accounts; both are linked to appraisal which has been shown to trigger emotion (Schutz et al, 2006). Previous research also links emotions with writing and supervision in the doctorate (Caffarella & Barnett, 2000; McCormack, 2009). Given that even accomplished writers experience anxiety when they write, doctoral students need access to better writing pedagogy (Paré, 2010b). Supervisors engaged in intercultural supervision should monitor the impact of their pedagogies and styles, enhance their understanding of their students' approaches to learning and include them in a supportive research culture (Manathunga, 2007a).

Second, activity theory highlights the significance of the way participants represent the object of their doctoral study. At the end of her first year Emily explained:

the more I'm doing everything, the more I'm testing, the more I'm gathering data, the more I'm reading, the more I'm discussing — I'm building a confidence through all of that and getting stronger (Emily, 3, 1401-1404)

In viewing the object of her doctoral experience as becoming a confident researcher, Emily's goals and values coincide with those of the academy. Although Journey views the object of his PhD in collective terms, this perspective too is easily accommodated by the academy. Through his PhD, Journey hopes to convince his Indonesian colleagues that they too can participate in international research:

I should communicate ... with them ... remind them that it's all about efforts, it's all about ah commitment ... maybe come up with failures, but you have to try ... So I've done my part, though it's small and shows us that yes we can! (Journey, 6, 1036-1044)

Jack on the other hand, finding himself 'arguing with a professor ... [with] a lot to lose' (Jack, 1, 283) decides to submit to his authority and focus on the less challenging object of timely PhD completion.

However, activity theory is less well suited to illuminating the *causes* of tension, since these reside in conflicts surrounding values and goals. Mary's goal of improving her English was thwarted by her supervisor's decision to communicate only in Chinese, yet her respect for her supervisor prevented her from objecting. Dev's 'humiliation' at the hands of the clinicians delayed his goal of recruiting participants but his concern for their 'face' prevented him from challenging their behaviour. Ariunaa's decision to suppress her anxiety about her son may have been prompted by observing the 'care-less' (Lynch, 2010) culture of the academy which 'values ... competitive ... and individualistic practices' (Bansel, 2011, p. 552). Unfortunately the 'culture of silence' reflected in Jack's, Mary's Dev's and Ariunaa's responses militates against change occurring in the AS of doctoral education. Anecdotal evidence from the researcher's network of (local and international) doctoral students suggests that the tensions experienced by the participants are common, as are their reactions. Their silence may have less to do with culture than power.

Examining participants' interactions in multiple activity systems highlights the tensions that can occur when individuals' *objects* and roles in different ASs conflict. It also revealed the poverty of participants' experiences of *community* in their departments compared with their rewarding disciplinary *community* interactions. Carlone and Johnson (2007) suggest that it is not uncommon for researchers to experience less recognition within their own departments than in the wider research community. Suggestions for enhancing the departmental environment include cultivating peer networks (Devenish, Dyer, Jefferson, Lord, van Leeuwen & Fazakerley, 2009) and establishing writing groups (Li & Vandermensbrugghe, 2011). Given the lack of *community* in their departments, it is perhaps not surprising that Dev and Emily valued the research interviews as an opportunity to reflect:

I think that every PhD student should have ... someone doing a PhD about PhD students ... [laughs] ... someone detached, not your supervisor ... not anyone in your department, that can just see how are you doing, and how are you feeling through all that, because it is a long road ... and there's a lot of things attached to this road ... (Emily, 6, 1812-1813)

Finally, activity theory proved less well suited to exploring the *subjects* at the heart of the doctoral experience (what was the precise nature of Jack's PhD 'compromise'?) than to identifying

the tensions they experienced and their impacts. Furthermore, interesting metacognitive themes such as Journey's observation that writing for publication is simultaneously useful and painful could not be captured within the activity theory framework.

Conclusion

Emotions play a complex role in doctoral experiences. Emily sent the following email message to clarify a comment she had made (in an interview) about being in 'an emotional state' (Emily, 3, 607) while writing her first journal article:

I think I just wanted to be really good ... So many people around me already had articles published. Now it was my turn to try ...

Funny that I did not remember it being emotional ... because this Monday, I finally got this article accepted for publication. And guess what: tears started running down my cheeks and then I laughed so much because it was the first time I was crying of joy and thought this is not at all the type of occasion that I should be crying of joy (this should be reserved to your wedding, seeing ... good friends after a long time apart ... But hey, that's how it went! (Emily, Email message, May 4, 2011)

Emily's powerful emotional response to having her work published underlines the intimate connection between writing and the construction of scholarly identity (Kamler & Thomson, 2006). However experiences of emotion like this are often omitted from accounts of doctoral experience (Lee & Williams, 1999) so that 'knowledge and intellect come to describe and define the whole person' (Bansel, 2011, p. 547).

The researcher acknowledges a number of limitations with this study. First, it focuses on the perspectives of a small number of individuals who come from extremely diverse linguistic and cultural backgrounds. However the goal of this research was not to identify universal 'truths' about international doctoral students' experiences but rather to take an in-depth look at the perspectives of six individuals. Third, the study investigates a highly complex phenomenon with comparatively blunt tools.

However the results vindicate the researcher's efforts since emotions have been shown to pervade the doctoral experience. Activity theory highlights the potential for candidates' interactions

to enhance or diminish their confidence, signalling the responsibility of those who wish to support them. If acknowledged, emotions can inspire, guide and enhance research (Herman, 2010); if ignored or suppressed, they can delay and even derail it. By acknowledging the emotional dimension of doctoral students' experiences, supervisors, departments and institutions can better support their research trajectories.

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Discussion

Overview

This chapter presents an overview of the study's findings by drawing together the themes discussed in Chapters Four to Eight and identifying conclusions which flow from the findings. The chapter is divided into three sections. First the study's principal findings are outlined and their importance discussed in the light of previous research. The second section considers the study's strengths and weaknesses in terms of research design and methodology and evaluates the usefulness of the different analytical tools applied to the data. The final section identifies four implications of the study's findings.

Major findings

The study set out to answer the following three research questions in relation to the experiences of six international doctoral researchers studying at an Australian university:

1. What is the nature and quality of the participants' learning experiences?
2. What opportunities do the participants have to engage in the practices of their respective academic communities?
3. What is the nature and quality of support provided to the participants by their supervisors, peers, other academics in their department, the institution and members of their wider disciplinary community?

In this section the study's major findings in relation to each of these questions are summarised and discussed in the light of previous research. The section concludes with a brief summary.

Learning experiences

The participants' narratives revealed that their principal learning experiences consisted of informal interactions with their supervisors. As Chapter Six reports, these experiences included planning research activities, discussing theoretical problems, seeking feedback on draft text and discussing

progress. The model for this kind of learning is one of engagement in shared practices (Wenger, 1998). While the participants reported a number of practices which correspond to the facilitative supervisor behaviours identified by Pearson and Kayrooz (2004), the range of practices in which they engaged during supervision sessions, as discussed in Chapter Six, was limited.

Despite the participants' predominantly positive evaluations of their supervisors' practices, their narratives provide instances of supervisors being inarticulate (Mary's supervisor advised her to include 'beautiful words' in the introductions to her articles), overbearing (Jack's supervisor disparaged his work and dismissed him until he has 'something original to say') and discouraging (Dev's third supervisor responded to his draft conference paper by telling him that with work of that standard 'you can't finish your PhD'). The second and third examples indicate that not all supervisors demonstrated a supportive attitude when communicating with candidates. These examples suggest that the participants were exposed not only to 'indifferent pedagogy' but also, on occasion a 'pedagogy of indifference' (Johnson, et al., 2000, p. 136).

The researcher was not surprised to find instances of harsh supervisor feedback in the participants' narratives since previous research has established that supervision is a systemic site of tension for doctoral researchers (Grant, 2008; Manathunga, 2007a, 2007b; T. W. Maxwell & Smyth, 2011). This study's illustration of the effects of power and emotion in the supervisory relationship (in Chapters Six and Eight) therefore adds to the findings of these studies. Supervision has been conceptualised as:

the site of the interplay of personalities, emotions, conceptions, beliefs and values
... between a supervisor and a student that occur as the creative process engages
the student with knowledge. (T. W. Maxwell & Smyth, 2011, p. 225)

The risks associated with presenting ideas for appraisal in this contested site are highlighted in Jack's references to his supervisor's disparaging feedback on his work. In a less obvious example of the workings of power and hierarchy, Ariunaa's supervisors' failure to intervene during her first three confusing months of candidature can be interpreted as an attempt to assimilate her to Western supervisory norms. Manathunga presents a strikingly similar example:

... one Asian supervisor described how in her past experience as a student she
'didn't know what to expect from the supervisor ... and there was no way of
discussing what the role could be'. This was because her supervisor basically let

her 'explore and wander around' and she was supposed to 'just come and ask ... if you have question'. She described her feelings of being 'very lost ... I was so desperate I actually nearly gave up'. (2007a, p. 108)

As this example makes clear, while the supervisors concerned may have been well-intentioned, their "hands-off" approach created difficulties for the doctoral researcher cited in Manathunga's study. Unfortunately, as Chapters Five, Six and Eight indicated, few doctoral researchers are willing to challenge their supervisors' practices or decisions.

The participants' accounts of their supervision-based learning experiences raise a number of concerns. First, some participants reported being exposed to a small number of pedagogic practices, suggesting that doctoral researchers' learning affordances are highly variable. Second, a number of practices which have been found to contribute positively to doctoral candidates' research expertise and confidence, such as having the opportunity to critique others' writing (Aitchison, 2009), did not appear in the data set at all. Third, several participants reported that they found some of their supervisors' practices unhelpful, but were unwilling to say so. Similar examples of unproductive supervisor practices were reported in a study of doctoral students' experiences conducted in Canada and the United Kingdom (McAlpine, et al., 2009). These examples suggest that the power relations operating between doctoral researcher and supervisor encourage many students to put up with unsatisfactory or unproductive practices.

The study also found that while the participants all had highly-qualified and experienced supervisors, not all their needs for specific research training were addressed. In her final interview, Emily explained that she would have liked to have attended some Statistics courses as part of her programme of study, but that there was no structure in place to make this happen:

if I could have had access to a course within [name of university], some support, someone that knows a lot that could guide me and help me and learn - I I think I could have been great in Statistics and this was the moment for me to do it and I have missed on that ... (Emily, 7, 2221-2224)

When Emily asked her supervisor about this, she was advised to contact the university's Statistics Department directly. When she did so, she was told that the Statistics Department staff were 'not paid to work with grad students from other departments'. In another example, Ariunaa wanted to get help with her writing skills but was not aware (until speaking to the researcher) that her

department would probably be able to provide funding for this. When it became clear that Dev's project needed technical expertise to complement that of his existing supervisors, he was able to add a third supervisor to his research team. In general, resources and expertise were available, but this was not always apparent to participants, nor was it easy for them to locate the resources independently.

The participants' narratives also provided evidence of learning taking place in settings other than their supervision sessions. The doctoral researchers reported learning independently from friends, former classmates, colleagues, family members, writing specialists and other researchers in face to face encounters, via computer-mediated communication and at conferences. These examples provide empirical support for reconceptualising the learning which occurs during the doctorate as 'significantly "distributed" and "horizontalized"' (Boud & Lee, 2005, p. 502). However, whereas a growing body of research attests to the positive contribution of doctoral student writing groups (Aitchison, 2010; Maher, et al., 2008) and peer support networks (Devenish, et al., 2009; Hadjioannou, Shelton, Fu, & Dhanarattigannon, 2007), none of the participants reported taking part in any such activities. Furthermore, differences were observed in participants' willingness to take the initiative in their learning. Journey, for instance, demonstrated considerable agency in networking with other researchers. The role of agency in influencing doctoral researchers' efforts at mediating their learning experiences was also noted in a study of doctoral students in the United Kingdom (Hopwood, 2010c).

In Wenger's (1998) model of learning as social practice, the criterion for successful learning outcomes is increased engagement over time. The study narratives provided clear evidence of Journey's and Emily's enhanced engagement by the end of the data-gathering period. The three co-authored and two single-authored articles Journey produced during his candidature and his plans to co-author an article with an international colleague after submitting his thesis provide a robust measure of his enhanced engagement with his disciplinary community, particularly given that he had not published in English prior to enrolling as a PhD candidate. Evidence of Emily's increased engagement was provided by the extensive international and local research networks she developed during the first two years of her candidature, principally as a result of her multi-site research project. In addition, during her first two years, she produced a co-authored publication, co-supervised a Masters student and participated in six conferences (5 international and 1 local). Evidence of increased engagement was more difficult to discern in the narratives of the other four participants.

Opportunities to participate

Unlike the supervisors described by Simpson and Matsuda (2008) and Thein and Beach (2010), the participants' supervisors provided few opportunities for their students to participate in their discipline's scholarly practices other than those associated with their routine doctoral work. Furthermore, it was rare for supervisors to provide opportunities for the participants to observe them engaging in routine academic practices such as reading articles, drafting or revising articles, reviewing others' texts or preparing or giving presentations. Instead, the participants were expected to learn about those practices from what their supervisors said about them. Consequently, when supervisors lacked skill in articulating their expertise, the quality of the participants' apprenticeship was affected. The crucial importance of the supervision relationship in modelling expert practices, shaping candidates' projects and developing their research skills is widely acknowledged by doctoral education researchers (Deuchar, 2008; Grant, 2003; Manathunga, 2005b; McCormack, 2004). However, as Chapters Five, Six and Eight report, the participants did not all have equal access to opportunities to learn about and participate in the practices of their disciplines, and for some, negotiating the supervisory relationship was challenging.

Writing, however, represented an important opportunity for five of the six doctoral researchers to learn about and engage in the practices of their disciplinary communities. Those participants who were completing their thesis by publication (Journey, Emily and Dev) and those whose supervisors encouraged them to publish during the thesis (Mary and Ariunaa) claim to have learned a lot from writing for publication (including the opportunity to co-author papers) under the guidance of their supervisors, and engaging with reviewers' comments on their papers. Like the international graduate students in Dong's (1998) study, most of them received help with their writing only from their supervisor(s) and in this study, none of the participants interacted with peers or other staff about their writing. However, only Journey's supervisor seemed to fully exploit co-authorship as a learning opportunity. As Chapter Five illustrates, Journey's interviews provided considerable evidence of his supervisor modelling expert writing practices, collaboratively negotiating textual revisions and mentoring him in the way that skilled pedagogues recommend (Kamler, 2010; Paré, 2010b; Simpson & Matsuda, 2008; Thein & Beach, 2010). Analysis of the participants' writing-related experiences suggests both that writing is a critical site for doctoral learning and that some of the participants would have benefited from exposure to a broader range of practices, such as those recommended by Paré (2010a, 2010b).

The fact that the participants identified writing as an important site of learning resonates with other studies of doctoral researchers' experiences of writing for publication (Cho, 2004; A. Lee & Kamler, 2008; Y. Li, 2006). These studies suggest that while non-native English speaking researchers experience a number of challenges when they attempt to publish in English, if they have access to the resources and expertise of more experienced members of their discourse community, they are more likely to succeed. Chapter Eight highlights the extent to which the participants' writing experiences were associated with strong emotions, both positive and negative. Kamler (2010) argues that the close connection between text and identity explains why critiquing an individual's text can be interpreted as an attack on the person. It is interesting to note that Jack still had not completed any writing by the end of the data-gathering period (some six months prior to his submission date), possibly reflecting the different expectations of his discipline. There was no evidence from Jack's narrative that any other activity replaced writing as an opportunity for learning when he met with his supervisor.

Although the study did not provide the opportunity to formally analyse the participants' written texts, the researcher's experience of proofreading their abstracts and other short texts suggested that all of them could benefit from focused writing support. Given that the development of academic literacies in a second language occurs incrementally over time (C. E. Chang & Strauss, 2010), doctoral researchers from non-native English-speaking backgrounds should not be expected to develop full competence in the complex academic literacies associated with graduate research during their candidature. Furthermore when their opportunities to learn about the relevant text, genre and social knowledge required for participation in the discourse of graduate research (Paltridge, 2002) are limited, the development of their academic literacies is likely to be delayed. Given this context, it was surprising that none of the supervisors offered participants access to systematic writing support.

The participants' ability to engage with the practices of their respective academic communities appears to have been supported by the different kinds of 'capital' (Bourdieu, 1986) they brought to their studies. While readers may be struck by the lack of fluency evidenced in excerpts from some interview transcripts, in fact linguistic competence is only one kind of 'capital' that doctoral researchers possess. Like the non-native English-speaking doctoral students in Chang and Kanno's US-based study, all six participants in this study 'were able to make use of the cultural capital they possessed in order to claim legitimate membership in their disciplinary communities' (2010, p. 688). Their cultural capital took various forms including English-medium educational backgrounds

(Jack, Dev), prior graduate study abroad (Jack, Journey, Ariunaa), prior (interrupted) doctoral study in China (Mary), prior professional experience (Dev, Emily), university lecturer status (Journey, Ariunaa) and content expertise (Ariunaa's and Journey's projects focused on aspects of the Mongolian and Indonesian contexts respectively). Recognition of the transferability of their cultural capital may have influenced the participants in adopting an instrumental approach to English which saw them access institutional resources when necessary, such as by working with faculty writing experts or copy editors (Journey, Dev).

The participants reported few opportunities to become involved in departmental activities. In fact none of them conveyed the sense of 'belonging to a community of learners' (Pearson, 1999, p. 279) within their departments, but conceived of their work in terms of individual projects supported by their supervisory relationships. While Jack taught part-time in his department (he was the only one to do so), he mentioned this only once, suggesting that he did not view his teaching experience as linked to his research training in any way. Emily, on the other hand, felt she had 'missed out' by not being offered any teaching experience by her department and worried that this might handicap her when she applied for academic positions after graduating. None of the participants belonged to peer networks in their departments although Emily had tried unsuccessfully to establish such a group with other doctoral researchers in her department. The group had not survived because:

people needed a leader and an organiser for the meetings, while me and the other PhD student who could have taken that role preferred that all get involved and take responsibility for it at an equal level. (Emily, Email, August 24, 2011)

Furthermore, none of the participants attended regular seminars in their departments or participated in other departmental activities. Journey occasionally attended cross-disciplinary seminars in his university but commented in his final interview that he would have liked to have had access to more opportunities of this kind:

That's ... what I imagine, a community, a scientific community would look like. You can come and go ... so part of this community is ongoing talks about ... knowledge, and as a person, especially in the research that what I'm doing that is connected with others, then you feel that you are part of this whole thing. (Journey, 6, 1157-1197)

What is clear from Journey's suggestion is that the 'scientific community' he envisaged being part of remained an 'imagined community' (Starfield, 2010) for him even at the end of his doctoral studies. In this respect, the study's findings support those of previous Australian research into international graduate students' attempts to develop a sense of community (Guilfoyle, 2005). The international postgraduates Guilfoyle interviewed acknowledged that they needed to take responsibility for developing networks and were ready for the challenge. However they argued that they lacked the facilities and opportunities to support such networking. Guilfoyle concludes — 'There was a qualitative difference between institutional advertising of gatherings and their accessibility.' (2005, p. 70)

In contrast to the lack of opportunities provided in their departments, participants reported positively on their experiences of attending and presenting at conferences. This is an aspect of doctoral experience which has not received much attention in previous research. Yet for most of the participants, conference participation represented their first crucial opportunity to be recognised as researchers, and therefore signalled an important milestone in their doctoral trajectories. In fact, the participants' interactions with other researchers at conferences may have contributed more to their sense of themselves as members of an academic community than any of their interactions in their departments. This finding resonates with Carlone and Johnson's (2007) study which found that researchers did not always receive the recognition they desired from their 'meaningful scientific others' (p. 1187). Given the benefits participants reported from taking part in conferences, some surprising differences in patterns of attendance were noted. Whereas Emily attended six conferences (five international and one local) in her first two years of candidature, and Journey attended five (four international and one local), Ariunaa, Jack and Dev only attended one, and Mary attended none until her third year. While not all candidates or projects may benefit from early conference participation, conferences represent an important opportunity for doctoral researchers to participate as members of a disciplinary community.

However, apart from attending conferences and writing for publication, other opportunities for participation in the practices of their academic communities such as editing papers for a journal (Hopwood, 2010b; Thomson, Byrom, Robinson, & Russell, 2010), serving on a departmental committee (McAlpine & Amundsen, 2007) or helping organise a conference were not extended to any of the study participants. In a paper which seeks to account for doctoral student attrition in the US context, Golde (1998) proposes three elements which might constitute a good first year doctoral experience — exposure to the 'practice of the life they are being prepared to enter ... opportunities

to observe the lived life of professional practitioners ... and opportunities to interact with graduate students at various stages of the process to learn about graduate student life' (1998, p. 63). While acknowledging the obvious differences that exist between the North American and Australian doctorates, the three broad elements Golde identifies seem equally relevant for doctoral researchers in Australia. It is therefore unfortunate that none of these three elements was salient in the participants' experiences across the period of the study. Most importantly, the participants had few opportunities to *observe* experts modelling academic practices other than at conferences. While departmental seminars might have provided another such opportunity, as discussed in Chapter Two it seems possible that doctoral researchers do not perceive such occasions as an opportunity to learn about the practices of the discipline, but instead view them in content terms. All in all, this suggests that the participants' doctoral environment presented a narrow range of learning opportunities.

Quality of support

The six supervisory relationships reflected in the participants' narratives varied significantly in terms of quality and affordances. The participants' research confidence appeared to be closely linked to the quality of their relationship with their supervisors, as has been observed in other studies of student experiences in higher education (Mahn & John-Steiner, 2002) since:

participation in supportive relationships that offer learners recognition and status
are vital contributors to academic success (Luckett & Luckett, 2009, p. 470)

The 'friction' Jack experienced in his relationship with his supervisor contrasts sharply with Emily's experience of collaborating productively with all three of her supervisors. The other four participants' experiences of supervision can be ranged between these two extremes. The study suggests that the quality of the participants' learning experiences depended heavily on the supervision relationship but also indicated that some supervisors may suffer from a 'significant cultural blind spot regarding enactments of supervisory power...' (Grant, 2008, p. 11). For instance, Mary's experience of co-authoring with her supervisor (as discussed in Chapter 5) suggested that some of her supervisors' practices (using Mandarin during supervision sessions, choosing to "fix" Mary's text rather than collaboratively revise it) actually inhibited her learning. Since supervisory relationships are inherently unequal, some researchers argue that 'the issue of student agency is paramount' (C. E. Chang & Strauss, 2010). However the participants' narratives suggest that agency

is only one of several variables which influence the complex dynamics at work in the supervision relationship.

On occasion, participants appeared to lack administrative guidance and support. For instance, Dev expressed anxiety and confusion during the final interview about his ability to extend his scholarship, indicating that he was unsure who he should consult to clarify the situation. Similarly, Ariunaa asked the researcher for advice about where she might obtain support for transcription and access to editing and writing assistance. While ready to share her resources and experience, the researcher was careful always to advise participants to seek their supervisors' advice since practices vary in different departments, disciplines and universities. Dev's and Ariunaa's questions signal confusion regarding where administrative responsibility for such issues resided in their respective departments.

Research into the significance of disciplinary differences (Becher, 1994; Zhao, Golde, & McCormick, 2007) might lead the reader to expect greater support for participants enrolled in the Science faculty. However this was not the case. Despite working in a lab, Mary had limited access to a group research culture since she was the only doctoral researcher working on her project. In fact, Mary reported that her supervisor seemed to discourage collaboration:

M: I kind of think it's a bit strange that we don't collaborate

R: But is that your decision or do you prefer it that way?

M: Not my decision because when I come here, others don't have no collaboration with each other and my supervisor didn't ask we to collaborate each other and I didn't bother to ask and I just —

R: — sort of followed that pattern?

M: Yeah, yeah (Mary, 3, 419-429).

Likewise Ariunaa, who was researching contemporary developments in Mongolia, saw limited possibilities for collaborating with other researchers in her department. Nor was there any evidence in these or the other participants' narratives of important identity- and community-fostering departmental practices such as:

... heavy emphasis on developing a strong connection among students, advisors, and research groups ... Students are given office space with their group and are listed in departmental directories by advisor name. The message is clear: The connection between the student and advisor is a critical one and should be made early. (Chris M Golde, 2005, p. 678)

Instead, Jack complains of having to work 'solo' on his PhD, Dev regrets not belonging to a cohort of doctoral candidates and Journey expresses disappointment at being unable to develop relationships with colleagues in other departments on campus. Emily, for her part, complains of having neither office space nor dedicated computer access when she first arrives. She contrasts her university experiences in Australia, where she observes her colleagues' reluctance to socialise or even eat lunch together with her time spent abroad at one of the other research sites, where she was immediately integrated into the team — 'I don't know if I told you that but it was another welcoming atmosphere. They told me when I arrived there was already my name on the door, and then you have lunch, everyone together has lunch' (Emily, 3, 358-360). However two years of candidature in Australia taught Emily to adapt to the local ways:

I'm now very happy to eat in my office ... I adapted to that and it's totally fine ... and I've also made my friends out of uni ... I have my network so I don't need any more this social relationship here. However I do feel bad when there's new people coming in because I know they must feel like I was feeling, and then I don't know how to react because I took the um the pattern that was there. (Emily, 7, 2001-2029)

In fact, the participants' narratives suggest that most had little contact with academics other than their supervisors and therefore derived little support from beyond their supervisory team. More than a decade ago, Pearson noted that despite the introduction of a number of *institution-level* initiatives to improve doctoral students' experiences:

there has been less attention to the *role of departments* [emphasis added] in ensuring that all students have a quality PhD experience (Mullins & Kiley, 1998) ... However, as established in Cullen et al (1994) and Pearson (1996), for students their lived experiences will depend on interaction with many others in addition to their supervisor, and thus on how the components of their programme are enacted in a specific local site ... (1999, p. 279)

The study suggests that more attention needs to be paid to the department's role in supporting its doctoral researchers since none of the participants reported deriving any obvious support either from departmental structures or peer networks. International doctoral researchers may experience particular pressures during their studies (see for example, Ingleton & Cadman, 2002; Trahar, 2011) and therefore benefit from being able to share their experiences, fears and difficulties with others as Ingleton and Cadman's study reports. These findings underline the importance of community for doctoral researchers who are far from home and operating with reduced personal support networks. The evidence from this study suggests that, in some university departments at least, work still remains to be done in establishing a welcoming and supportive environment for doctoral researchers.

As previous studies have shown, doctoral researchers are often reluctant to express their insecurities to their supervisors (Manathunga, 2005b). Therefore if they lack a wider network of peers and other academics with whom to discuss such matters, they are likely to look to family and friends for support. For international researchers whose local networks are likely to be limited, this can be especially problematic. As Chapter Seven demonstrated, the fact that Ariunaa had no departmental colleagues with whom to compare notes added to her anxiety about her slow progress and weak English language skills. For participants unaccompanied by family members, the situation may be even more difficult. Dev's increasingly frequent (email and phone) contact with the researcher as the study progressed may have indicated that he lacked other sources of support. Hockey suggests that, where it exists, a research student subculture can furnish significant support for doctoral students but comments that in his study — '[c]ertain departments were devoid of this facility, as a critical mass of research students was absent' (1994, p. 185). While Jack, Journey and Ariunaa all indicated that their departments lacked a 'critical mass' of students in their respective areas, this is not adequate justification for ignoring international doctoral researchers' need for social and academic contact.

An equally troubling feature of the participants' doctoral experiences was their lack of contact with local students. The social isolation of international students in Australian universities is well documented (Owens & Loomes, 2010; Sawir, et al., 2008; Singh & Cui, 2011; Summers & Volet, 2008). If one of the goals of Australian higher education policy is to internationalise its offerings and institutions, work needs to be done to make university campuses and communities more welcoming to students from abroad. Cadman argues that Australian universities need to be:

proactive in creating transcultural spaces for the *exchange*, for the reshaping, of knowledges, in our own heads no less than in university degree programmes. Further exploration of the reflective experiences of international postgraduates may offer us opportunities to avoid losing international scholars' voices 'into the air', and to develop new critical appreciation of the variety of knowledges in the world. (2000, p. 488)

The international doctoral researchers in this study were both surprised and disappointed at having so little contact with local students. From the perspective of the university, its staff and local students, failure to welcome and integrate international students represents a neglected opportunity:

Through our mutual interactions, we can acquire new perspectives on our societies, learn about other nations and cultures, acquire intercultural communication skills, gain a more global understanding of the knowledge being produced, and more effectively prepare ourselves for future careers with multicultural and international dimensions. (Hanassab, 2006, p. 170)

While there is considerable evidence that this problem is not peculiar to Australian university campuses, with similar findings reported in studies conducted in Canada (Guo & Chase, 2011; Morita, 2004), Ireland (Sheridan, 2011), the USA (Hanassab, 2006; H. Li, Fox, & Almarza, 2007) and the United Kingdom (Trahar, 2011; Trahar & Hyland, 2011), strategies devised to address the issue here need to take account of Australian conditions and circumstances. There is now considerable evidence that simply forcing international and local students into cross-cultural encounters is unlikely to succeed (Leask & Carroll, 2011). These researchers' emphasis on the need for 'strategic and informed intervention to improve inclusion and engagement' (2011, p. 647) highlights an obvious gap in the policies of the institution where the study participants were enrolled.

However, previous studies have cautioned against drawing simplistic conclusions from the observation that international students tend to mix more with students from a similar cultural or linguistic background than with local students. For instance, Myles and Cheng (2003) found that a number of international students in their Canadian study retained 'outsider status' despite finding the locals friendly because they did not enjoy the kinds of activities in which local students typically engaged (such as drinking and attending barbecues).

While it is clear that Journey and Ariunaa had limited free time to participate in additional activities or socialise with other students (whether local or international) due to their family responsibilities (see also Owens & Loomes, 2010), none of the remaining participants included Australian students in their peer networks either. Mary's response to a question from the researcher in the final interview points to one possible explanation:

R And what about the fact that you ended up not meeting many Australian students or Australians? Do you feel disappointed about that? Do you think [name of university] should have done something more, or is that just kind of irrelevant?

M Oh, yeah, yeah, I think yeah, it's not quite international [laughs], just like ah ... if you got um Australian students to know – but there's an Australian girl in my office but ... the problem is that I don't have much chance to meet her, maybe it's because of ... we are also research people, most people don't like to – not very open, myself I'm not quite open, I don't know you I won't talk too much, yeah, if we get to know each other, then we'll maybe we'll start talking with each other.

R But do you think the university has a responsibility to try and create some sort of social connections?

M Yeah, yeah, ... I think the university didn't try ... to do anything, I didn't see any ... effort of doing this, so I think maybe ... this university can do more on this aspect .. (Mary, 5, 1245-1270)

International students like Emily and Mary who are accompanied by their spouses may be less likely to seek contact with locals. However, neither Jack nor Dev (the two single participants) reported any Australians amongst their social networks either.

A number of other explanations have been advanced to explain the lack of contact between Australian and international students, relating both to the local students and to those who arrive from abroad. First, Australians are considered to be highly individualistic and maintain a strong sense of privacy (Hofstede, 2009). It is also claimed that Australian students are comparatively uninterested and/or inexperienced in matters related to overseas study and study of second

languages (Owens & Loomes, 2010), which may make them reluctant to interact with international colleagues. Kenway and Bullen suggest that local students may view international students studying in Australia as 'studious and uninterested in social interaction ... [which can be] seen as a way of closing off the cultural conversation' (2003, p. 13). It is also true that Australian doctoral candidates begin their studies with pre-established networks of family and friends and are more likely to be part-time (Pearson, et al., 2008); both characteristics may discourage them from interacting with international colleagues.

International students, on the other hand, may tend to socialise with other international students as a 'pragmatic, practical survival strategy' (Kenway & Bullen, 2003, p. 16) which affirms their identity and provides a sense of community. Some international students may have less time for socialising due to the demands of studying in another language, the importance they attach to academic achievement and the obligation they feel towards those who have provided financial support (Ingleton & Cadman, 2002; Kenway & Bullen, 2003). Other potential explanations include differences in cultural knowledge (and curiosity) concerning aspects of popular Australian culture such as sporting codes and social practices surrounding alcohol, particularly for Muslim students (Novera, 2004). Links have also been drawn between the social isolation of international students in Australia and concerns about their safety following a number of violent attacks on Indian students in Victoria and New South Wales (Marginson, et al., 2010; Quiddington, 2009). When all these potential factors are taken into consideration, it seems unrealistic to expect contact between international and local students to occur without 'strategic and informed intervention to improve inclusion and engagement' (Leask & Carroll, 2011, p. 647).

Whatever the explanation, this aspect of the participants' experience is regrettable both from the perspective of the international students who have missed out on developing networks with locals and also from that of the institution. Doherty and Singh (2007) argue that institutions often display 'constrained' understandings of their international students which:

... do not take into account the motivations, transnational identities and resources these students bring to the Western university, and how these resources may be exploited to construct less parochial, more global or internationalized educational spaces. (p. 130)

Given the efforts Australian universities invest in recruiting international candidates, the present study highlights the need to invest similar effort in genuinely welcoming international scholars into their institutions and engaging with them.

The study also provided tentative evidence for the impact of race on the quality of support provided to two of the participants. Emily believed that she had experienced certain advantages over other international doctoral researchers on account of the colour of her skin:

E No, no, I do think that the fact that I am white um helps me a lot compared to others. That's the first thing. Everywhere I go –

R Interesting that you you're aware of that.

E Yeah, I I think I have more advantages than others. If I'm an international student, I don't think I am. (Emily, 5, 439-445)

Two points are interesting here. Firstly Emily has observed a difference between the way she is treated and other international students are treated. When the researcher followed up on this theme in Emily's sixth interview, she explained that she felt that because her appearance (being white) and her accent were less 'marked' than those of other international students, it was easier for her to mix with others without being immediately identified as an outsider. Clearly, Emily's whiteness is one aspect of the 'cultural capital' (Bourdieu, 1986) which she brings to the task of doctoral study. The second point is that Emily does not think of herself as an international student, suggesting perhaps that she wishes to disassociate herself from the negative connotations associated with this term. In contrast, Dev, who has been using English for many more years than Emily, was unable to use his linguistic capital to leverage himself into a more powerful position with the clinical staff with whom he interacted. Instead, he was the victim of potentially racist and patronising comments which suggested that the ethical research standards observed in Australia would not apply in his country, India.

The narratives also suggest that the university provided little systematic support for the development of participants' English language skills. Although all the participants (except Mary, whose principal supervisor and laboratory peers were from China and whose departmental administrative staff also spoke Chinese) used English in their everyday interactions on campus, these did not generate a significant amount of communicative practice. Consequently, Journey's,

Ariunaa's and Mary's oral English did not appear to develop significantly over the two years that the researcher conducted interviews with them. This was doubtless due to the fact that in all three cases they (naturally) spoke their own language at home with their families and interacted with few other students on campus. Two and a half years after arriving in Australia, Mary explained:

Yeah, I feel more comfortable when I do the presentation because I know the English words but I don't feel comfortable when I speak every day the normal
(Mary, 4, 1494-1496)

Emily's situation was different in that she and her husband did not share a first language so they used English as their 'lingua franca'. As long-time users of English, Jack and Dev were perfectly comfortable communicating in English in both everyday and academic settings, although as neither had begun producing much writing by the end of the data-gathering period, it is difficult to comment on their written language performance. Most non-native English speaking doctoral researchers would expect their English language competence to develop as a consequence of completing their PhD in an English-speaking country. Both Journey and Mary expressed disappointment that this had not occurred. However the fact that newcomers' opportunities for socialisation in the host language are often very limited has been demonstrated in previous studies (Norton, 2000). Duff (2007a) cites a Canadian study by Ranta (2004) which found that Chinese international students reported having only ten minutes per day of exposure to conversation in English outside of their classes. Opportunities for some of the doctoral researchers in this study to use their conversational English were similarly limited.

Postcolonial theorists like Pratt (1992) suggest that it may be unrealistic to expect the contemporary university to offer an experience of community. She argues that since the contemporary university is anything but homogeneous, the notion of the 'contact zone' may better represent the interactional spaces (such as supervision) where 'disparate cultures meet, clash and grapple with each other, often in highly asymmetrical relations of domination and subordination' (1992, p. 4). The study indicates that the participants experienced a range of encounters in their lives as doctoral researchers, sometimes confusing (the 'invisibility' of Australian peers), sometimes bruising (Dev and the administrator, Jack and his supervisor). Bullen and Kenway argue for 'reconceptualising the globalising university as a new intercultural space ... by envisioning ... the global university "contact zone"' (2003, p. 46) as a place where differences are negotiated and

influences exchanged. Such a vision demands that the university also change and accommodate difference, rather than assuming that newcomers will unquestioningly adopt its practices.

Summary

Many of the experiences and challenges reported by the participants were repeated in the stories of other doctoral candidates (international and local) in the researcher's network. Challenges such as negotiating the politics of sequencing supervisors' names on a co-authored paper (Emily), needing to request supervisor support with finalising revisions on a co-authored paper due to the sudden death of a family member (Journey), dealing with the frustration caused by delays in processing a supplementary Ethics application (Dev), learning to write acceptable academic English without benefiting from any explicit modelling or instruction (Mary), drafting a grant application without access to either models or explanation of the criteria on which it would be judged (Ariunaa), and adjusting to a hands-off, abrasive supervision style (Jack) can easily be identified in the trajectories of other doctoral candidates within the researcher's personal network. Clearly, many of the challenges faced by the study participants are common to all doctoral researchers.

However, by virtue of being newcomers to the country and university, international doctoral candidates have fewer support systems than local students. This is reason enough for institutions to enhance the support they provide for their international candidates. Furthermore, some international doctoral researchers may take longer to develop confidence with the academic literacies implicated in doctoral study than some of their local counterparts, although this is by no means always true (Duff, 2007a). For instance, while Ariunaa had achieved the level of English language proficiency required for admission to her course of study, it is to be expected that acquiring the 'textual knowledge, genre knowledge and social knowledge (Bhatia, 1999) required' (Paltridge, 2002, p. 137) to produce a doctoral thesis in English would demand considerably more time and effort. Yet despite the evidence of her weak oral English skills, Ariunaa's supervisors offered no additional language support until Ariunaa sought assistance with her writing at the start of her third year.

Identifying commonalities in the doctoral experiences of the study participants and those of other doctoral researchers in Australia resonates with the findings of an Australian national survey of doctoral students which claimed that 'in many ways being 'international' or 'domestic' makes little difference to the experience of being a doctoral candidate' (Pearson, et al., 2008). Rather than revealing that the international participants followed a distinct "international doctoral student

trajectory”, the study conducted by Pearson and her colleagues identified significant differences amongst their experiences, reinforcing the claim that the doctoral researcher population in Australia is increasingly diverse (Pearson, et al., 2011). Universities should therefore resist the stereotypes which assume that all international doctoral students will encounter problems simply because they are international doctoral students (Y.-J. Chang & Kanno, 2010) and instead genuinely seek to engage and support each doctoral candidate who enrolls in their institution.

Evaluation of the study

This section of the chapter is divided into four parts. The first two parts consider the study’s strengths in terms of research design and methodology. The third section evaluates the contribution of each of the different analytical tools applied to the data. The final part considers the study’s limitations.

Contribution of research design

By adopting a longitudinal narrative design, this study provided access to the perspectives of central participants in doctoral learning whose voices are seldom heard. The need for research studies grounded in students’ experiences and standpoints has been identified by a number of researchers in doctoral education (Bullen & Kenway, 2003; Ingleton & Cadman, 2002; Jazvac-Martek, et al., 2011; Kenway & Bullen, 2003; Leonard & Becker, 2009; Pearson, et al., 2008).

The longitudinal dimension enabled the researcher to develop trusting reciprocal relationships with the participants over the period of the study with two important consequences. First, it enabled the creation of a rapport between researcher and participants which encouraged them to express their views frankly and in depth. Second, as indicated in Chapter Three (2.3.4), shifting narrator perspectives are a feature of narrative. Accordingly, the longitudinal design made it possible to document important shifts in participants’ perspectives over time. For instance, in her first interview, Mary spoke critically about having ‘wasted’ three years being enrolled in a PhD programme in China (prior to coming to Australia). In China, Mary felt that she was providing her supervisor with ‘cheap labour’ by completing research proposals and other tasks for him without making progress towards her own graduation. One year later, however, she reflected very differently on her time as a PhD student in China, saying:

M At the first I think the period in China is a waste of time but now I
 appreciate that experience cause um even if you make mistakes and you

know that's not what you want, but still that that experience is very helpful

–

R How has it helped you?

M The presentation I did there and the ... slides I prepared for my supervisor and the ... ways he told me how to how to apply for project is very useful for ... my PhD project now. It's, I think the theory is the same, yeah and ah also I think my previous supervisor is a very successful man in China so and ... I think he is ... successful for some reason because he is a real socialisable man –

R Ah

M - and I think his character is very helpful for me so I know how to deal with people, how to get along with people –

R Isn't that interesting because I didn't get that impression of him when you talked the first time. I got the impression that he – excuse me for being very blunt –

M Yeah

R - but that he sort of *used* you. I didn't get the impression that he was a sociable and very pleasant person. I thought he was more like a boss?

M Yeah, he's like a boss but ... first I still learned things and second is that, personally he is really a nice man ...

R Ahh

M — and I think his character is very helpful for me so I know how to deal with people, how to get along with people (Mary, 4, 786-805)

With the benefit of hindsight, Mary recognised that she had learned a great deal during the three years that she was a PhD student in China. The 'one shot interview' (Riessman, 2008) would have

misrepresented Mary's perspective on that important experience. This instance of a participant significantly altering her perspective on an earlier experience is not an isolated example in the study narratives. The value of extended studies of this kind is confirmed by a recent review of unpublished research on the experiences of international students in higher education in the United Kingdom (Leonard, et al., 2003) which explicitly called for more longitudinal investigations of students' experiences.

The temporal dimension is of central importance in narrative since 'we are constantly having to revise the plot as new events are added to our lives' (Polkinghorne, 1998, p. 150). The participants' narratives provided multiple instances of this phenomenon. For example, although the first two years of Ariunaa's PhD studies were dominated by her anxiety about her son's health, everything changed in early 2011 when her son was prescribed medication which controlled his seizures, enabling her to focus more time and energy on her doctoral project. Changes in participants' identities can also be observed in their narratives, although these changes are more nuanced and subtle. For instance, after explaining that she had recently begun co-supervising a Masters student, Emily remarked — 'I have a bit less of this feeling of being only a student' (Emily, 4, 592-593). As she had been in successful professional practice for several years before coming to Australia, Emily did not enjoy being treated as 'only a student', so this 'intertextual' remark contributes to a conversation thread which was present in several of her interviews.

Contribution of narrative methodology

Narrative studies foreground those stories which the participants wish to tell. The narratives in this study tell complex stories of the tensions and pleasures the six doctoral researchers experienced during two years of doctoral work. Narrative also reflects the influence of the individual to whom the story is being told. On numerous occasions, the transcripts indicate that while the participants were happy to report certain events or reactions to the researcher, they were unwilling to share this information with others, especially not with their supervisors. Their openness with the researcher contrasts with their reticence with the supervisor on account of the dynamics of power that operate in supervision relationships.

Another affordance of narrative methodology in this study was the way it provided access to participants' emotions, as illustrated in Chapter Eight. On several occasions in the study, narrative created the circumstances in which the act of reflecting on past experiences prompted participants to re-live the associated emotions. For instance, during her third interview Ariunaa explained that

anxiety about her son's health was preventing her from concentrating fully on her project. She then recounted a traumatic story of having accompanied her son to hospital by ambulance one night after he suffered a severe seizure. In her rush to leave the house, Ariunaa forgot her wallet and mobile phone, so was unable to contact her husband or buy food to eat for the three days they remained in hospital. When her son was discharged, Ariunaa waited until the husband of another patient arrived to visit so she could ask to be driven home. As she told this story, Ariunaa broke down sobbing (as did the researcher). Clearly, Ariunaa was not just *referring* to a past experience; she was reliving it.

Contribution of analytical tools

This section briefly considers the way in which each of the analytical tools adopted in analysing the data contributed to the study.

Community of practice

As others have pointed out (Barton & Tusting, 2005; Gourlay, 2009; Haneda, 2006; M. R. Lea, 2005), Wenger's (1998) community of practice (COP) framework presents a somewhat benign view of the relations operating between 'oldtimers' and 'newcomers'. As Jack's narrative has shown, negotiating participation in an established COP is inherently 'conflictive' (Block, 2007, p. 27) and depends greatly on the disposition of those with whom newcomers interact. Perhaps Pratt's (1992) notion of the 'contact zone' with its connotations of struggle and contestation captures more appropriately the bruising nature of many of Jack's encounters with his supervisor than that of the gradual apprenticeship of the COP. A second objection to the COP framework is its positioning of all 'newcomers' as novices without acknowledging the different expertise they bring with them. Jack's supervisor's apparent failure to recognise his previous experience may explain some of the initial 'friction' between them. Third, the COP framework focuses attention exclusively on newcomers' efforts at becoming expert participants in the COP, while ignoring other goals they may be pursuing (such as contributing to national development and ensuring the family's economic security, in Ariunaa's case).

However, by conceptualising learning as participation in the practices of an expert community, the COP framework provides an excellent metaphor for the process of doctoral learning. As Chapters 5 and 6 demonstrate, the doctoral pedagogy the participants encountered consisted of their supervisors encouraging them to adopt various academic practices and then providing feedback on their performance. The COP framework highlights the essentially social and situated nature of doctoral learning, and focuses attention on the shared practices at the heart of community

members' activities. Those shared practices can be considered the curriculum of doctoral education and the modelling, scaffolding and feedback practices of expert community members represent the learning mechanisms. The COP perspective also demonstrates how participants' experiences of participating in the community's practices —when they give papers at conferences or produce research articles for publication — help form their identities as members of the academic community. Overall, as Lea (2005) suggested, the COP framework is more useful as a heuristic for interrogating practices in higher education than as a model to emulate.

Academic literacies

The academic literacies research perspective proved less useful in analysing the data gathered for this study than the other frameworks. This is due in part to the fact that the researcher did not seek to analyse exemplars of the participants' written texts and therefore was able to access participants' experiences of academic literacies only indirectly.

It seems possible that Mary's and Journey's lack of opportunities to develop their oral competence in English may have inhibited the development of their academic writing competence. Given that 'effective critical oracy precedes critical literacy' (Cadman, 1994, p. 7), Mary's supervisor's decision to communicate with her only in Mandarin effectively deprived Mary of the opportunity to rehearse her ideas orally (in English) first before attempting to express them in writing. Interestingly, Mary's husband was a PhD candidate at another university in Sydney who also had a Chinese supervisor. Mary reported that her husband's supervisor (who was very 'strict') always spoke to his students in English regardless of where they came from. Mary believed that her supervisor's preference for speaking Chinese was related to her (the supervisor's) weak oral English skills. Transcripts of Journey's interviews also provide evidence of little increase in fluency over the period of the study, although his hesitant, reflective style of speaking English may reflect his communication style in his first language. Nevertheless, Journey spent little time actually speaking in English and this may have impacted on the development of his written academic literacy. When asked in the final interview to reflect on any changes in his ability to write in English over the three and a half years, Journey responds:

J I would say that maybe the problem with me here is that I do not really use
my – especially conversational English very much and that's why –

R Oh?

J - when you - when you read things, words, vocabularies come but then when you -

R It's passive

J Yeah, yeah so it goes - disappears somewhere and then sometimes "Oh, what should I use?" and yeah, things like that, so it's still a struggle for me (Journey, 6, 788-799)

Given the diverse doctoral student population in Australia today, institutions may need to pay more explicit attention to their candidates' linguistic environment and opportunities.

The study also provides some evidence of what Starke-Meyerring refers to as 'the paradox of doctoral writing' (2011, p. 76) — the fact that the underlying conventions and practices of academic literacy are at the same time deeply familiar and normalised for 'oldtimers' and thoroughly new for doctoral students. This paradox may explain the small number of supervisor writing pedagogies reported by the participants, and supervisors' apparent lack of metalanguage with which to discuss writing. When supervisors lack skill at articulating their deeply embedded knowledge of disciplinary discourse (Paré, 2011) or fail to see the need to, their students may experience difficulty acquiring knowledge of those practices and opportunities to engage with them.

Despite the attention paid to identity in much of the research on multiliterate writers, none of the participants referred to this aspect of their academic literacy development or of their struggles with adopting an authoritative stance in their writing. Journey once mentioned different written genres within his discipline and expressed interest in experimenting with a narrative style:

J Ah, we have not developed well as I think specially myself to know yeah the genres of writing. I'm ah considering to yeah try to develop papers in yeah more I think yeah ... more story-like -

R More narrative. Yeah.

J Yeah ... more narrative way of writing but yeah that's a problem of I think first the tradition in certain fields and second one -

- R Certain journals too though. Certain journals might be more accepting.
- J Yeah also with myself, what the narrative writing actually is and how do I formulate my papers into a writing narrative writing style.
- R That's very interesting. I think case study is a kind of a methodology that is quite sympathetic to that way of writing.
- J Yeah I am I am still yeah struggling with this and finding ways to to represent myself into that kind of writing and yeah – (Journey, 3, Lines 1034-1056)

But there was no indication that his supervisors had eased his 'struggle' to find a way of formulating his ideas in a different style. As Chapters Five and Six indicate, most of the participants lacked opportunities to see academic literacies modelled and were exposed to a limited number of pedagogical strategies for developing their academic literacies. One of the most glaring omissions from the repertoire of practices which the participants were exposed to was the opportunity to read and comment on others' texts. Despite the intense emotions which often accompany this practice, previous studies have indicated that much can be learned from giving and receiving critiques of writing (Caffarella & Barnett, 2000). Not surprisingly, since giving feedback on others' writing was not modelled for them, none of the participants sought opportunities to read (and potentially learn from) their peers' draft texts. One important implication of the participants' limited exposure to strategies for developing academic literacies is that, like Ariunaa, they may need to assume responsibility for seeking writing models, feedback and guidance from alternative sources.

Activity theory

Activity theory's principal contribution to the study was that it integrated in one theoretical framework the different elements that influenced the participants' doctoral learning experiences. This enabled relationships to be identified between elements in the different activity systems and impacts on the participants' learning experiences. For instance, rather than viewing Ariunaa's son's ill health as a personal problem unconnected to her doctoral learning, activity theory theorised her roles as mother and doctoral researcher as creating tensions which interfered with her learning. Had the 'community' of Ariunaa's departmental activity system projected a more 'family-friendly' set of values, she might have experienced less stress and not felt obliged to conceal the extent of her anxiety and family responsibilities from her supervisors. Instead of viewing the role contradictions

she experienced as evidence of a need for the system to be adjusted (Engeström, 2001), Ariunaa internalised them. Lynch argues:

A care-less academic culture sends out a strong message ... to graduate students and postdoctoral scholars as to who is and is not an appropriate candidate for academic life. Women and men who cannot work unpaid hours are likely to be severely disadvantaged within the academy. (2010, p. 58)

Activity theory also helped identify the dual functions of emotions as drivers of the learning process and outcomes of it (Pekrun, et al., 2002). The motivation that prompted Dev to approach the clinical facility early to recruit participants for his study (*object*) was replaced with feelings of humiliation and anger when his efforts at complying with their ethical consent procedures (*rules*) were thwarted. Had Dev's supervisors appreciated the strength of his discouragement at this setback, perhaps they would have intervened sooner and prevented months of unnecessary delay to his project.

Finally, activity theory highlights the complex ways in which emotions, motivation and cognition interact in intellectual work (Eynde & Turner, 2006). Although it is difficult to isolate stretches of discourse which unambiguously link particular emotions with specific achievements, Emily's description of herself as being in 'an emotional state' (Emily, 3, 607) while writing her first journal article captures something of this complexity (see Chapter Eight). In explaining her feelings Emily expresses a desire to emulate the behaviours and achievements of role models around her so that she can be accepted as a member of her disciplinary research community. A focus on emotion illuminates this language of desire, ambition and identification.

Scholarly identity development

Although the theme of scholarly identity development has not yet been fully explored in the form of a Research Text, clearly it is central to doctoral researchers' trajectories. A number of themes identified in the Phase One survey and focus group discussion (discussed in Chapter Four) foreshadowed issues which impacted on the six central participants' efforts to construct a scholarly identity for themselves. Whereas the survey revealed that the respondents were multilingual, multiliterate and culturally sophisticated, a number of the focus group participants complained that the way the university positioned them was disempowering and unwelcoming. For instance, Rajiv's surprise at the university's 'outsourcing' of visa applications was compounded by his disappointment at being met at the airport not by a representative of the university but by an agent

whose only relationship to the institution was commercial. For individuals from cultural backgrounds which regard relationships as of paramount importance, such a casual approach to welcoming newcomers is likely to be perceived as offputting and may inhibit their ability to see themselves as members of the university community.

At the departmental level too, some focus group participants experienced difficulties establishing relationships with their colleagues and navigating their responsibilities. The bureaucratic difficulties Andreas experienced as he struggled to prepare his project budget were exacerbated by his lack of access to more experienced researchers who could share resources and expertise with him. Rajiv rationalised his department's failure to welcome him appropriately by arguing that people were busy and since new doctoral researchers joined the department at different times, it was impossible for every newcomer to be welcomed individually. Whatever the challenges associated with creating a welcoming departmental environment, the informal contact which new researchers have when they interact with their more experienced colleagues represents an integral component of their formation as researchers and scholars.

The third issue discussed in Chapter Four was the awkwardness a number of the participants experienced in relating to their supervisors, either because of different expectations concerning the nature of the relationship (Brigitte) or ambivalence about how to communicate with the supervisor (Songsak, Marie). While the particular issues which doctoral candidates encounter in their relationships with their supervisors will vary, negotiating a mutually respectful, comfortable relationship with the supervisor is essential for all doctoral researchers (Deuchar, 2008). Since the supervision relationship has the potential to offer the richest learning opportunities, candidates need to feel comfortable about asking questions, seeking advice and engaging with their supervisors' feedback. Effective doctoral learning is therefore predicated on a functional supervision relationship.

The final issue identified in the first phase of the study which impacted on participants' sense of themselves as members of the local academic community was the difficulty some reported in making contact with Australian students. Helen, a North American student, reported that although she sometimes socialised with Australian students, she did not find it easy to establish friendships with them. Her comment anticipates the experience of the study's six central participants, none of whom included any Australians in their friendship networks. As discussed in Chapter Seven, researchers have proposed a number of reasons for the apparent reluctance of Australian and

international students to socialise (Sawir, Marginson, Deumert, Nyland & Ramia, 2008; Weiss & Ford, 2011). However the study provided no evidence of the participants' departments recognising this challenge or attempting to counteract the tendency.

All four issues identified by the focus group participants also impacted on the scholarly identity trajectories of the study's six central participants. A range of different stakeholders, interactions and events contributed to (or disrupted) the participants' sense of themselves as researchers at different times, with interview transcripts providing clear evidence of fluctuating levels of confidence. Mahn and John-Steiner (2002) argue that good teachers impart the gift of confidence to their learners. While confidence emerges from a number of sources during the doctoral journey, interesting differences can be observed in the extent to which the participants' supervisors imparted the gift of confidence.

Jack's relationship with his supervisor afforded few instances of positive feedback or acknowledgement and several where he openly undermined Jack's confidence. In fact the only positive scholarly experiences Jack reports are his interactions with other researchers at an international conference. Not only does Jack never mention the words 'confident' or 'confidence' in five hour-long interviews, he describes his doctoral work in terms of 'endurance' and completion (see Chapter 8). While his research confidence may be as robust as that of the other participants by the time his degree is conferred, his narrative provides no evidence that he views himself as a researcher or a scholar. Rather, he compares his doctoral experience to a rite of initiation — something painful and secret. While initiations also involve identity change, it is interesting that Jack refers only to the more negative aspects of the comparison:

It's a painful experience ... but of course no-one will ever tell you about it ... a lot of PhD students hide the difficult part ... and I mean most of them actually never discuss it openly ... ok they might show that they are pissed off about it, but that's normal ... but they still come to the office ... so it's not that they just walk away completely. But it's because they are thinking of the end result what they'll have gained when they finish [Jack, 5, 660-696]

It is tempting to interpret these words as describing Jack's own approach to the PhD and to conclude that he conceptualises the doctoral learning process not in terms of a journey towards becoming a scholar, but rather in terms of the qualification obtained at the end of the process.

Ariunaa's supervision experiences appear to be more positive than Jack's in that when she compares herself unfavourably with some of her peers, her supervisors remind her of the progress she has made since enrolling and encourage her to focus on her goals. Nevertheless her interviews are peppered with expressions of anxiety about her weak English language skills, her (perceived) slow progress and the interruptions to her scholarly life which her responsibilities as wife and mother provoke. However Ariunaa is significantly more advanced than Jack in her trajectory of academic identity for she has worked as an academic in Mongolia for several years prior to coming to Australia. Furthermore her research confidence received a major boost when, 18 months after enrolling, her first article was accepted for publication in an international journal. This provided her with valuable (external) evidence that she is worthy of membership in the international community of scholars.

Dev's supervision experiences both boost and disrupt his research confidence. While his principal supervisor is unfailingly supportive and encouraging, his third (adjunct) supervisor (added to the team a year after Dev enrolled) is often tactless and discouraging in the feedback he provides, making comments such as — 'I expected more from you' — after reading a draft conference paper Dev had sent him. However, like the other participants, Dev's sense of himself as a researcher is boosted by some positive experiences outside the university department. For instance, when he decides to enrol in a postgraduate course at another university to boost his technical skills, the Head of Department is extremely welcoming and flexible and expresses interest in Dev's research project. In addition, Vijay receives positive feedback on his project at a number of conferences and research meetings. Perhaps the most salient event in his scholarly identity trajectory, however, is the series of delays he encounters when he seeks to recruit research participants at the clinical facility associated with his university department. The greatest damage done to Dev's research confidence therefore occurred within the research network of his own department.

Mary's research narrative reflects an incremental development in research confidence, based on her developing writing skills, her successful completion of a number of journal articles and her participation in five conferences in her third year of candidature. On the other hand, her principal supervisor's contribution to her growing sense of herself as a researcher and scholar is somewhat ambiguous. While Mary reports that they have a friendly and productive relationship, the supervisor's decision to use their mutual first language during supervision sessions may have delayed the development of Mary's oral academic proficiency in English. Furthermore the supervisor's tendency to appropriate and edit Mary's draft text rather than offering to work

collaboratively on revising it (as discussed in Chapter Five) undermines Mary's confidence in her ability to be able to write independently in English. More than any other narrative, Mary's highlights the way that events and individuals constantly impact positively and negatively on doctoral researchers' fluctuating sense of themselves as researchers and members of the disciplinary community.

Journey's interviews include many references to experiences and interactions which contribute positively to his research confidence. While he enjoys an extremely collaborative and mutually respectful relationship with his principal supervisor, he distinguishes himself from the four participants already discussed by actively initiating contacts with other researchers around the globe in the interests of expanding his research network and obtaining feedback from as many expert scholars as possible. This suggests that Journey already sees himself as a member of his discipline's research community. Indeed, in talking about one of the international scholars to whom he sent a draft paper for feedback, Journey referred to him as his 'peer', explaining that he saw himself as now entering the field that such experts had helped establish. Clearly the fact that he had worked as an academic in Indonesia for some years prior to arriving in Australia contributes to his sense of himself as a researcher. For him the PhD is just one more stage in his ongoing academic research trajectory.

Finally, Emily's narrative of scholarly identity is one of almost consistently positive experiences. She rapidly establishes excellent relationships with all three of her supervisors (the most senior of whom invites her to present his paper for him at a prestigious international conference which he is unable to attend) and her multiple research partners at different research sites around the world. Although she initially feels unwelcome in the university department where she is enrolled, and takes issue with their insistence on positioning her as a student (symbolised by the inclusion of the word 'student' in the institutional email address she refuses to use), she takes maximum advantage of the apparently richer opportunities available to her in the other research sites where her data-gathering occurs. Emily also reports that she is being very well 'taken care of' by the wider research community of her discipline in Australia although, tellingly, she does not believe this is the case with all doctoral candidates. In fact, Emily brings significant 'cultural capital' (Bourdieu, 1986) to her role as doctoral candidate, including the fact that she is phenotypically white, has several years of professional experience as a clinician and comes from a country to which others typically wish to emigrate. All these elements combine to strengthen and reinforce Emily's sense of herself as a researcher, signalled by her increasing confidence and ambition.

In reflecting on the different elements which contribute to the construction of scholarly identity, it is interesting to note that whereas all six participants were acknowledged as researchers when they participated in conferences and Ariunaa, Mary, Emily and Journey felt recognised as scholars when their manuscripts were accepted for publication, some appeared to lack the same recognition within the institutions where they were enrolled.

Limitations

Perhaps the most novel aspect of the research design was the decision to depend on interviews with the six international doctoral researchers as the principal source of data. While including interviews with the participants' supervisors may have resulted in a more comprehensive picture of their experiences, given the sensitivity of some of the issues canvassed, it was felt that this could have made the participants less candid in what they said. The researcher's stance was motivated by the discovery that few studies of international doctoral students' lived experiences existed, as evidenced by frequent calls for such research (Duff, 2007a; Kenway & Bullen, 2003; M. R. Lea, 2005; McAlpine & Amundsen, 2011b; McCormack, 2004; Pearson, 1999). In focusing on the participants' narratives of their experiences the researcher sought to uncover candidate-centred insights into the doctoral experience.

Another potential limitation of the study includes the fact that it reports the perspectives of only six participants. However, given that the researcher's intention was to capture the detailed contours of the participants' lives as doctoral researchers over a two-year period, this number of participants was considered optimal. In practice, the researcher was able to establish trusting, reciprocal relationships with the participants and encourage the sharing of interesting, informative narratives of experience. Furthermore, the six participants reflected important differences in age, cultural and linguistic background, marital status, employment history, discipline, prior experience of international study and thesis type. Their narratives enable reflection on the impact of these different variables on their doctoral learning experiences.

It might also be argued that significant differences in the backgrounds of the study's six participants make it difficult to apply the findings in any meaningful way. This is an important point which concerns the study's goals and the researcher's epistemological standpoint. The researcher's intention was not to generalise from the findings of the study to the learning experiences of all international doctoral researchers. Rather her intention was to offer insights into the practices, opportunities and support which contributed to these individuals' learning experiences and identify

issues which warrant further exploration. The case narratives in Cumming's (2007) doctoral thesis also highlight the variability of different candidates' experiences, prompting him to argue that both the particularity and the complexity of the doctoral experience need to be recognised. The researcher is pleased to have been able to demonstrate the uniqueness of the six participants' trajectories, while also identifying important issues associated with doctoral supervision, pedagogy, policy and programmes which could usefully be explored by institutions, departments, supervisors and students.

A third limitation (and strength) of the study is that, as with all narrative research, events may have been embellished by the participants, facts distorted or individuals misrepresented. However this does not invalidate the study's results. On the contrary, the participants' representations of people, practices and events will, undoubtedly, have been influenced by their intentions and by their interactions with the researcher. By accessing participants' representations of the experiences that constitute their doctoral learning, an opportunity is created to view these practices and structures with different eyes.

Implications of the study

The study raises a number of issues about the experiences of international doctoral researchers which point to the need for change. The implications of these findings are discussed briefly below under the headings of communication, community, structure and chance.

Communication

The narratives provide abundant evidence of the need to improve the quality of communication between doctoral researchers and the researchers who surround them. The study observed that a 'culture of silence' tends to operate within doctoral researcher circles — 'a lot of PhD students hide the difficult part' (Jack, 5, 681). Doctoral candidates are often reluctant to divulge the difficulties they are experiencing (except to family and close friends) because they believe this may reflect badly on them and their abilities (Manathunga, 2005b). The pressure not to acknowledge difficulties may be even greater for international doctoral researchers since they are battling negative stereotypes. One strategy to relieve this tension could be to create a collective voice for international doctoral researchers and a structure within their departments where their views could be heard (McAlpine & Amundsen, 2009). In addition, there might be some scope for creating an 'advocate' for doctoral researchers who could listen non-judgementally to student concerns and provide advice and encouragement, while also communicating (anonymously) candidate concerns

to departmental authorities. Supervisors and institutions need to do more or do things differently if they want to better support their international doctoral researchers' learning.

Second, supervisors need to be able to interact with the doctoral researchers they supervise on more than just an intellectual level. It is no coincidence that the participant whose trajectory was the most successful was the one whose supervisors manifestly cared about her emotional wellbeing as well as the progress of her project. While there is no suggestion that doctoral supervisors should become counsellors, the study reveals that some supervisors exacerbate the stress their students are feeling because of their communication styles or demands.

Community

The study also identified the need for significant efforts to be made to create a sense of community in the departments and faculties where international doctoral researchers enrol. Not only did the six international doctoral researchers lack opportunities to meet and mix with local students, they lacked a sense of collegiality and community in their lives as doctoral researchers. While reasons for the lack of contact between Australian and international students are complex, change needs to occur if Australia is to continue championing itself as a provider of international education.

Structure

One possible response to several of the systemic weaknesses identified in the study would be to introduce more structure into several aspects of the doctoral programme. For instance, Ariunaa believes that she lost at least three months at the start of her PhD trying to work out what she was supposed to be doing. Had her first three months included a structured orientation to the university, department and higher degree research, she might have felt less 'lost'. Interestingly, in his final interview, Dev proposed that the first six months of candidature for new doctoral researchers be termed an induction period where candidates from different departments might follow a structured (part-time) programme which introduced them to research methods, statistics and research software. One of the advantages of this period, he felt, would be that researchers could establish a network with candidates from a range of disciplines, thus creating a nascent sense of community.

The study also provided some evidence for the value of providing structured opportunities for reflection for all doctoral candidates. Both Dev and Emily commented that participating in the study had helped foster their ability to reflect on and learn from their learning experiences. Dev requested copies of the audio files of each of his interviews which he listened to in reflecting on the

progress he had made in his project since the previous meeting. This implies that other doctoral researchers might also benefit from the chance to regularly reflect on their learning in a non-judgemental setting. Perhaps the 'advocate' for doctoral researchers (see above) could also create opportunities for candidates to meet in small groups to share experiences and reflect on their progress.

'Chance' in doctoral success

The final implication of the study is that chance plays an important role in doctoral researchers' success. Jack's having been assigned a 'passive' second supervisor added pressure to a tense relationship between himself and his supervisor; the friction he experienced persuaded him to focus on completing his degree in minimum time and abandon some of his original loftier ambitions (see Chapter Eight). The decision by Ariunaa's son's doctor in January 2011 to prescribe a medication which controlled his seizures transformed her ability to focus on her project from that time on. In a chapter which reviews the literacy-related experiences of a number of international doctoral students, Starfield comments:

Reading the autobiographical accounts and case studies of the multi-literate doctoral students referred to in this chapter, it has struck me how many attribute their ultimate success to chance. The challenge for supervisors and institutions is to reduce this contingency by learning from stories of transition how to better facilitate participation of new students in the doctoral community of scholars.'
(2010, p. 144)

Yet given the 'private space' (Manathunga, 2005a) of doctoral supervision, it is not easy for candidates to alter the arrangements governing their progress or adjust the balance of power. Perhaps university departments need to informally monitor the learning opportunities and support to which their candidates have access.

Summary

This chapter has discussed the study's principal findings in relation to its three research questions and identified limitations experienced by the participants in relation to their learning experiences, opportunities to participate in the practices of their disciplinary communities and the quality of the support they received. It also considered the extent to which these findings have confirmed, extended or disconfirmed the findings of previous studies. It then evaluated the study's research

design and methodology, considered the contribution of the different analytical tools applied to the data and acknowledged a number of limitations. The final section of the chapter identified four implications of the study findings. The next chapter will conclude the thesis by suggesting practical applications of the study's findings and making a number of recommendations for further research.

Conclusion

Introduction

This chapter concludes the thesis by re-examining the study's aims, considering the extent to which they have been achieved, suggesting how the study's findings could be applied and identifying a number of areas for further research. The first section re-asserts the significance of the central issue investigated in the thesis, evaluates the methods adopted to investigate the research questions and briefly acknowledges the study's limitations. The second section considers the significance of the study's findings and recommends ways in which they could be applied to enhance the experiences of doctoral researchers in Australian universities. The third section of the chapter identifies promising directions for future research. The chapter concludes with a personal reflection on the researcher's role in presenting her interpretations of the participants' narratives.

Quality matters

The study is concerned with the nature and quality of the learning experiences of six international doctoral candidates studying in Australia. Currently international students represent 21.5% of all students in tertiary education in Australia; this proportion represents more than three times the OECD average (OECD, 2011) signalling the importance to the Australian economy of international student enrolments. Given the significant economic benefits of the increasing numbers of international students enrolling in Australian university degree programmes (Bullen & Kenway, 2003), the researcher argues that greater attention needs to be paid to the quality of their learning experiences. This study and other research reported in the thesis have attempted to address the paucity of research into international graduate students' experiences in Australian universities (as identified in Chapter One).

The study's conceptual framework (presented and discussed in Chapter Two) is informed by social practice theory (Lave & Wenger, 1991) which views learning as situated activity involving cognition, context and social interaction, and activity theory (Engeström, 1999) which maintains that individuals construct their knowledge by interacting with others and their environment.

Viewed through these lenses, learning is conceptualised as involving the whole person and therefore ‘implies not only a relation to specific activities, but a relation to social communities’ (1991, p. 53). The study also draws on academic literacies research (M. Lea & Street, 2006) in analysing the participants’ experiences with reading and writing texts, and on notions of scholarly identity (Barnett & Di Napoli, 2008b; Thomson & Kamler, 2010) in analysing changes in the way the participants perceive and position themselves over time. Accordingly, the study explored the doctoral researchers’ perspectives on the activities they engage in, the environments in which their learning occurs and the relationships, activities and resources which support their learning. The participants’ perspectives were explored through a narrative inquiry process consisting of multiple individual interviews conducted over a two-year period. The project sought answers to the following research questions:

1. What is the nature and quality of the participants’ doctoral learning experiences?
2. What opportunities do the participants have to engage in the practices of their respective academic communities?
3. What is the nature and quality of support provided to the participants by their supervisors, peers, other academics in their department, the institution and members of their wider disciplinary community?

The first phase of the study canvassed the perspectives of a cross-section of international graduate students by means of an online survey and a focus group. The second (principal) phase of the study began in May 2009 after the six doctoral researcher participants had been recruited and concluded in June 2011 with transcription and analysis of the final interview.

The affordances of narrative

Bruner argues that people make sense of their lives through narrative (1990). Narrative therefore proved a flexible tool for exploring the participants’ understandings of their doctoral experiences. As they shared their experiences and offered their views on issues raised, the participants constructed narratives of their lives as doctoral researchers, in collaboration with the researcher. Successive interviews allowed them to revisit stories and events, add or change details, elaborate on earlier themes, report changes in their circumstances and revise their perspectives on events. Over time, this resulted in the incremental construction of six distinctive narratives of doctoral experience which were drawn on in producing the study’s Research Texts (Chapters 4-8). It is

acknowledged, however, that the dynamic and fluid character of participants' narratives is not easily represented in written research outcomes which inevitably represent as static what are actually fluid and dynamic trajectories. Accordingly, McCormack advises:

Acknowledgement that a story is merely a snapshot in time — the person is not statically and permanently defined by the discourses of the story — needs to be included in such an analysis. (2009b, p. 149)

Contrasting the open-endedness of narrative with the fixed nature of conventional research texts underlines the affordances of narrative as a tool for researching complex intrapersonal themes which develop over time.

Narrative also proved a sensitive means of exploring issues which the participants might have found difficult to report on in other ways. Rather than explicitly naming negative practices in their academic environments or apportioning blame (Mesquita & Frijda, 1992), participants sometimes chose to tell stories which provided indirect evidence of mistreatment. For instance, the way that Jack reports his supervisor's behaviour and paraphrases his feedback resembles instances of supervisory bullying reported by Morris (2011), although Jack never complains of being bullied. Likewise, Dev's reporting of his interactions with the clinical facility administrator suggests he may have been the victim of racism, but he makes no such allegation. Given that narrative allows individuals to claim positive social value for themselves as they establish and maintain rapport with their interlocutors (Spencer-Oatey, 2000), the research interviews may have presented Jack and Dev with an opportunity to mitigate the feeling of having been offended as they told their versions of events to the researcher. Narrative therefore provided access to perspectives which might have remained hidden had an alternative research method been adopted.

Limitations of the study

As indicated in Chapter Nine, this study has three limitations. First, it presents the narratives of a small subset of the thousands of international doctoral researchers who enrol in Australian universities every year. However, this aspect of the study's design can also be viewed as a strength. In counterpoint to the work of researchers who investigate selected aspects of doctoral education (such as research supervision or doctoral writing), this thesis offers the possibility of exploring these issues from the perspective of six very different doctoral candidates within the broader context of their research trajectories. For instance Emily's narrative reveals how a multi-site research project can enrich a doctoral researcher's experience, and Journey's narrative

demonstrates how a lack of departmental community can be compensated for by the doctoral researcher's personal agency. Some might argue, however, that the particular demographics of the six participants limit the generalisability of the findings. But generalisability can never be the goal of narrative research of this kind. Instead the study highlights the idiosyncrasy of the six doctoral researchers' trajectories and reports themes that emerged in their reflections on their experiences. This approach — focusing on the particular rather than the general — complements Pearson's argument for exploring the generic processes of learning and supervision:

This perspective offers a way out of the apparent dilemma otherwise posed by discussing in general what is so particular: the detail of individual experience and disciplinary variation remains highly idiosyncratic, but the processes of learning and supervision conceived of as a form of professional education are generic.
(Pearson, 1996, p. 304)

The thesis therefore offers insights into affordances in the learning experiences of these six individuals, and signals issues which may warrant further exploration by researchers and practitioners in the field of doctoral education.

A second limitation is the fact that no attempt was made to triangulate the data by including contributions from the supervisors, administrators, peers and policies which also helped shape the participants' environment. The decision to design the study in this way was supported by a threefold rationale. First, researchers have identified an 'absence of qualitative approaches that enable students to reflect ... [on] the aspects of supervision that are important to them' (A. Lee & McKenzie, 2011, p. 71). In encouraging the study participants to reflect not only on their experience of supervision but on their entire experience of the PhD, the study makes an original and timely contribution to the research literature. Second, the researcher judged that seeking the perspectives of the participants' supervisors or peers could undermine the rapport she sought to develop with them. Numerous instances in the research interviews where participants disclosed information to the researcher which they were unwilling to convey to their supervisors suggest that this decision was justified. Third, it was considered that viewing multiple aspects of the doctoral experience simultaneously from the perspective of current doctoral candidates would generate insights into the way those phenomena are experienced. For example, by adopting activity theory (Engeström, 1999) to analyse the participants' narratives, tensions were identified when the researchers' dual roles (*division of labour*) as doctoral candidates and parents were in conflict or when particular elements

in their departmental activity system (e.g. *community*) failed to support their efforts to achieve their goals (*objects*). In this way, an in-depth narrative study of six doctoral researchers' trajectories complements studies which focus on discrete aspects of the doctorate.

The third limitation relates to the status of the narratives generated by the study. Given that narratives are not simply reports of experience but are the narrators' attempts to make sense of their experiences, they 'inevitably distort those experiences' (Elliott, 2005, p. 23). This would be a problem if the study set out to obtain factual accounts. But since the focus is on exploring the participants' *perceptions* and *understandings* of their experiences, any 'distortion' which occurs as they tell their stories can provide important insights into the significance participants attach to events or individuals:

Oral sources ... are not always fully reliable in point of fact. Rather than being a weakness, this is however, their strength: errors, inventions and myths lead us through and beyond facts to their meanings (Portelli, 1991, p. 2)

This process is illustrated in Jack's and Dev's occasional use of swear words in the interviews. On one occasion Jack reported that his supervisor disparaged his work saying — 'it's bullshit ... it's rubbish' (Jack, 4, 919). However when the researcher queried this, Jack indicated that in fact the supervisor did not use the word "bullshit" at all — 'of course he would say it doesn't make sense to him' (Jack, 4, 923). In this instance, swearing indexes the anger Jack felt at the time of the incident and possibly his feelings as he retells the story (Jay & Janschewitz, 2008). Jack's choice of words leads us beyond the facts of the situation to its significance.

Significance of the findings

Given the limitations discussed above, the study's findings cannot be expected to translate directly into specific recommendations. Instead they point to issues which warrant further consideration and future research. This section therefore identifies important issues arising from the study's findings and suggests a range of actions that could be taken by supervisors, departments and institutions to enhance the quality of international doctoral researchers' experiences.

Community

First, the participants' narratives indicated a resounding lack of community in their respective university departments. In their investigation of international graduate students studying in Australia, Ryan and Viete report that students feel 'excluded, ignored, isolated, marginalised, or

simply distanced' (2009, p. 309) and argue that this is linked to their feeling that the knowledge and experience they bring are not valued by the host institution. These experiences and those of the study participants reflect a profoundly 'one-way flow[s] of knowledge' (Ryan & Viete, 2009, p. 304) despite the rhetoric of internationalisation which pervades Australian higher education. None of the study participants (with the possible exception of Emily) reported instances where their expertise or knowledge was celebrated within their departments. In part, this may have been due to the hierarchical structure of universities which tends to ignore students' previous experience and positions them solely in terms of their institutional status, as the focus group participants lamented (see Chapter Four). This one-sided model of international education persists because students feel silenced by the power relations operating in their interactions with others, and departments and supervisors fail to engage in 'genuine intercultural dialogue' (Ryan & Viete, 2009, p. 305).

As a result of this lack of engagement by the wider departmental and institutional community, the participants' learning experiences were limited to those which occurred within their supervisory teams. Departments uncomfortable with this characterisation of their approach might benefit from reviewing the ways they welcome, acknowledge and position their international candidates. The international doctoral researchers in this study — as well as others the researcher talked to informally in the course of her investigations — need to feel they belong to their department and to see their contributions acknowledged, for example by seeing their work showcased in departmental seminars, reports or publicity. Departments might also review the formal and informal opportunities they provide for international doctoral researchers to participate in scholarly activities alongside more experienced colleagues. Such recommendations would benefit all doctoral researchers, not only international scholars, and may lead to new opportunities for collaboration between local and international scholars.

Previous studies have recommended a range of interventions to enhance doctoral researchers' experiences within their departments. Some of these aim to support learning while fostering relationships between peers in activities such as student writing groups (Aitchison, 2009; L. Y. Li & Vandermensbrugghe, 2011), study groups (Devenish, et al., 2009) or journal editing projects (Hopwood, 2010b). Other initiatives encourage doctoral researchers to collaborate with more experienced academics in editing book or journal proofs or participating in research projects (Simpson & Matsuda, 2008) or serving on departmental committees (McAlpine & Amundsen, 2007). For these initiatives to succeed, productive social relationships need to be formed. The fundamental requirement underpinning all such initiatives is that departments invest in and engage with the

international doctoral researchers they recruit. Current thinking about the interrelationships amongst individuals' identity, agency and learning autonomy (Cooker, forthcoming) suggests that identity development is powerfully affected by external influences such as participation in social interaction and community. University departments can therefore foster the development of positive doctoral researcher identities by creating a supportive and inclusive research community.

Communication

The second significant finding was that the participants tended to conspire in a 'culture of silence' when they experienced frustration or tension in their doctoral work. Mary felt frustrated at having to use Chinese during her supervision sessions; Jack was offended at the type of tasks his supervisor assigned him at the beginning of his PhD; and Dev was upset at the way he had been treated by the clinical facility administrator. However, sensitive to the power relations embedded in these relationships, none of these three participants chose to raise these issues with the individuals concerned. This draws attention to a systemic difficulty in doctoral researchers' relationships with their supervisors. Anecdotal evidence from the researcher's network of doctoral researchers (local and international) suggests that the kinds of tensions reported by the participants are common, as is reluctance to voice concerns beyond the peer group. While this is understandable given the high stakes associated with doctoral work, the academy's distrust of emotion (Leathwood & Hey, 2009) and the supervisor's dual role of pedagogue and gatekeeper (Manathunga, 2007b), silence inhibits effective learning.

In order to address this issue, Manathunga recommends that supervisors adopt a more proactive approach to communicating with candidates and monitoring their well-being (2005b). McCormack argues that supervisors should share their own stories with their students, citing one supervisor's reflection on her own experience of being supervised:

One thing that helped me enormously was to hear from my genius supervisor that she often felt like a fraud. That helped me to see that even the brightest are human ... I will try to model those aspects of her style in my own supervisory practice: admit my weaknesses, actively listen to the student and reflect manageable understandings of what they're trying to achieve back to them. (2009b, p. 147)

If supervisors were to communicate more frankly with candidates about their own research insecurities, doctoral researchers might be more willing to raise important issues that affect their

learning, rather than seeking advice elsewhere. However the challenge for supervisors lies in achieving the appropriate balance between providing adequate personal and academic support and encouraging the student to develop confidence and independence as a researcher. A recent study (Overall, Deane, & Peterson, 2011) found that the most effective supervision style involved encouraging 'students to think and act autonomously while simultaneously offering guidance on how to approach and complete research tasks' (p. 14). While there is no simple formula for achieving such a balance, explicitly discussing these dimensions of supervision might provide a helpful focus for dialogue between supervisor and candidate.

Doctoral researchers themselves might also be encouraged to adopt a more proactive approach to their academic identity trajectories (McAlpine, Amundsen, & Jazvac-Martek, 2011). Journey's and Emily's narratives both demonstrate the powerful contribution of agency to their doctoral learning. Not content to receive feedback only from his supervisors, Journey initiated contact with two international experts on one of the first papers he wrote for his PhD and continued networking actively throughout his doctorate, culminating in his co-authoring an article with a European colleague he had met at a conference. Therefore, as is argued in Chapter Six, doctoral researchers need to understand and manage their doctoral trajectories and not simply rely on their supervisors for direction. However, as both Journey's and Emily's narratives demonstrate, a sense of agency is supported by feelings of confidence, often linked to positive supervision practices. One important aspect of doctoral researchers adopting a more proactive approach to their research journeys might include knowing their rights and taking action when issues arise or problems occur (Morris, 2011).

Chance

The third significant finding was that important differences emerged in the quantity and quality of the participants' learning opportunities with Emily benefiting from a broader range of opportunities than the other participants. In part, this was due to the design of her study which required her to collaborate with multiple researchers in five different research sites in three countries. However, additional opportunities such as Emily's second supervisor inviting her to deliver his paper at a prestigious international conference he was unable to attend, and her first supervisor asking her to co-supervise a Masters student did not occur in the trajectories of the other participants. While no conclusions can be drawn as to the cause of these differences, it suggests that the providers of doctoral programmes need to monitor the opportunities they provide to their candidates in the interests of equity and fairness. Important discrepancies were also observed in the quality of the participants' relationships with their supervisors (ranging from Jack's dysfunctional relationship to

Emily's experience of feeling 'cared for'), the timing and frequency of their access to conference funding (Mary attended no conferences in her first two years whereas Emily attended six), the quality and nature of their writing-focused support (as discussed in relation to Journey's and Mary's writing experiences in Chapter Five), the range of pedagogies their supervisors exposed them to (as discussed in Chapter Six) and the extent of their academic networks (as discussed in Chapter Six). These differences suggest, as Starfield (2010) argues, that there is an element of 'chance' associated with the outcomes of doctoral research.

It will not be easy to ensure that all doctoral researchers have access to a similar range of opportunities and affordances. Ultimately, as this study has shown, doctoral trajectories are highly idiosyncratic and unpredictable. However departments need to monitor the quality of research supervision, access to resources and opportunities for participation extended to their candidates. Perhaps, as Emily and Dev suggested, doctoral researchers (and indirectly their departments) could benefit from talking about their research to someone outside their supervisory team. Ultimately more resources are likely to be required if the quality of international doctoral researchers' learning experiences is to be enhanced. Given the fact that research students contribute approximately 65% of university research output in Australia (Siddle, 1997 cited in Pearson, et al., 2004, p. 348), surely such investment is warranted.

Future research

In this section, the study's main findings in relation to each research question are first briefly evaluated before identifying relevant issues for further research.

Learning experiences

While this study has generated insights into the range, nature and quality of the participants' learning experiences within their supervisory teams, it has not succeeded in completely unpacking the 'black box' of doctoral learning. For instance, it failed to shed much light on Jack's doctoral learning processes since he met only rarely with his supervisor, did no writing during the first three years of his candidature, and did not interact with peers as part of his learning experience. Jack's experience also highlights the need to identify mechanisms for ensuring a better 'fit' between supervisor and candidate. Given the importance of doctoral researchers' pedagogical affordances, the study also suggests the need to explore factors which influence the development of supervisors' pedagogical repertoires. Furthermore, the salient role played by writing in four of the participants' learning experiences suggests the value of investigating the impact of completing the thesis by

publication on candidates' research trajectories. Finally, while it was not clear why the participants did not engage in learning activities with their doctoral researcher peers, the powerful affordances of peer learning networks suggest that this situation warrants further investigation.

Future research therefore might investigate the respective contributions of mediated learning experiences (such as supervision and collaborative writing) and independent scholarly work (such as conceptualising the research project, reading and crafting the thesis). Given the central importance of the supervision relationship in doctoral learning, efforts also need to be invested in developing strategies for ensuring an appropriate match between supervisor and student as well as identifying mechanisms to monitor the relationship through time. Random assignment of supervisors to research students is unlikely to result in the kind of productive mentoring relationship described by Simpson and Matsuda (2008). Studies could also profitably explore different interventions for enhancing supervisors' ability to articulate and model their expertise in the critical area of writing (Paré, 2011) and for expanding their pedagogic repertoires (Aitchison, et al., 2010; Kamler & Thomson, 2006; Paltridge & Starfield, 2007). As indicated above, studies might also explore the most effective way of implementing supportive peer learning networks and writing groups.

Opportunities to participate

The surprising finding that the participants' learning opportunities were remarkably similar and comparatively limited regardless of the faculties in which they were enrolled also merits further investigation. The opportunities which appeared to contribute most to participants' learning were their collaborative writing experiences and their opportunities to participate in conferences. While these are both central activities in academics' lives, there are many others (journal editing, conference planning, committee work) which the participants did not experience. Future research might explore ways of enhancing doctoral researchers' access to such opportunities.

An important focus of future research would therefore be to investigate the reasons why some supervisors provide their candidates with access to a wider range of opportunities to participate in the disciplinary community's practices than others. To what extent, for example, are supervisors' practices determined by their own experiences of being supervised as doctoral students? What role do institutional and departmental policies on timely completion play in constraining supervisors' practices? Research could also explore interventions aimed at expanding doctoral researchers' opportunities to participate in the practices of the academy. These interventions might include

collective learning experiences of the type advocated by Malfroy (2005), Manathunga and Goozée (2007) and Parker (2009) and could be offered as departmental initiatives, which would reduce the pressure on individual supervisors. Studies could also investigate doctoral researchers' perceptions of existing opportunities in their academic communities in order to identify attitudes or beliefs which inhibit participation.

Quality of support

Finally, the study found that the participants lacked access to a supportive and vibrant intellectual and social community of peers and fellow researchers in their respective departments. Given the pervasiveness of the community of practice (Lave & Wenger, 2002) as a metaphor for graduate study, this is both ironic and unfortunate, although previous researchers have suggested that Lave and Wenger's view of community is overly benign (M. R. Lea, 2005). It is also interesting to speculate on the extent to which the institution's and department's failure to welcome and engage these international doctoral candidates might have extended to local researchers too. Perhaps the mantra of timely doctoral completions has effectively destroyed the potential for relaxed and informal academic and social encounters of the type Bhatia (2001) reports enjoying during his days as a research student in the United Kingdom. However if doctoral researchers are to be supported in constructing a scholarly identity for themselves 'the focus must be on the process of ... mutual construction' (Wenger, 1998, p. 146) of the individual and the community.

Perhaps the most urgent issue to investigate is ways of enhancing the inclusion and engagement of international doctoral researchers in Australian universities. Leask and Carroll argue that there has been 'too much emphasis on "wishing and hoping" that benefits will flow from cultural diversity on campus and not enough emphasis on strategic and informed intervention' (2011, p. 647). Given that there is now a substantial literature documenting the lack of cultural mixing on Australian university campuses (Robertson, Line, Jones, & Thomas, 2000; Sawir, et al., 2008; Summers & Volet, 2008) it is time to address this issue through a comprehensive programme of research. A related issue is the need for research into the quality of the research environment into which international doctoral researchers are introduced and the 'health' of the departmental community and culture. In this study, participants' perceptions that their departments lacked a sense of community are confounded with their status as international students. It would be interesting to know whether local students enrolled in the same departments viewed the departmental culture differently. Indeed, it would be valuable more generally to investigate differences and commonalities between

international and local doctoral researchers' experiences of learning, opportunities to participate and community within particular university departments.

The suggestions for future research proposed here would benefit from adopting a range of qualitative methodologies. These might include the use of focus groups, case studies or diary studies of individual learners, observation of supervision sessions (if access could be obtained), analysis of doctoral researchers' textual products and peer interaction studies. Given the duration of doctoral study and the incremental nature of research and the associated learning, the value of longitudinal approaches seems clear. Adopting different analytical methods to explore these questions would also likely enhance understanding. For instance, applying methods of analysis which go beyond the surface of participants' narratives (such as investigating the use of metaphor or appraisal analysis) might uncover underlying attitudes that the participants may not be aware of, or at least do not clearly articulate.

What remains at the end of this thesis is a collection of stories. These stories tell us something about the individuals concerned, about the situations and environments they encounter and the people with whom they interact. They also tell us something about ourselves, as we reflect on our reactions to the participants' stories. Ultimately this thesis will have made a contribution if the stories it tells help open up conversations between researchers and their supervisors, amongst networks of doctoral researchers and amongst academics and policy makers.

Coda

During the course of the project, my views of the methodology, my role as researcher and my relationships with the participants all changed. Given the longitudinal nature of the study, this is hardly surprising. However it does impact on data analysis and reporting, particularly in relation to epistemological issues and my increasing feelings of unease in reporting my versions of the participants' stories. Most notably, I became intensely aware that the way I perceived the participants' experiences was likely to differ from the way they viewed those same experiences. Furthermore, the act of creating 'research texts' (Clandinin & Connelly, 2000) came to feel almost 'unseemly' in its dislocation from the intimate setting in which the participants originally shared their stories with me. This is what Barkhuizen means when he says that 'narrative researchers are intimately implicated in their research activities' (2011, p. 393).

My unease emerged in part because of the rapport I established with the participants and my increasing familiarity with the circumstances of their lives. The reciprocal, interactive nature of encounters was most evident with Dev — the youngest of the participants — and Emily, the most forthcoming. My interviews with Emily could more accurately be characterised as conversations than research interviews. This was particularly apparent when Emily began the fifth interview, before the tape recorder was switched on, by asking my opinion on a recent policy decision in her institution which she felt impacted on the identity of doctoral researchers and was therefore pertinent to the study. This reinforced my impression that she and I were resuming a conversation after a period of absence. My willingness to share my experiences with the participants (when asked) undoubtedly helped establish rapport and therefore inevitably impacted on our interactions. Our encounters therefore shifted away from formal research interviews towards the type of ‘reflexive dyadic interviews’ described by Ellis and Berger in which:

the interviewer typically shares personal experience with the topic at hand or reflects on the communicative process of the interview. In this case the researcher's disclosures are more than tactics to encourage the respondent to open up; rather, the researcher often feels a reciprocal desire to disclose, given the intimacy of the details being shared by the interviewee. The interview is conducted more as a conversation between two equals than as a distinctly hierarchical, question-and-answer exchange, and the interviewer tries to tune in to the interactively produced meanings and emotional dynamics within the interview itself. (2003, p. 162)

Finally, my view of knowledge production changed during the course of the study. Mindful of Richardson's (2003, p. 189) words, ‘writing is never innocent’, I began to feel increasingly uneasy about the power associated with the move from field texts to research texts as I decided what to highlight in the participants’ narratives, which excerpts to quote and what not to report. The researcher’s role in brokering participants’ narratives to a wider audience is anything but innocent.

References

- Adams, K., and Cargill, M. (2003). 'Knowing that the other knows: Using experience and reflection to enhance communication in cross-cultural postgraduate supervisory relationships. Retrieved March 23, 2011, from:
<http://www.herdsa.org.au/wp-content/uploads/conference/2003/PDF/HERDSA68.pdf>
- Aitchison, C. (2009). Writing groups for doctoral education. *Studies in Higher Education*, 34(8), 905-916.
- Aitchison, C. (2010). Learning together to publish: Writing group pedagogies for doctoral publishing. In C. Aitchison, B. Kamler & A. Lee (Eds.), *Publishing pedagogies for the doctorate and beyond* (pp. 83-100). New York: Routledge.
- Aitchison, C., Kamler, B., & Lee, A. (Eds.). (2010b). *Publishing pedagogies for the doctorate and beyond*. New York: Routledge.
- Aitchison, C., & Lee, A. (2006). Research writing: Problems and pedagogies. *Teaching in Higher Education*, 11(3), 265-278.
- Andrade, M. S. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education*, 5(2), 131-154.
- Archer, L. (2007). Diversity, equality and higher education: A critical reflection on the abuses of equity discourse within widening participation. *Teaching in Higher Education*, 12(5-6), 635-653.
- Aspland, T. (1999). 'You learn round and I learn square': Mei's story. In Y. Ryan & O. Zuber-Skerritt (Eds.), *Supervising postgraduates from non-English speaking backgrounds* (pp. 25-39). Buckingham: The Society for Research into Higher Education & Open University Press.
- Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education*, 73(1), 94-122.
- Austin, A. E. (2009). Cognitive apprenticeship theory and its implications for doctoral education: A case example from a doctoral program in higher and adult education. *International Journal for Academic Development*, 14(3), 173-183.
- Austin, A. E., & McDaniels, M. (2006). Preparing the professoriate of the future: Graduate student socialization for faculty roles. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. XXI, pp. 397-456): Springer.
- Australian Education International. (May 2011a). Export income to Australia from education services in 2010. Retrieved from <http://aei.gov.au/research/Research-Snapshots/Documents/2011061803%20Export%20Income%202010.pdf>
- Australian Education International. (May 2011b). International student numbers 2010. Retrieved from <http://www.aei.gov.au/research/Research-Snapshots/Documents/2011051801.pdf>
- Baker, V. L., & Lattuca, L. L. (2010). Developmental networks and learning: Toward an interdisciplinary perspective on identity development during doctoral study. *Studies in Higher Education*, 35(7), 807-827.

- Bansel, P. (2011). Becoming academic: A reflection on doctoral candidacy. *Studies in Higher Education*, 36(5), 543-556.
- Barkhuizen, G. (2011). Narrative knowledging in TESOL. *TESOL Quarterly*, 45(3), 391-414.
- Barnes, B. J., & Austin, A. E. (2009). The role of doctoral advisors: A look at advising from the advisor's perspective. *Innovative Higher Education*, 33(5), 297-315.
- Barnett, R., & Di Napoli, R. (2008a). Identity and voice in higher education: Making connections. In R. Barnett & R. Di Napoli (Eds.), *Changing identities in higher education: Voicing perspectives* (pp. 197-204). London: Routledge.
- Barnett, R., & Di Napoli, R. (Eds.). (2008b). *Changing identities in higher education: Voicing perspectives*. London: Routledge.
- Bartlett, A., & Mercer, G. (2000). Reconceptualising discourses of power in postgraduate pedagogies. *Teaching in Higher Education*, 5(2), 195-204.
- Barton, D., & Tusting, K. (Eds.). (2005). *Beyond communities of practice: Language, power and social context*. Cambridge: Cambridge University Press.
- Bartram, B. (2008). Supporting international students in higher education: Constructions, cultures and clashes. *Teaching in Higher Education*, 13(6), 657-668.
- Beard, C., Clegg, S., & Smith, K. (2007). Acknowledging the affective in higher education. *British Educational Research Journal*, 33(2), 235-252.
- Beauchamp, C., Jazvac-Martek, M., & McAlpine, L. (2009). Studying doctoral education: Using Activity Theory to shape methodological tools. *Innovations in Education and Teaching International*, 46(3), 265-277.
- Becher, T. (1994). The significance of disciplinary differences. *Studies in Higher Education*, 19(2), 151-161.
- Belcher, D. (1994). The apprenticeship approach to advanced academic literacy: Graduate students and their mentors. *English for Specific Purposes*, 13(1), 23-34.
- Belcher, D., & Hirvela, A. (2001). Voice in L2 writing. *Journal of Second Language Writing*, 10(1/2), Special issue.
- Benesch, S. (2001). *Critical English for academic purposes: Theory, politics and practice*. Mahway, NJ: Lawrence Erlbaum Associates.
- Bhatia, V. K. (2001). Initiating into academic community: Some autobiographical reflections. In D. Belcher & U. Connor (Eds.), *Reflections on multiliterate lives* (pp. 38-50). Clevedon: Multilingual Matters.
- Bjuremark, A. (2006). The relationship between supervisor and doctoral student: Lasting longer than an average marriage in Sweden? In T. S. Popkewitz, K. Petersson, U. Olsson & J. Kowalczyk (Eds.), *The future is not what it appears to be: Pedagogy, genealogy and political epistemology* (pp. 84-104). Stockholm: HLS Förlag.
- Blinded Institution. (n.d.). Performance development and review. Retrieved February 23, 2011: <http://www.blinded/policy/develop/pdr/PDRhelp/guidelines/factorsforplanning.html>
- Blinded Institution. (2010a). *Higher degree research office: PhD students country codes*.
- Blinded Institution. (2010b). *Higher degree research guide for candidates and supervisors*.

- Blinded Institution Higher Degree Research Office. (2010c). Total headcount of research candidates by degrees and citizenship. Retrieved September 10, 2010: http://blindedinstitution/information_for/higher_degree_research_committee/data_and_reporting/documents/PROG1.pdf
- Block, D. (2000). Problematizing interview data: Voices in the mind's machine. *TESOL Quarterly*, 34, 757-763.
- Block, D. (2006). *Multilingual identities in a global city: London stories*. London: Palgrave.
- Block, D. (2007). *Second language identities*. London: Continuum.
- Block, D. (2008). EFL narratives and English-mediated identities: Two ships passing in the night? In P. Kalaja, V. Menezes & A. M. F. Barcelos (Eds.), *Narratives of learning and teaching EFL* (pp. 141-154). Basingstoke: Palgrave Macmillan.
- Block, D. (2010). Researching language and identity. In B. Paltridge & A. Phakiti (Eds.), *Continuum companion to research methods in applied linguistics* (pp. 337-349). London: Continuum.
- Bond, M. H., Žegarac, V., & Spencer-Oatey, H. (2000). Culture as an explanatory variable: Problems and possibilities. In H. Spencer-Oatey (Ed.), *Culturally speaking: Managing rapport through talk across cultures* (pp. 47-71). London: Continuum.
- Boud, D. (1988). Moving towards autonomy. In D. Boud (Ed.), *Developing student autonomy in learning* (pp. 17-39). London: Kogan Page.
- Boud, D., & Lee, A. (2005). 'Peer learning' as pedagogic discourse for research education. *Studies in Higher Education*, 30(5), 501-516.
- Boud, D., & Lee, A. (2009). Introduction. In D. Boud & A. Lee (Eds.), *Changing practices of doctoral education* (pp. 1-9). London: Routledge.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258): Greenwood Press
- Bourke, S. (2007). PhD thesis quality: The views of examiners. *South African Journal of Higher Education*, 21(8), 1001-1019.
- Braine, G. (2002). Academic literacy and the nonnative speaker graduate student. *Journal of English for Academic Purposes*, 1(1), 59-68.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Briggs, C. L. (2007). Anthropology, interviewing, and communicability in contemporary society. *Current Anthropology*, 48(4), 551-567.
- Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- Bullen, E., & Kenway, J. (2003). Real or imagined women? Staff representations of international women postgraduate students. *Discourse*, 24(1), 35-49.
- Burnett, C., & Gardner, J. (2006). The one less travelled by ...: The experience of Chinese students in a UK university. In M. Byram & A. Feng (Eds.), *Living and studying abroad: Research and practice* (pp. 64-90). Clevedon: Multilingual Matters.
- Cadman, K. (1994). *Constructing a thesis: A question of identity?* Paper presented at the Quality in postgraduate research: Making it happen Conference April 7-8, 1994.
- Cadman, K. (1997). Thesis writing for international students: A question of identity? *English for Specific Purposes*, 16(1), 3-14.

- Cadman, K. (2000). 'Voices in the air': Evaluations of the learning experiences of international postgraduates and their supervisor. *Teaching in Higher Education*, 5(4), 475-491.
- Caffarella, R. S., & Barnett, B. G. (2000). Teaching doctoral students to become scholarly writers: The importance of giving and receiving critiques. *Studies in Higher Education*, 25(1), 39-51.
- Can, G., & Walker, A. (2011). A model for doctoral students' perceptions and attitudes toward written feedback for academic writing. *Research in Higher Education*, 52(5), 508-536.
- Candlin, C., and Crichton, J. (2010). Discourses of deficit. Basingstoke: Palgrave Macmillan.
- Cargill, M., & Cadman, K. (2005). Revisiting quality for international research education: Towards an engagement model. In M. Carroll (Ed.), *The 2005 Australian universities quality forum 'Engaging communities'* (pp. 45-49). Sydney.
- Carlone, H. B., & Johnson, A. (2007). Understanding the science experiences of successful women of colour: Science identity as an analytic lens. *Journal of Research in Science Teaching*, 44(8), 1187-1218.
- Casanave, C. P. (2002). *Writing games: Multicultural case studies of academic literacy practices in higher education*. Mahwah, New Jersey: Lawrence Erlbaum.
- Casanave, C. P. (2008). Learning participatory practices in graduate school: Some perspective-taking by a mainstream educator. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 14-31). Ann Arbor: University of Michigan Press.
- Casanave, C. P. (2010). Case studies. In B. Paltridge & A. Phakiti (Eds.), *Continuum companion to research methods in applied linguistics* (pp. 66-79). London: Continuum.
- Casanave, C. P., & Li, X. (Eds.). (2008). *Learning the literacy practices of graduate school: Insiders' reflections on academic acculturation*. Ann Arbor: University of Michigan Press.
- Castello, M., Inesta, A., & Monereo, C. (2009). Towards self-regulated academic writing: An exploratory study with graduate students in a situated learning environment. *Electronic Journal of Research in Educational Psychology*, 7(3), 1107-1130.
- Chalmers, D. (2011). Progress and challenges to the recognition and reward of the Scholarship of L. 2010. Academic writing and tacit knowledge. *Teaching in Higher Education*, 15: 151-60.
- Chang, C. E., & Strauss, P. (2010). 'Active agents of change?' Mandarin-speaking students in New Zealand and the thesis writing process. *Language and Education*, 24(5), 415-429.
- Chang, Y.-J., & Kanno, Y. (2010). NNES doctoral students in English-speaking academe: The nexus between language and discipline. *Applied Linguistics*, 31(5), 671-692.
- Chik, A. (2007). From learner identity to learner autonomy: a biographical study of two Hong Kong learners of English. In P. Benson (Ed.), *Learner Autonomy 8: Teacher and Learner Perspectives* (pp. 41-60). Dublin: Authentik.
- Chik, A., & Benson, P. (2008). Frequent flyer: A narrative of overseas study in English. In P. Kalaja, V. Menezes & A. M. F. Barcelos (Eds.), *Narratives of learning and teaching EFL* (pp. 155-168). Basingstoke: Palgrave Macmillan.
- Cho, S. (2004). Challenges of entering discourse communities through publishing in English: Perspectives of nonnative-speaking doctoral students in the United States of America. *Journal of Language, Identity and Education*, 3(3), 47-72.

- Christie, H., Tett, L., Cree, V. E., Hounsell, J., & McCune, V. (2008). 'A real rollercoaster of confidence and emotions': Learning to be a university student. *Studies in Higher Education*, 33(5), 567-581.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.
- Clegg, S. (2005). Theorising the mundane: The significance of agency. *International Studies in Sociology of Education*, 15(2), 149-163.
- Cohen, R. (2009). *No opinion gets a B: The role of essay writing in disciplinary inductions*. Unpublished PhD, Victoria University of Wellington, Wellington.
- Colbeck, C. L. (2008). Professional identity development theory and doctoral education. *New Directions for Teaching and Learning*, 113, 9-16.
- Connell, R. W. (1985). How to supervise a PhD. *Vestis*, 28(2), 38-41.
- Cooker, L. (forthcoming). The applied linguistic individual: Gaining perspective. In P. Benson & L. Cooker (Eds.), *The applied linguistic individual: Sociocultural approaches to autonomy, agency and identity* (pp. xx). London: Equinox.
- Costley, T. (2008). "You are beginning to sound like an academic": Finding and owning your academic voice. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of the graduate school: Insiders' reflections on academic enculturation* (pp. 74-87). Ann Arbor: University of Michigan Press.
- Cotterall, S., & Murray, G. (2009). Enhancing metacognitive knowledge: Structure, affordances and self. *System*, 37(1), 34-45.
- Coughlan, P., & Duff, P. (1994). Same task, different activities: Analysis of a SLA task from an activity theory perspective. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 173-194). Norwood, NJ: Ablex.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks: Sage.
- Cumming, J. (2007). Representing the complexity, diversity and particularity of the doctoral enterprise in Australia. Unpublished PhD thesis. Australian National University.
- Cumming, J. (2010a). Contextualised performance: Reframing the skills debate in research education. *Studies in Higher Education*, 35(4), 405-419.
- Cumming, J. (2010b). Doctoral enterprise: A holistic conception of evolving practices and arrangements. *Studies in Higher Education*, 35(1), 25-39.
- Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly*, 14(2), 175-187.
- de Beauvoir, S. (1984). *Adieux: A farewell to Sartre*. New York: Pantheon Book.
- Deem, R., & Brehony, K. (2000). Doctoral students' access to research cultures - are some more unequal than others? *Studies in Higher Education*, 25(2), 149-165.
- Delamont, S., Parry, O., & Atkinson, P. (1998). Creating a delicate balance: The doctoral supervisor's dilemmas. *Teaching in Higher Education*, 3(2), 157-171.
- Delanty, G. (2008). Academic identities and institutional change. In R. Barnett & R. Di Napoli (Eds.), *Changing identities in higher education: Voicing perspectives* (pp. 124-133). London: Routledge.

- Denson, N., & Zhang, S. (2010). The impact of student experiences with diversity on developing graduate attributes *Studies in Higher Education*, 35(5), 529-543.
- Department of Education Employment and Workplace Relations. (2009a). Data Snapshot: Who, why and what in international education. Retrieved 17 February, 2010: <http://www.deewr.gov.au/International/Pages/Datasnapshot.aspx>
- Department of Education Employment and Workplace Relations. (2009b). 2008 Full year student summary. Retrieved September 9, 2010: <http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Documents/2008/2008HigherEducationStudentStats.pdf>
- Department of Education Employment and Workplace Relations. (2011a). Boost to international education sector in response to Knight Review. Retrieved 24 September 2011: http://www.deewr.gov.au/Ministers/Evans/Media/Releases/Pages/Article_110927_162702.aspx
- Department of Education Employment and Workplace Relations. (2011b). *Doctorate by research: Government student headcount 2001-2009*. Sydney: UTS Planning and Quality Unit Portal.
- Deuchar, R. (2008). Facilitator, director or critical friend? Contradiction and congruence in doctoral supervision styles. *Teaching in Higher Education*, 13(4), 489-500.
- Devenish, R., Dyer, S., Jefferson, T., Lord, L., van Leeuwen, S., & Fazakerley, V. (2009). Peer to peer support: The disappearing work in the doctoral student experience. *Higher Education Research and Development*, 28(1), 59-70.
- Dirkx, J. (2008). The meaning and role of emotions in adult learning. *New Directions for Adult and Continuing Education*, 2008(120), 7-18.
- Doherty, C., & Singh, P. (2007). Mobile students, flexible identities and liquid modernity: Disrupting western teachers' assumptions of 'The Asian Learner'. In D. Palfreyman & D. L. McBride (Eds.), *Learning and teaching across cultures in higher education* (pp. 114-132). Basingstoke: Palgrave Macmillan.
- Dong, Y.-R. (1998). Non-native speaker graduate students' thesis/dissertation writing in science: Self-reports by students and their advisors from two US institutions. *English for Specific Purposes*, 17(4), 369-390.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Duff, P. A. (2007a). Problematising academic discourse socialisation. In H. Marriott, T. Moore & R. Spence-Brown (Eds.), *Learning discourses and the discourses of learning* (pp. 1.1-1.18). Melbourne: Monash University ePress.
- Duff, P. A. (2007b). Second language socialization as sociocultural theory: Insights and issues. *Language Teaching*, 40(4), 309-319.
- Duff, P. A. (2008). *Case study research in applied linguistics*. New York: Lawrence Erlbaum Associates.
- Duff, P. A. (2010). Language socialization into academic discourse communities. *Annual Review of Applied Linguistics*, 30, 169-192.
- Edwards, A. (2001). Researching pedagogy: A sociocultural agenda. *Pedagogy, Culture and Society*, 9(2), 161-186.
- Edwards, A., & Mackenzie, L. (2005). Steps toward participation: The social support of learning trajectories. *International Journal of Lifelong Education*, 24(4), 287-302.

- Edwards, D. (1999). Emotion discourse. *Culture and Psychology*, 5(3), 271-291.
- Egan, R., Stockley, D., Brouwer, B., Tripp, D., & Stechyson, N. (2009). Relationships between area of academic concentration, supervisory style, student needs and best practices. *Studies in Higher Education*, 34(3), 337-345.
- Elliott, J. (2005). *Using narrative in social research: Qualitative and quantitative approaches*. London: Sage.
- Ellis, C., & Berger, L. (2003). Their story/my story/our story: Including the researcher's experience in interview research. In J. F. Gubrium & J. A. Holstein (Eds.), *Postmodern interviewing* (pp. 157-183). Thousand Oaks: CA: Sage.
- Elton, L. (2010). Academic writing and tacit knowledge. *Teaching in Higher Education*, 15(2), 151-160.
- Engebretson, K., Smith, K., McLaughlin, D., Seibold, C., Terrett, G., & Ryan, E. (2008). The changing reality of research education in Australia and implications for supervision: A review of the literature. *Teaching in Higher Education*, 13(1), 1-15.
- Engeström, Y. (1999). Activity theory and individual and social transformation. In Y. Engeström, R. Miettinen & R.-L. Punamaki (Eds.), *Perspectives on activity theory* (pp. 19-38). Cambridge: Cambridge University Press.
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization *Journal of Education and Work*, 14(1), 133-156.
- Evans, T., Evans, B., & Marsh, H. (2008). Australia. In M. Nerad & M. Heggelund (Eds.), *Toward a global PhD? Forces and forms in doctoral education worldwide* (pp. 171-203). Seattle, WA: University of Washington Press.
- Evans, T., and Green, B. (1995). Dancing at a distance? Postgraduate studies, 'supervision', and distance education. Paper presented at the Australian Association for Research in Education Conference, Hobart, November.
- Eynde, P., & Turner, J. E. (2006). Focusing on the complexity of emotion issues in academic learning: A dynamical component systems approach. *Educational Psychology Review*, 18(4), 361-376.
- Fitzmaurice, M. (2010). Considering teaching in higher education as a practice. *Teaching in Higher Education*, 15(1), 45-55.
- Flowerdew, J. (2000). Discourse community, legitimate peripheral participation, and the nonnative English-speaking scholars. *TESOL Quarterly*, 34(1), 127-150.
- Fujioka, M. (2008). Dissertation writing and the (re)positioning of self in a "community of practice". In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 58-73). Ann Arbor: The University of Michigan Press.
- Gardner, S. K. (2007). "I heard it through the grapevine": Doctoral student socialization in chemistry and history. *Higher Education*, 54(5), 723-740.
- Gardner, S. K. (2009). Student and faculty attributions in high and low-completing doctoral programs. *Higher Education*, 58(1), 97-112.
- Gatfield, T., & Alpert, F. (2002, 7-10 July 2002). *The supervisory management styles model*. Paper presented at the Quality Conversations, Proceedings of the 25th HERDSA Annual Conference, Perth.

- Gee, J. P. (2001). Identity as an analytic lens for research in education. *Review of Research in Education*, 25, 99-125.
- Gilbert, R. (2009). The doctorate as curriculum: A perspective on goals and outcomes of doctoral education. In D. Boud & A. Lee (Eds.), *Changing practices of doctoral education* (pp. 54-68). London: Routledge.
- Golde, C. M. (1998). Beginning graduate school: Explaining first-year doctoral attrition. *New Directions for Higher Education*, 101, 55-64.
- Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *The Journal of Higher Education*, 76(669-700).
- Golde, C. M., & Dore, T. M. (2001). *At cross purposes: What the experiences of doctoral students reveal about doctoral education* (www.phd-survey.org). Philadelphia, PA: A report prepared for the Pew Charitable Trusts.
- Goode, J. (2007). Empowering or disempowering the international PhD student? Constructions of the dependent and independent learner. *British Journal of Sociology of Education*, 28(5), 589-603.
- Gourlay, L. (2009). Threshold practices: Becoming a student through academic literacies. *London Review of Education*, 7(2), 181-192.
- Grant, B. (1999). *Walking on a rickety bridge: Mapping supervision*. Paper presented at the Cornerstones: What Do We Value in Higher Education?, Proceedings of the 22nd HERDSA Annual Conference, Melbourne.
- Grant, B. (2003). Mapping the pleasures and risks of supervision. *Discourse: Studies in the cultural politics of education*, 24(2), 175-190.
- Grant, B. (2008). Agonistic struggle: Master-slave dialogue in humanities supervision. *Arts and Humanities in Higher Education*, 7(1), 9-27.
- Green, B. (2005). Unfinished business: Subjectivity and supervision. *Higher Education Research and Development*, 24(2), 151-163.
- Green, B., & Lee, A. (1995). Theorising postgraduate pedagogy. *Australian Universities' Review*, 38(2), 40-45.
- Gubrium, J. F., & Holstein, J. A. (2008). *Analyzing narrative reality*. Thousand Oaks, CA: Sage.
- Guilfoyle, A. M. (2005, August 2011). *Developing essential networks as a source of community for international postgraduate students*. Paper presented at the 2005 Australian Universities Quality Forum: Engaging Communities, Sydney, Australia.
- Guo, S., & Chase, M. (2011). Internationalisation of higher education: Integrating international students into Canadian academic environment *Teaching in Higher Education*, 16(3), 305-318.
- Gurr, G. M. (2001). Negotiating the 'rickety bridge' - a dynamic model for aligning supervisory style with research student development. *Higher Education Research and Development*, 20(1), 81-92.
- Hadjioannou, X., Shelton, N. R., Fu, D., & Dhanarattigannon, J. (2007). The road to a doctoral degree: Co-travelers through a perilous passage. *College Student Journal*, 41(1), 160-177.
- Hakala, J. (2009). Socialization of junior researchers in new academic research environments: Two case studies from Finland. *Studies in Higher Education*, 34(5), 501-516.

- Haksever, A. M., & Manisali, E. (2000). Assessing supervision requirements of PhD students: The case of construction management and engineering in the UK. *European Journal of Engineering Education*, 25(1), 19-32.
- Hall, L. A., & Burns, L. D. (2009). Identity development and mentoring in doctoral education. *Harvard Educational Review*, 79(1), 49-70.
- Hall, S. (1996). Who needs identity? In S. Hall & P. Du Gay (Eds.), *Questions of cultural identity* (pp. 1-17). London: Sage.
- Halse, C. (2011). 'Becoming a supervisor': The impact of doctoral supervision on supervisors' learning. *Studies in Higher Education*, 36(5), 557-570.
- Hanassab, S. (2006). Diversity, international students and perceived discrimination: Implications for educators and counselors. *Journal of Studies in International Education*, 10(2), 157-172.
- Haneda, M. (2006). Classrooms as communities of practice: A reevaluation. [The Forum]. *TESOL Quarterly*, 40(4), 807-817.
- Hasrati, M. (2005). Legitimate peripheral participation and supervising PhD students. *Studies in Higher Education*, 30(5), 557-570.
- Hasrati, M., & Street, B. (2009). PhD topic arrangement in 'D'iscourse communities of engineers and social sciences/humanities. *Journal of English for Academic Purposes*, 8, 14-25.
- Heath, T. (2002). A quantitative analysis of PhD students' views of supervision. *Higher Education Research and Development*, 21(1), 41-53.
- Hedgcock, J. S. (2008). Lessons I must have missed: Implicit literacy practices in graduate education. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 32-45). Ann Arbor: University of Michigan Press.
- Hellstén, M. (2008). Researching international pedagogy and the forming of new academic identities. In M. Hellstén & A. Reid (Eds.), *Researching international pedagogies: Sustainable practice for teaching and learning in higher education* (pp. 83-98). London: Springer.
- Herman, C. (2010). Emotions and being a doctoral student. In P. Thomson & M. Walker (Eds.), *Routledge doctoral student's companion: getting to grips with research in education and the social sciences* (pp. 283-294). London; New York: Routledge.
- Hirvela, A., & Belcher, D. (2001). Coming back to voice: The multiple voices and identities of mature multilingual writers. *Journal of Second Language Writing*, 10(1-2), 83-106.
- Hirvela, A., & Li, Y. (2008). From expectations to empowerment: How a mentor and a dissertation writer negotiated the intricacies of a qualitative results chapter. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 121-133). Ann Arbor: University of Michigan Press.
- Hockey, J. (1994). New territory: Problems of adjusting to the first year of a social science PhD. *Studies in Higher Education*, 19(2), 177-190.
- Hockey, J., & Allen-Collinson, J. (2005). Identity change: Doctoral students in art and design. *Arts and Humanities in Higher Education*, 4(1), 77-93.
- Hoffmann, E. (1989). *Lost in translation: A life in a new language*. New York: Penguin.
- Hofstede, G. (2009). Cultural dimensions [for Australia]. Retrieved September 22, 2010 http://www.geert-hofstede.com/hofstede_australia.shtml

- Holbrook, A. (2007). 'Levels' of success in the use of the literature in a doctorate. *South African Journal of Higher Education*, 21(8), 1020-1041.
- Holley, K. (2009). Animal research practices and doctoral student identity development in a scientific community. *Studies in Higher Education*, 34(5), 577-591.
- Holstein, J. A., & Gubrium, J. F. (2003). Active interviewing. In J. F. Gubrium & J. A. Holstein (Eds.), *Postmodern interviewing* (pp. 67-80). Thousand Oaks, CA: Sage.
- Hopwood, N. (2010a). Doctoral experience and learning from a sociocultural perspective. *Studies in Higher Education*, 35(7), 829-843.
- Hopwood, N. (2010b). Doctoral students as journal editors: Non-formal learning through academic work. *Higher Education Research and Development*, 29(3), 310-331.
- Hopwood, N. (2010c). A sociocultural view of doctoral students' relationships and agency. *Studies in Continuing Education*, 32(2), 103-117.
- Hopwood, N., & McAlpine, L. (2007). *Exploring a theoretical framework for understanding doctoral education*. Paper presented at the Annual Conference of the Higher Education Research and Development Society of Australasia.
- Hopwood, N., & Stocks, C. (2008). Teaching development for doctoral students: What can we learn from activity theory? *International Journal for Academic Development*, 13(3), 175-186.
- Huang, J. (2009). *Autonomy, agency and identity in foreign language learning and teaching*. Unpublished PhD thesis, University of Hong Kong, Hong Kong.
- Huisman, K. (2008). "Does this mean you're not going to come visit me anymore?": An inquiry into an ethics of reciprocity and positionality in feminist ethnographic research*. *Sociological Inquiry*, 78(3), 372-396.
- Humphrey, R., & McCarthy, P. (1999). Recognising difference: Providing for postgraduate students. *Studies in Higher Education*, 24(3), 371-386.
- Hyland, K., & Tse, P. (2004). "I would like to thank my supervisor". Acknowledgements in graduate dissertations. *International Journal of Applied Linguistics*, 14(2), 259-275.
- Ingleton, C., & Cadman, K. (2002). Silent issues for international postgraduate research students: Emotion and agency in academic success. *Australian Educational Researcher*, 29(1), 93-113.
- Ivanič, R. (1998). *Writing and identity: The discursal construction of identity in academic writing*. Amsterdam: John Benjamins.
- Jawitz, J. (2009). Academic identities and communities of practice in a professional discipline. *Teaching in Higher Education*, 14(3), 241-251.
- Jay, T., & Janschewitz, K. (2008). The pragmatics of swearing. *Journal of Politeness Research. Language, Behaviour, Culture*, 4(2), 267-288.
- Jazvac-Martek, M. (2009). Oscillating role identities: The academic experiences of education doctoral students. *Innovations in Education and Teaching International*, 46(3), 253-264.
- Jazvac-Martek, M., Chen, S., & McAlpine, L. (2011). Tracking the doctoral student experience over time: Cultivating agency in diverse spaces. In L. McAlpine & C. AMundsen (Eds.), *Doctoral education: Research-based strategies for doctoral students, supervisors and administrators* (pp. 17-36). London: Spring.
- Johnson, L., Lee, A., & Green, B. (2000). The PhD and the autonomous self: Gender, rationality and postgraduate pedagogy. *Studies in Higher Education*, 25(2), 135-147.

- Kamler, B. (2008). Rethinking doctoral publication practices: Writing from and beyond the thesis. *Studies in Higher Education*, 33(3), 283-294.
- Kamler, B. (2010). Revise and resubmit: The role of publication brokers. In C. Aitchison, B. Kamler & A. Lee (Eds.), *Publishing pedagogies for the doctorate and beyond* (pp. 64-82). New York: Routledge.
- Kamler, B., & Thomson, P. (2006). *Helping doctoral students write: Pedagogies for supervision*. London: Routledge.
- Kanno, Y. (1999). The use of the community-of-practice perspective in language minority research. *TESOL Quarterly*, 33(1), 126-131.
- Kanno, Y. (2003). *Negotiating bilingual and bicultural identities*. New Jersey: Lawrence Erlbaum Associates.
- Kanno, Y., & Norton, B. (2003). Imagined communities and educational possibilities: Introduction. *Journal of Language, Identity and Education*, 2(4), 241-249.
- Kaptelinin, V. (2005). The object of activity: Making sense of the sense-maker. *Mind, Culture and Activity*, 12(1), 4-18.
- Kenway, J., & Bullen, E. (2003). Self-representations of international women postgraduate students in the global university 'contact zone'. *Gender and education*, 15(1), 5-20.
- Kettle, M. (2011). Academic practice as explanatory framework: Reconceptualising international student academic engagement and university teaching. *Discourse: Studies in the Cultural Politics of Education*, 32(1), 1- 14.
- Kiley, M. (1998). 'Expectation' in a cross-cultural postgraduate experience. In M. Kiley & G. Mullins (Eds.), *Quality in postgraduate research: Managing the new agenda*. Adelaide: University of Adelaide.
- Kiley, M. (2009). Identifying threshold concepts and proposing strategies to support doctoral candidates. *Innovations in Education and Teaching International*, 46(3), 293-304.
- Kiley, M. (2011). Developments in research supervisor training: Causes and responses. *Studies in Higher Education*, 36(5), 585-599.
- Kim, D., Bankart, C. A. S., & Isdell, L. (2011). International doctorates: Trends analysis on their decision to stay in US. *Higher Education*, 62(2), 141-161.
- Kim, S. H. O. (2011). International graduate students' difficulties: Graduate classes as a community of practices. *Teaching in Higher Education*, 16(3), 281-292.
- Kouritzin, S. (2000). Bringing life to research: Life history research in ESL. *TESL Canada Journal*, 17(2), 1-35.
- Krase, E. (2007). "Maybe the communication between us was not enough": Inside a dysfunctional advisor/L2 advisee relationship. *Journal of English for Academic Purposes*, 6, 55-70.
- Kuwahara, N. (2008). It's not in the orientation manual: How a first-year doctoral student learned to survive in graduate school. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 186-200). Ann Arbor: University of Michigan Press.
- Kwan, B. (2009). Reading in preparation for writing a PhD thesis: Case studies of experiences. *Journal of English for Academic Purposes*, 8(3), 180-191.

- Kwan, B. (2010). An investigation of instruction in research publishing offered in doctoral programs: the Hong Kong case. *Higher Education*, 59(1), 55-68.
- Lantolf, J. P., & Genung, P. (2002). 'I'd rather switch than fight': An activity theoretic study of power, success and failure in a foreign language classroom. In C. Kramsch (Ed.), *Language acquisition and language socialization: Ecological perspectives* (pp. 175-196). London: Continuum Press.
- Lantolf, J. P., & Pavlenko, A. (2001). (S)econd (L)anguage (A)ctivity theory: understanding second language learners as people. In M. P. Breen (Ed.), *Learner Contributions to Language Learning: New Directions in Research* (pp. 141-158). Harlow, Essex: Pearson Education.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lave, J., & Wenger, E. (2002). Legitimate peripheral participation in communities of practice. In M. Lea & K. Nicoll (Eds.), *Distributed learning: social and cultural approaches to practice* (pp. 56-63). London: Routledge.
- Lea, M. R. (2005). 'Communities of practice' in higher education. In D. Barton & K. Tusting (Eds.), *Beyond communities of practice: Language, power and social context* (pp. 180-197). Cambridge: Cambridge University Press.
- Lea, M. R., & Street, B. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education*, 23(2), 157-172.
- Lea, M.R., & Street, B. (2006). The "academic literacies" model: Theory and applications. *Theory into Practice*, 45(4), 368-377.
- Leask, B., & Carroll, J. (2011). Moving beyond 'wishing and hoping': Internationalisation and student experiences of inclusion and engagement. *Higher Education Research & Development*, 30(5), 647-659.
- Leathwood, C. (2006). Gender, equity and the discourse of the independent learner in higher education. *Higher Education*, 52, 611-633.
- Leathwood, C., & Hey, V. (2009). Gender/ed discourses and emotional sub-texts: Theorising emotion in UK higher education. *Teaching in Higher Education*, 14(4), 429-440.
- Lee, A., & Aitchison, C. (2009). Writing for the doctorate and beyond. In D. Boud & A. Lee (Eds.), *Changing practices of doctoral education* (pp. 87-99). London: Routledge.
- Lee, A., & Boud, D. (2003). Writing groups, change and academic identity: Research development as local practice. *Studies in Higher Education*, 28(2), 187-200.
- Lee, A., & Green, B. (2009). Supervision as metaphor. *Studies in Higher Education*, 34(6), 615-630.
- Lee, A., & Kamler, B. (2008). Bringing pedagogy to doctoral publishing. *Teaching in Higher Education*, 13(5), 511-523.
- Lee, A., & McKenzie, J. (2011). Evaluating doctoral supervision: Tensions in eliciting students' perspectives. *Innovations in Education and Teaching International*, 48(1), 69-78.
- Lee, A., & Williams, C. (1999). 'Forged in fire': Narratives of trauma in PhD supervision pedagogy. *Southern Review*, 32(1), 6-26.
- Lee, H., & Maguire, M. H. (in press). International students and identity: Resisting dominant ways of writing and knowing in academe. In D. Starke-Meyerring, A. Pare, N. Artemava, M. Horne & L. Yousoubova (Eds.), *Writing in a knowledge society*: West Lafayette Press and WAC Clearinghouse.

- Leki, I. (1995). Coping strategies of ESL students in writing tasks across the curriculum. *TESOL Quarterly*, 29(2), 235-260.
- Leonard, D., & Becker, R. (2009). Enhancing the doctoral experience at the local level. In D. Boud & A. Lee (Eds.), *Changing practices of doctoral education* (pp. 71-86). London: Routledge.
- Leonard, D., Pelletier, C., & Morley, L. (2003). *The experiences of international students in UK higher education: A review of unpublished research*: UK Council for International Student Affairs
- Li, H., Fox, R. F., & Almarza, D. J. (2007). Strangers in stranger lands: Language, learning, culture. *International Journal of Progressive Education*, 3(1), 6-28.
- Li, L. Y., & Vandermensbrugghe, J. (2011). Supporting the thesis writing process of international research students through an ongoing writing group. *Innovations in Education & Teaching International* 48(2), 195-205.
- Li, X. (2008). Learning to write a thesis with an argumentative edge. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 46-57). Ann Arbor: University of Michigan Press.
- Li, Y. (2006). A doctoral student of physics writing for publication: A sociopolitically-oriented case study. *English for Specific Purposes*, 25(4), 456-478.
- Li, Y. (2007). Apprentice scholarly writing in a community of practice: An intraview of an NNES graduate student writing a research article *TESOL Quarterly*, 41(1), 55-79.
- Lillis, T. (2001). *Student writing: Access, regulation and desire*. London: Routledge.
- Lillis, T., & Scott, M. (2007). Defining academic literacies research: Issues of epistemology, ideology and strategy. *Journal of Applied Linguistics*, 4(1), 5-32.
- Liu, Y., & Xu, Y. (2011). Inclusion or exclusion?: A narrative inquiry of a language teacher's identity experience in the 'new work order' of competing pedagogies *Teaching and Teacher Education*, 27(3), 589-597.
- Luckett, K., & Luckett, T. (2009). The development of agency in first generation learners in higher education: A social realist analysis. *Teaching in Higher Education*, 14(5), 469-481.
- Lundell, D. B., & Beach, R. (2003). Dissertation writers' negotiations with competing activity systems. In C. Bazerman & D. R. Russell (Eds.), *Writing selves/writing societies: Research from activity perspectives* (pp. 483-514). Fort Collins, Colorado: The WAC Clearinghouse and Mind, Culture, and Activity. Available at http://wac.colostate.edu/books/selves_societies/.
- Lupton, D. (1998). *The emotional self: A sociocultural exploration*. Thousand Oaks, California: Sage.
- Lynch, K. (2010). Carelessness: A hidden doxa of higher education. *Arts and Humanities in Higher Education: An International Journal of Theory, Research and Practice*, 9(1), 54-67.
- Maher, D., Seaton, L., McMullen, C., Fitzgerald, T., Otsuji, E., & Lee, A. (2008). 'Becoming and being writers': The experiences of doctoral students in writing groups. *Studies in Continuing Education*, 30(3), 263-275.
- Mahn, H., & John-Steiner, V. (2002). The gift of confidence: A Vygotskian view of emotions. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century : sociocultural perspectives on the future of education* (pp. 46-58). Oxford, UK: Blackwell Publishers.
- Malfroy, J. (2005). Doctoral supervision, workplace research and changing pedagogic practices. *Higher Education Research and Development*, 24(2), 165-178.

- Manathunga, C. (2005a). The development of research supervision: 'Turning the light on a private space'. *International Journal for Academic Development* 10(1), 17-30.
- Manathunga, C. (2005b). Early warning signs in postgraduate research education: A different approach to ensuring timely completions. *Teaching in Higher Education*, 10(2), 219-233.
- Manathunga, C. (2007a). Intercultural postgraduate supervision: Ethnographic journeys of identity and power. In D. Palfreyman & D. L. McBride (Eds.), *Learning and teaching across cultures in higher education* (pp. 93-113). Basingstoke: Palgrave Macmillan.
- Manathunga, C. (2007b). Supervision as mentoring: The role of power and boundary crossing. *Studies in Continuing Education*, 29(207-221).
- Manathunga, C., & Goozée, J. (2007). Challenging the dual assumption of the 'always/already' autonomous student and effective supervisor. *Teaching in Higher Education*, 12(3), 309-322.
- Mann, S. (2000). The student's experience of reading. *Higher Education*, 39(3).
- Marginson, S., Nyland, C., Sawir, E., & Forbes-Mewett, H. (2010). *International student security*. Cambridge: Cambridge University Press.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969.
- Maxwell, J. A. (2006). Literature reviews of, and for, educational research: A commentary on Boote and Beile's "Scholars before researchers". *Educational Researcher*, 35(9), 28-31.
- Maxwell, T. W., & Smyth, R. (2011). Higher degree research supervision: From practice toward theory. *Higher Education Research and Development*, 30(2), 219-231.
- McAlpine, L. (2009). *To be or not to be ... an academic? Identity construction and doctoral experience*. Paper presented at the American Educational Research Association, San Diego.
- McAlpine, L., & Amundsen, C. (2007). Academic communities and developing identity: The doctoral student journey. In P. B. Richards (Ed.), *Global issues in higher education* (pp. 57-83). Hauppauge, New York: Nova Science Publishers.
- McAlpine, L., & Amundsen, C. (2009). Identity and agency: Pleasures and collegiality among the challenges of the doctoral journey. *Studies in Continuing Education*, 31(2), 109-125.
- McAlpine, L., & Amundsen, C. (2011a). Making meaning of diverse experiences: Constructing an identity through time. In L. McAlpine & C. Amundsen (Eds.), *Doctoral education: Research-based strategies for doctoral students, supervisors and administrators* (pp. 173-183). London: Springer.
- McAlpine, L., & Amundsen, C. (Eds.). (2011b). *Doctoral education: Research-based strategies for doctoral students, supervisors and administrators*. London: Springer.
- McAlpine, L., Amundsen, C., & Jazvac-Martek, M. (2011). Living and imagining academic identities: Perceptions of doctoral students and pre-tenure academics In L. McAlpine & G. Akerlind (Eds.), *Becoming an academic: Empirical and theoretical perspectives on developing an academic career* (pp. 125-154): Palgrave Macmillan.
- McAlpine, L., & Ashgar, A. (2010). Enhancing academic climate: Doctoral students as their own developers. *International Journal for Academic Development*, 15(2), 167-178.
- McAlpine, L., Jazvac-Martek, M., & Gonsalves, A. (2008). The question of identity: Negotiating roles and voices in evolving academic systems. In R. Barnett & R. Di Napoli (Eds.), *Changing identities and voices in higher education: Voicing perspectives* (pp. 113-123). London: Routledge.

- McAlpine, L., Jazvac-Martek, M., & Hopwood, N. (2009). Doctoral student experience in Education: Activities and difficulties influencing identity development. *International Journal for Researcher Development*, 1(1), 97-112.
- McAlpine, L., & Norton, J. (2006). Reframing our approach to doctoral programs: An integrative framework for research and action. *Higher Education Research and Development*, 25(1), 3-17.
- McCallin, A., & Nayar, S. (2011 in press). Postgraduate research supervision: A critical review of current practice. *Teaching in Higher Education*, 1-12.
- McCormack, C. (2004). Tensions between student and institutional conceptions of postgraduate research. *Studies in Higher Education*, 29(3), 319-334.
- McCormack, C. (2009a). Postgraduate research students' experience: It's all about balancing living. In M. Tight, K. H. Mok, J. Huisman & C. C. Morphew (Eds.), *The Routledge International Handbook of Higher Education* (pp. 181-193). New York; London: Routledge.
- McCormack, C. (2009b). Stories return personal narrative ways of knowing to the professional development of doctoral supervisors. *Studies in Continuing Education*, 31(2), 141-156.
- Merriam, S. (1988). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.
- Merriam, S. (1998). *Qualitative research and case study applications in education (2nd ed.)*. San Francisco: Jossey-Bass.
- Mesquita, B., & Frijda, N. H. (1992). Cultural variations in emotions: A review. *Psychological Bulletin*, 112(2), 179-204.
- Miller, J. (1999). Becoming audible: Social identity and second language use. *Journal of Intercultural Studies*, 20(2), 149-165.
- Mishler, E. G. (1995). Models of narrative analysis: a typology. *Journal of Narrative and Life History*, 5(2), 87-123.
- Morita, N. (2000). Discourse socialization through oral classroom activities in a TESL graduate program. *TESOL Quarterly*, 34(2), 279-310.
- Morita, N. (2004). Negotiating participation and identity in second language academic communities. *TESOL Quarterly*, 38(4), 573-603.
- Morita, N. (2009). Language, culture, gender, and academic socialization. *Language and Education*, 23(5), 443-460.
- Morris, S. (2011). Doctoral students' experience of supervisory bullying. *Pertanika Journal of Social Sciences and Humanities*, 19(2), 547-555.
- Murphey, T., Chen, J., & Chen, L.-C. (2005). Learners' constructions of identities and imagined communities. In P. Benson & D. Nunan (Eds.), *Learners' Stories: Difference and Diversity in Language Learning* (pp. 83-100). Cambridge: Cambridge University Press.
- Murray, G. (2009). Narrative inquiry. In J. Heigham & R. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction* (pp. 45-65). Basingstoke: Palgrave Macmillan.
- Myles, J., & Cheng, L. (2003). The social and cultural life of non-native English speaking international graduate students at a Canadian university. *Journal of English for Academic Purposes*, 2(3), 247-263.

- Nerad, M., & Heggelund, M. (Eds.). (2008). *Toward a global PhD? Changes in doctoral education worldwide*. Washington DC: University of Washington Press.
- Neumann, R. (2007). Policy and practice in doctoral education. *Studies in Higher Education*, 32(4), 459-473.
- Neumann, R. (2009). Policy driving change in doctoral education: An Australian case study. In D. Boud & A. Lee (Eds.), *Changing practices of doctoral education* (pp. 211-224). London: Routledge.
- Norton, B. (2000). *Identity and language learning: Gender, ethnicity and educational change*. London: Longman.
- Novera, I. A. (2004). Indonesian postgraduate students studying in Australia: An examination of their academic, social and cultural experiences. *International Education Journal*, 5(4), 475-487.
- Nulty, D., Kiley, M., & Meyers, N. (2009). Promoting and recognising excellence in the supervision of research students: an evidence-based framework. *Assessment and Evaluation in Higher Education*, 34(6), 1-15.
- Nyland, C., Forbes-Mewett, H., & Marginson, S. (2010). The international student safety debate: Moving beyond denial. *Higher Education Research and Development*, 29(1), 89-101.
- Ochs, E., & Capps, L. (1996). Narrating the self. *Annual Review of Anthropology*, 25(1), 19-43.
- OECD. (2011). *Education at a Glance 2011: OECD Indicators*: OECD Publishing.
- O'Malley, M. J., Chamot, A. U., Stewner-Manzanares, G., Russo, R. P., & Kupper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19(3), 557-584.
- Oropeza, M. V., Varghese, M. M., & Kanno, Y. (2010). Linguistic minority students in higher education: Using, resisting, and negotiating multiple labels. *Equity and Excellence in Education*, 43(2), 216-231.
- Overall, N. C., Deane, K. L., & Peterson, E. R. (2011). Promoting doctoral students' research self-efficacy: Combining academic guidance with autonomy support. *Higher Education Research & Development*, 1-15.
- Owens, A. R., & Loomes, S. L. (2010). Managing and resourcing a program of social integration initiatives for international university students: What are the benefits? *Journal of Higher Education Policy and Management*, 37(3), 275-290.
- Palfreyman, D. (2005). Othering in an English language programme. *TESOL Quarterly*, 39(2), 211-234.
- Paltridge, B. (2002). Thesis and dissertation writing: An examination of published advice and actual practice. *English for Specific Purposes*, 21(2), 125-143.
- Paltridge, B., & Starfield, S. (2007). *Thesis and dissertation writing in a second language : A handbook for supervisors*. London: Routledge.
- Paré, A. (2010a). Making sense of supervision: Deciphering feedback. In P. Thomson & M. Walker (Eds.), *The Routledge doctoral student's companion: Getting to grips with research in education and the social sciences* (pp. 107-115). London: Routledge.
- Paré, A. (2010b). Slow the presses: Concerns about premature publication. In C. Aitchison, B. Kamler & A. Lee (Eds.), *Publishing pedagogies for the doctorate and beyond* (pp. 30-46). New York: Routledge.

- Paré, A. (2011). Speaking of writing: Supervisory feedback and the dissertation. In L. McAlpine & C. Amundsen (Eds.), *Doctoral education: Research based strategies for doctoral students, supervisors and administrators* (pp. 59-74). London: Springer.
- Parker, R. (2009). A learning community approach to doctoral education in the social sciences. *Teaching in Higher Education*, 14(1), 43-54.
- Pavlenko, A. (2007). Autobiographic narratives as data in applied linguistics. *Applied Linguistics*, 28(2), 163-188.
- Pavlenko, A., Blackledge, A., Piller, I., & Teutsch-Dwyer, M. (Eds.). (2001). *Multilingualism, second language learning and gender*. New York: Mouton de Gruyter.
- Pearson, M. (1996). Professionalising Ph.D. education to enhance the quality of the student experience. *Higher Education* 32, 303-320.
- Pearson, M. (1999). The changing environment for doctoral education in Australia: Implications for quality management, improvement and innovation. *Higher Education Research and Development*, 18(3), 269-285.
- Pearson, M. (2005). Framing research on doctoral education in Australia in a global context. *Higher Education Research and Development*, 24(2), 119-134.
- Pearson, M., & Brew, A. (2002). Research training and supervision development. *Studies in Higher Education*, 27(2), 135-150.
- Pearson, M., Cumming, J., Evans, T., Macauley, P., & Ryland, K. (2008). Exploring the extent and nature of the diversity of the doctoral population in Australia: A profile of the respondents to a 2005 national survey. In M. Kiley & G. Mullins (Eds.), *Quality in Postgraduate Research: Research education in the new global environment* (pp. 90-114). Canberra: Australian National University.
- Pearson, M., Cumming, J., Evans, T., Macauley, P., & Ryland, K. (2011). How shall we know them? Capturing the diversity of difference in Australian doctoral candidates and their experiences. *Studies in Higher Education*, 36(5), 527-542.
- Pearson, M., Evans, T., & Macauley, P. (2004). The working life of doctoral students: Challenges for research education and training. [Editorial]. *Studies in Continuing Education*, 26(3), 347-353.
- Pearson, M., & Kayrooz, C. (2004). Enabling critical reflection on research supervisory practice. *International Journal for Academic Development*, 9(1), 99-116.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37(2), 91-105.
- Phan, L. H. (2009). Strategic, passionate, but academic: Am I allowed in my writing? *Journal of English for Academic Purposes*, 8(2), 134-146.
- Pilbeam, C., & Denyer, D. (2009). Lone scholar or community member? The role of student networks in doctoral education in a UK management school. *Studies in Higher Education*, 34(3), 301-318.
- Polkinghorne, D. E. (1998). *Narrative knowing and the human sciences*. Albany, NY: State University of New York Press.
- Portelli, A. (1991). *The death of Luigi Trastulli and other stories: Form and meaning in oral history*. Albany, NY: State University of New York Press.
- Pratt, M. L. (1992). *Imperial eyes: Travel writing and transculturation*. London: Routledge.

- Quiddington, P. (2009, June 3). Attacks cast a sinister shadow. *The Australian*.
- Riazi, A. (1997). Acquiring disciplinary literacy: A social-cognitive analysis of text production and learning among Iranian graduate students of Education. *Journal of Second Language Writing*, 6(2), 105-137.
- Richards, K. (2003). *Qualitative inquiry in TESOL*. Basingstoke, Hampshire: Palgrave Macmillan.
- Richards, K. (2009). Interviews. In J. Heigham & R. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction* (pp. 182-199). Basingstoke: Palgrave Macmillan.
- Richards, K. (2011). Using micro-analysis in interviewer training: 'Continuers' and interviewer positioning. *Applied Linguistics*, 32(1), 95-112.
- Richardson, L. (1998). Writing: A method of inquiry. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 345-371). London: Sage.
- Richardson, L. (2003). Poetic representation of interviews. In J. F. Gubrium & J. A. Holstein (Eds.), *Postmodern interviewing* (pp. 187-201). Thousand Oaks, CA: Sage.
- Ridley, D. (2004). Puzzling experiences in higher education: Critical moments for conversation. *Studies in Higher Education*, 29(1), 91-107.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. London: Sage.
- Robertson, M., Line, M., Jones, S., & Thomas, S. (2000). International students, learning environments and perceptions: A case study using the Delphi technique. *Higher Education Research and Development*, 19(1), 89-102.
- Rose, M., & McClafferty, K. A. (2001). A call for the teaching of writing in graduate education. *Educational Researcher*, 30(2), 27-33.
- Roth, W.-M. (2004). Activity theory and education: An introduction. *Mind, Culture and Activity*, 11(1), 1-8.
- Russell, D. R. (1997). Rethinking genre and society: An activity theory analysis. *Written communication*, 14(4), 504-551.
- Ryan, J., & Viète, R. (2009). Respectful interactions: Learning with international students in the English-speaking academic. *Teaching in Higher Education*, 14(3), 303-314.
- Sawir, E., Marginson, S., Deumert, A., Nyland, C., & Ramia, G. (2008). Loneliness and international students – an Australian study. *Journal of Studies in International Education* 12(2), 148-180.
- Scardamalia, M., & Bereiter, C. (1987). Knowledge telling and knowledge transforming in written composition. In S. Rosenberg (Ed.), *Advances in applied psycholinguistics: Reading, writing, and language learning* (pp. 142-175). Cambridge: Cambridge University Press.
- Schutz, P. A., Hong, J. Y., Cross, D. I., & Osbon, J. N. (2006). Reflections on investigating emotion in educational activity settings. *Educational Psychology Review*, 18(4), 343-360.
- Sheets-Johnstone, M. (2009). Animation: The fundamental, essential, and properly descriptive concept. *Continental Philosophy Review*, 42(3), 375-400.
- Shen, F. (1998). The classroom and the wider culture: Identity as a key to learning English composition. In V. Zamel & R. Spack (Eds.), *Negotiating academic literacies* (pp. 123-134). Mahwah, NJ: Lawrence Erlbaum.
- Sheridan, V. (2011). A holistic approach to international students, institutional habitus and academic literacies in an Irish third level institution. *Higher Education*, 62(2), 129-140.

- Sherry, M., Thomas, P., & Chui, W. H. (2011). International students: A vulnerable student population. *Higher Education*, 60(1), 33-46.
- Silverman, D. (2007). Anthropology, interviewing, and communicability in contemporary society: Comments. *Current Anthropology*, 48(4), 572-573.
- Simpson, S., & Matsuda, P. K. (2008). Mentoring as a long-term relationship: Situated learning in a doctoral program. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school: Insiders' reflections on academic enculturation* (pp. 90-104). Ann Arbor: University of Michigan press.
- Singh, M., & Cui, G. (2011). Internationalising Western doctoral education through bilingual research literacy. *Pertanika Journal of Social Sciences and Humanities*, 19(2), 535-545.
- Skyrme, G. (2007). Entering the university: the differentiated experience of two Chinese international students in a New Zealand university. *Studies in Higher Education*, 32(3), 357-372.
- Sommers, N., & Saltz, L. (2004). The novice as expert: Writing in the freshman year. *College Communication and Composition*, 56(1), 124-149.
- Spack, R. (1997a). The acquisition of academic literacy in a second language; a longitudinal case study. *Written Communication*, 14(1), 3-62.
- Spack, R. (1997b). The rhetorical construction of multilingual students. *TESOL Quarterly*, 31(4), 765-774.
- Spencer-Oatey, H. (2000). Rapport management: A framework for analysis. In H. Spencer-Oatey (Ed.), *Culturally speaking: Managing rapport through talk across cultures* (pp. 11-46). London: Continuum.
- Starfield, S. (2002). "I'm a second-language English speaker": Negotiating writer identity and authority in sociology one. *Journal of Language, Identity and Education*, 1(2), 121-140.
- Starfield, S. (2010). Fortunate travellers: Learning from the multiliterate lives of doctoral students. In P. Thomson & M. Walker (Eds.), *The Routledge doctoral supervisor's companion* (pp. 138-146). London: Routledge.
- Starfield, S., & Ravelli, L. J. (2006). 'The writing of this thesis was a process that I could not explore with the positivistic detachment of the classical sociologist': Self and structure in New Humanities research theses. *Journal of English for Academic Purposes*, 5(3), 222-243.
- Starke-Meyerring, D. (2011). The paradox of writing in doctoral education: Student experiences. In L. McAlpine & C. Amundsen (Eds.), *Doctoral education: Research -based strategies for doctoral students, supervisors and administrators* (pp. 75-95). London: Springer.
- Summers, M., & Volet, S. (2008). Students' attitudes towards culturally mixed groups on international campuses: Impact of participation in diverse and non-diverse groups. *Studies in Higher Education*, 33(4), 357-370.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15(4), 327-358.
- Talmy, S. (2010). Qualitative interviews in Applied Linguistics: From research instrument to social practice. *Annual Review of Applied Linguistics*, 30, 128-148.
- Tananuraksakul, N. (2009). Unintelligibility: World Englishes shock and repetition shock in an Australian context. *Prospect*, 24(2), 42-52.

- Tardy, C. M. (2005). "It's like a story": Rhetorical knowledge development in advanced academic literacy. *Journal of English for Academic Purposes*, 4(4), 325-338.
- Taylor, C. A. (2011). More than meets the eye: The use of videonarratives to facilitate doctoral students' reflexivity on their doctoral journeys. *Studies in Higher Education*, 36(4), 441-458.
- Taylor, P. (2008). Being an academic today. In R. Barnett & R. Di Napoli (Eds.), *Changing identities in higher education: Voicing perspectives* (pp. 27-39). London: Routledge.
- Thein, A. H., & Beach, R. (2010). Mentoring doctoral students towards publication within scholarly communities of practice. In C. Aitchison, B. Kamler & A. Lee (Eds.), *Publishing pedagogies for the doctorate and beyond* (pp. 117-136). London: Routledge.
- Thomson, P., Byrom, T., Robinson, C., & Russell, L. (2010). Learning about journal publication: The pedagogies of editing a 'special issue' In C. Aitchison, B. Kamler & A. Lee (Eds.), *Publishing pedagogies for the doctorate and beyond* (pp. 137-156). New York: Routledge.
- Thomson, P., & Kamler, B. (2010). It's been said before and we'll say it again - research is writing. In P. Thomson & M. Walker (Eds.), *The Routledge Doctoral Supervisor's Companion, Volume 1* (pp. 149-160). London: Routledge.
- Thomson, P., & Walker, M. (Eds.). (2010). *Routledge doctoral student's companion: Getting to grips with research in education and the social sciences*. London; New York: Routledge.
- Tonso, K. (2006). Student engineers and engineer identity: Campus engineer identities as figured world. *Cultural studies of science education*, 1(2), 273-307.
- Torrance, M., Thomas, G. V., & Robinson, E. J. (1993). Training in thesis writing: An evaluation of three conceptual orientations. *British Journal of Educational Psychology*, 63, 170-184.
- Trahar, S. (2011). *The doctorate: International stories of the UK experience*. Bristol: University of Bristol.
- Trahar, S., & Hyland, F. (2011). Experiences and perceptions of internationalisation in higher education in the UK. *Higher Education Research & Development*, 30(5), 623-633.
- Tsolidis, G. (2001). New cultures new classrooms: international education and the possibility of radical pedagogies *Pedagogy, Culture & Society*, 9(1), 97-110.
- Vardi, I., & Quin, R. (2011). Promotion and the Scholarship of Teaching and Learning. *Higher Education Research and Development*, 30(1), 39-49.
- Vehvilainen, S. (2009). Student-initiated advice in academic supervision. *Research on language and social interaction*, 42(2), 163-190.
- Wang, T., & Li, L. Y. (2011). Tell me what to do' vs. 'guide me through it': Feedback experiences of international doctoral students. *Active Learning in Higher Education*, 12(2), 101-112.
- Webster, L., & Mertova, P. (2007). *Using narrative inquiry as a research method: An introduction to using critical event narrative analysis in research on learning and teaching*. London: Routledge.
- Weiss, M. L., & Ford, M. (2011). Temporary transnationals: Southeast Asian students in Australia. *Journal of Contemporary Asia*, 41(2), 229-248.
- Wellington, J. (2010). More than a matter of cognition: An exploration of affective writing problems of post-graduate students and their possible solutions. *Teaching in Higher Education*, 15(2), 135-150.

- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wodak, R. (1996). *Disorders of discourse*. Harlow: Longman.
- Zappa-Hollman, S. (2007). Academic presentations across post-secondary contexts: The discourse socialization of non-native English speakers. *Canadian Modern Language Review*, 63(4), 455-485.
- Zembylas, M. (2004). The emotional characteristics of teaching: An ethnographic study of one teacher. *Teaching and Teacher Education*, 20(2), 185-201.
- Zhao, C.-M., Golde, C. M., & McCormick, A. C. (2007). More than a signature: How advisor choice and advisor behaviour affect student satisfaction. *Journal of Further and Higher Education*, 31(3), 263-281.
- Zhu, W., & Cheng, R. (2008). Negotiating the dissertation literature review: The influence of personal theories. In C. P. Casanave & X. Li (Eds.), *Learning the literacy practices of graduate school* (pp. 134-149). Ann Arbor: University of Michigan Press.

Appendix A Online Survey

Crossing Borders Phase One

- your language background and
- your initial impressions of Australia and Macquarie University.

Your questionnaire responses will be recorded in a database but you will not be identified in the final research.

5. Background

1) Which country are you from?

2) When did you arrive in Australia?

3) Why did you decide to enrol for postgraduate study in Australia? (Tick as many boxes as are applicable.)

- ☐ Reputation of Macquarie University
- ☐ Reputation of academic staff of Macquarie University
- ☐ Macquarie University awarded me a scholarship
- ☐ Other (please specify)

4) Have you lived in any country other than your home country and Australia?

- ☐ Yes
- ☐ No (selecting "no" will take you to Question 6)

6. Countries lived in (other than home country and Australia)

5) Please write the name of the country or countries here:

7. Language skills

6) What is your highest English language qualification? (Please name the test and your score e.g. TOEFL 550, IELTS 6.5 etc)

Crossing Borders Phase One

1. Information about the Study

You are invited to participate in this research project related to your studies at Macquarie University.

The purpose of the study is to explore the experiences of international students who are completing higher degrees at Macquarie University.

The study is being conducted by Sara Cotterell (sara.cotterell@students.mq.edu.au), Tel: 9850 8749) to meet the requirements for the degree of Doctor of Philosophy in Linguistics under the supervision of Associate Professor David Hall (David.Hall@ling.mq.edu.au), Department of Linguistics, Macquarie University, Tel: 9850 9647) and Professor Anne Burns (Anne.Burns@ling.mq.edu.au, Department of Linguistics, Macquarie University, Tel: 9850 8604).

2. Participating in the Study

If you decide to participate in the study, you will be asked to complete an **anonymous online survey**. The survey asks you about

- your English language skills
- your impressions of Australian English
- your experiences during your first few weeks in Australia

The questionnaire should take no longer than 10 minutes to complete. Your responses will be added to an electronic database. At the end of the survey you will also be invited to provide your contact details should you be willing to meet for a follow-up discussion to be arranged several weeks later.

3. Participant Consent

Any information or personal details gathered in the course of the study are **confidential**. **No individual will be identified in any publication of the results**. Only the researcher and her supervisors will have access to the data, which will be kept secure.

Should you be interested in obtaining information on the overall findings of the study, you are invited to contact the researcher (sara.cotterell@students.mq.edu.au) and request a summary of the results, once the study has been concluded.

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research). If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Ethics Review Committee through its Secretary (Tel: 9850 7854; Email: ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Participant Consent

- ☐ I give my voluntary informed consent to participate in this research project.
- ☐ I understand that I may withdraw at any time without prejudice or negative consequences.
- ☐ I understand that my responses will be anonymous and confidential, unless I choose to include identifying information as part of my answers.

4. Introduction to the Questionnaire

In this questionnaire I want to ask you about

Crossing Borders Phase One

7) How confident were you about your English language skills before arriving in Australia?

- ☐ Very confident
- ☐ Confident
- ☐ Not confident
- ☐ Other (please specify)

8) What were your impressions of the English you heard when you first arrived in Australia?

- ☐ Easy to understand
- ☐ OK to understand
- ☐ Difficult to understand
- ☐ Other (please specify)

9) How confident are you about using English in Australia now in social situations?

- ☐ Very confident
- ☐ Confident
- ☐ Not confident
- ☐ Other (please specify)

10) How confident are you about using English in Australia now in academic situations?

- ☐ Very confident
- ☐ Confident
- ☐ Not confident
- ☐ Other (please specify)

8. Challenges

Crossing Borders Phase One

11) What was the most difficult challenge you faced in your first few weeks in Australia? (Tick all the boxes that are applicable.)

- ☐ Understanding the English that people spoke to me
- ☐ Getting others to understand my English
- ☐ Homesickness
- ☐ Finding accommodation
- ☐ Other (please specify)

Thank you for taking the time to answer the questionnaire.

I would like to organise a discussion on campus with a group of international students about the experience of arriving in Australia and beginning to study at Macquarie University. The discussion will be scheduled within the next 2-3 weeks. It will last no longer than 60 minutes and will be audiotaped (to help me analyse responses later).

Would you be willing to take part?

- ☐ Yes
- ☐ No

9. Invitation to Participate in a Focus Discussion Group

If you are willing to take part in a discussion, please click [here](#).

Thank you. I will contact you within the next three weeks.

Sara Cotterall (sara.cotterall@students.mq.edu.au)

10. Thank you

Thank you for taking the time to complete the questionnaire.

Sara Cotterall (sara.cotterall@students.mq.edu.au)

Appendix B Focus Group Discussion Questions

Crossing borders: A narrative study of international higher degree research students' experiences of language, learning and identity at university

Introduction

You recently completed my online survey about your experiences and impressions associated with arriving in Australia and enrolling at university as a Higher Degree Research student. In this discussion I want to ask you more about your experience of the first six months in Australia and at university. The discussion will be audio-recorded but you will not be identified in the final research.

Expectations and Experiences

1. Before arriving in Australia, what did you expect **living in Australia** would be like? In what way is Australia different to your expectations?
2. What was **the most surprising** aspect of your first month of living in Australia? Why?
3. What was **the most difficult** aspect of your first month of living in Australia? Why?
4. What did you expect **studying at university in Australia** would be like? In what ways is studying at university in Australia different to what you expected?
5. Do you have any other comments on your experiences so far that you would like to make about:
 - Accommodation, internet provision etc.
 - Business, service, transport
 - Finances – cost of living
 - University administration, welcome, orientation
 - Your department – getting started, meeting your supervisor, other students, facilities, knowing what you were doing

Thank you for taking part in the discussion. [\[sara.cotterall@gmail.com\]](mailto:sara.cotterall@gmail.com)

Appendix C Sample Interview Guide

Catch-up

- What have you been doing since we last met up? What were your principal activities over that time? (presentations, papers, conferences, seminars)

Follow-up

1. You mentioned in our third interview that there was some discussion about the order in which you would list your co-authors? Has that issue been resolved? How?
2. Have you heard back from the reviewers of the journal article that you submitted in April this year?

Focus – today

3. How do you **feel** about your PhD work at this point in time?
4. What has been the **highlight** of your doctoral journey so far this year? Why?
5. What has been the **most challenging aspect** of your doctoral journey so far this year? Why?
6. What are your **plans for the rest of 2010**? [Are you still going to xxxxx in October? What is the purpose of that visit? When do you return?]
7. Is there anything else that you would like to tell me about your PhD experience at this point?

Appendix D Sample Transcript

Journey, Interview Six, Thursday 2nd June, 2011 (78 mins)

[This is the transcript of Journey's final interview, recorded three months before he submitted his thesis. It was decided to include this transcript since in it, Journey makes many interesting and insightful retrospective comments on his experience of the PhD. The transcript provides a representative example of the relaxed conversational nature of the interviews, and includes some instances where the researcher shares her experiences. Journey explicitly agreed to this transcript being included in the thesis. Because the transcript was reformatted for the thesis, line numbers in the interview may vary from those of excerpts cited in the thesis.]

- J ... two or three times meeting together
- S Mmm hmm
- J And also through emails, ah - ⁹he was at that time preparing to go on leave ah in Europe, so yeah, he provided me feedback and then I rewrite –
- S = worked with it
- J - the paper and then send again by the time he was already somewhere in Europe –
- S Yeah
- J - and ah yeah before before before that we met yeah the last time here
- S Face to face?
- J Yeah, face to face, the three of us, yeah they want to yeah convince me that it's good ah and they want to make sure that I will ah add some more contents
- S Mmm hmmm
- J Ah because the idea was good, but it's –
- S It needed something more
- J Yeah, some work to do so yeah, the final meeting was about that and then I I went to work on the draft and then sent when one of them was already in Europe
- S Right
- J So he provided me again ah feedbacks, and I mostly consulted with -
- S The guy here?

⁹ Journey is talking about his new (replacement) second supervisor. This is the first paper he has co-authored with him (and his first supervisor is again a co-author)

J - yeah, the guy here, ah technical editings and yeah I was in a rush to submit by the I think 31st of December, so that was the deadline, and yeah I I submitted it January 1

S [laughs]

J Yeah

S You could pretend it was a day later here!

J After went to Balmain and watched the fireworks [laughs]

S [laughs]

J And yeah –

S It's quite memorable isn't it?

J So yeah I contacted the the journal editors of the Special Issue and that person said "It's ok"

S No problem?

J Yes

S They were probably on holiday anyway!

J Yeah, so yeah they they received the submission and letting me know they send it already to reviewers and they said they will keep me informed ah when it's done

S Yeah

J But it's been some times –

S So you still haven't heard?

J I haven't heard

S That's very slow.

J I send I send an email two or three weeks ago, I received a reply already and they say

S It's still with reviewers?

J Yes there are many papers submitted for the – so they took longer time to to ah process everything –

S Was this one that you were invited to submit to?

J No, it's not

S So you're competing with other –

J Yes, I'm competing with with with other papers. It's yeah – we consider a number of -

S = journals

J = journals at that time when we discuss together with the two supervisors

S Yeah

J So ah we choose this one because it opens the possibility especially for developing countries perspective –

S Ah, good

J They focus more on inter-country study

S Right ...

J Ah, that's –

S So you should have a better chance?

J Ah, yeah –

S With the developing country stuff, not the inter-country stuff

J Yeah, that's one of the key issue that I would probably not have a right fit but yeah we consider it's still good to give the perspective from countries like Indonesia which is not really well represented in journals

S Right, right, right

J So that's the point we -

S So you're not competing with a thousand other Indonesian academics? [5:00 minutes]

J No, it's it's -

S That's going to be one of your key advantages from now on

J Yeah, I hope, yeah, I hope that's the ah key issue that we offer

S Yeah, well fingers crossed for that one.

J Yeah, so I'm I'm waiting I think to hear the result. It may be very soon

S I think it's quite delicate that follow-up with emails is essential but you can't do it too soon –

J No

S - or you irritate them, but I have found that with the ones that I've submitted to – enormous differences in their um — you know the time it takes? And there was one where the day I submitted, he sent an automatic email saying “we warn you that it takes two years” or something like that

J Wow

S - they actually rejected the paper, but they were quick to reject it which is actually really good –

J Yeah

S - because - I mean it's terribly sad to be rejected -

J Yeah

S - and I was in Canada and I was devastated -

J Yeah

S - but you get over these things ...

J Yeah

S But if it's quick to reject, you can then react

J Sure

S - revise it, and go somewhere else, which is what I'm doing with it at the moment

J Yeah

S If they take a year to read and get back to you and then reject –

J Yeah, that's really crazy! [laughs]

S But when I showed my supervisor this email where I got this automatic reply "it will take two years" — he said "That's just not good enough". I think I think it's right. Sorry to divert but it's like Australia's processing of asylum seekers' applications. It's not good enough that it takes them 18 months, you know? But anyway, yeah, so basically this period has been - a large part of it has been revising and working on papers?

J Yes

S And you're near the end of that process now?

J Yes

S But you've also simultaneously been doing some shaping of the framing of the thesis

J Yeah, so yeah, so yeah the third paper finished, submitted, waiting for the result now. While doing this, I keep on writing the fourth one –

S Yep

J - the one that I co-authored with with colleagues from the Netherlands –

S Right

J - which I visited the university and had some discussions, so it took some times to go back and forth between us -

S Of course!

J - and especially I focus more on this paper when she was here –

S Yeah

J - she came to -

S [Name of Journey's university]

J No, [name of another Sydney university]

S Right

J She is now a Professor there as well

S Oh, ok

J So have positions still in the Netherlands but also here

S Oh I see

J So she was here about three or four months, yeah we work on the paper

S How recently was she here? Was that before, was that after I saw you? After October?

J After October. It started on the new semester, so January she was here –

S Oh, ok

J January to April, late March

S Yeah, so that must be a lot easier working face to face

J Yes, yes, so I finished the draft from my view and send to her, she read and then provided me some comments and then we –

S Physically met?

J Physically met, yes.

S Yeah, yeah, great

J Ah

S But [Journey] can I interrupt? Because it seems to me that again one of the advantages of the thesis by publication is that um some of your six papers, they'll be in different stages even when you submit, and in some ways, as an academic –

J Yeah

S - that is a totally normal state of affairs. You know? Like, maybe we would have a kind of feeling that to be neat and tidy, everything will be submitted and accepted by the time – but that's not how it works!

J Yeah, yeah

S And so to some extent maybe you and I both have to accept that some of them will be finished in some sense, but others will be works in progress, but the really positive way I view that is that this is the sort of transition into your post-doctoral life where you continue being an academic, you continue being a co-author with international colleagues –

J Yeah

S - and this PhD has been a wonderful platform for you -

J Sure, sure

S - in publication

J Yes, so, yeah, I entirely agree. It is the life of academics and and yeah you would keep on doing different things sometimes simultaneously sometimes ah in certain order but it's not yeah clear – [10:23]

S No [laughs]

J - line of time that you finish this and then you do that

S Not at all

J Yeah, sometimes it's just ah yeah, things go ah yeah one interrupt the other

S Exactly and you've got to be flexible

J Sure, yes

S Because I imagine, particularly in the future, once you're no longer here, once an opportunity arises at a conference –

J Yes

S - and some international colleague says you know "Professor [family name], would you like to work with us on this?"

J Yes, sure

S You don't say "no"; you do not say "no, I've got too much to do"

J And, and, yeah, at the time I have to postpone things like that, so I met a colleague from Finland, she did her research about ah the transition of HRM practices in China

S In China?

J Yes

S A Finnish woman?

J Ah, a Chinese woman

S Oh, a Chinese woman

J A Chinese woman but now now live in in Finland

S Right

J She's maybe now a Finnish ah - by citizenship

S Right. So her study is not unlike your study in Indonesia, of HRM practices in Indonesia

J Yeah, so, yeah we met twice I think, one in the USA when I attended the conference there. The other time we met in Birmingham

S Mmm, hmm

J So we we found that we have some –

S Common interests?

J Yeah, common interests and cases we studied yeah look like yeah would be good to to do some comparative analysis -

S Mmm

J - so yeah, ah, the idea was ah yes we we talked about that one evening in Birmingham but then she came back I think March and asking again whether we would like to -

S Has she finished her PhD?

J She – not yet. She’s still finishing her thesis

S But she has time to do it now, so that’s hard, yeah.

J Yeah, but yeah I have to say that-

S Not just at the moment!~

J - it’s difficult at that time and we might have to postpone it and see how things going

S Yeah

J But yeah it’s sometimes things like that come and you don’t – at the time you don’t expect to that to comes up

S Yeah, [Journey] my experience from my previous academic work would be not sometimes, very often

J Yeah, yeah

S And and I think there’s a beautiful word in English, I don’t know if you’ve heard it – serendipity –

J Yeah

S You know, sometimes you have to say yes even when you should say no

J [laughs] Yeah, yeah

S [laughs] and it’s just serendipitous to do it like that

J Yeah, yeah

S Um, yeah, I think that’s probably one of the main tensions of academic work. I mean, when I – there’s a very very very famous applied linguist in this department called [name of academic] and you know that expression of having a lot of balls in the air? I don’t know how he does what he does. Sometimes he sends us an email and says these are the books I’ve published in the last six months –

J Yeah

S Not *papers*, *books*

J Yes

S But he’s collaborating with a vast international network and you know I guess you – you develop different systems and and you – he also doesn’t do a lot of teaching. He does supervision but that’s all, you know so at different points in people’s career they’ve got more support and so on. But I mean this is the world we’re part of isn’t it?

J Yeah

S Ok, so that that – does that kind of bring us up to now? You’ve mostly been working on the papers -

J Yes

S - and so on

J Yeah, still finishing the papers and yeah. Yeah I also just something that's not part of the project but it's about the idea that I'm studying and when I was in the Netherlands, we agreed – I and - [15:00]

S The Chinese woman? Oh, another one?

J - a colleague, no it's – not the one that I collaborate in in writing at the moment –

S So your network is really growing?

J Yeah, I develop it, yeah [laughs]

S It's great!

J And we agreed to start a collaborative project based on the research of a Masters degree student, so we create yeah just propose an idea to study about the HRM in Indonesia and the student agreed to take the project and yeah I was expecting that she could come to Indonesia at that time but ah it's very difficult in terms of the financial support and maybe other considerations, so she just ah conducted ah phone interviews with with the managers ... it's difficult in Indonesia to do that because you don't know people –

S And this is a culture where relationships are so important.

J Sure, sure so, sometimes when when I started to contact, yeah the HR professionals from here, say “No, no, no, no”. Oh my God, so how should – how could I -?

S Yeah, get the information

J But when I was in the field, yeah it's sometimes -

S = How interesting

J = connections, ah alumni of the – of my university

S Yeah, yeah

J - so something goes and then you can enter there in a network and then

S Absolutely, and that's not irrelevant to the topic of HR is it?

J Yeah, yeah

S I mean it's how networks work. Yeah.

J So that's that's a side project that we did, the student already finished the –

S Wow!

J - the research. She has finished the thesis as well.

S Is she an Indonesian student?

J No, she's she's a Dutch student and it's good to to extend the ideas that I'm working with and she took a slightly different angle to see that so, to some extent enrich me as well -

S Sure, sure

J - although yeah with my current papers, there are some connections. That's good, it gives me more information about what I'm doing so yeah, we – that's part of the the offers and things that come that you may not expect

S But but it's a very positive -

J Surely, yes

S - outcome of it all. If I ask you now then to try and step back from it a bit, ideally this question I'd ask you after you've finished –

J Yeah

S - but I may not have the chance. Um, if you look back on the whole time of being a Phd student, um, how shall I put this – what would you identify as some of the high points and low points if there were any?

J Ah, ah, so what is the criteria for high and low?

S I guess in terms of you know pleasure or achievement –

J Ok

S - or a sense of –

J Yeah, yeah

S - understanding, insight, that kind of thing and the other might be quite emotional, but just feeling that it's too much or that sort of thing

J It's a bit difficult to –

S Yeah, it's three plus years, isn't it and –

J And, so you know when I started this process of doing my PhD, and maybe I have already mentioned in previous interviews so, for me, it's not only to do my PhD –

S Mmm hmmm

J - ah, and doing PhD or doctoral degree may be compared to what happen in in other countries, especially Indonesia, so we just go and and take courses, finish all them and at the end of the programme doing a research and then write the –

S thesis

J - thesis and submit it, defend your work and that's all, finish, you got your degree.

[20:00]

S Mmm

J We were in in a struggle to to yeah convince ourself that like other academics, like other universities, research is central part of the business of the university of us as academics and publication is like the fruits of ah. So it's – in that perspective I put my my PhD life, so I have to – and taking this thesis by publication for my PhD is a way to achieve that goal as well, so not only doing this and get the degree but also showing that we we *can* do research and

publication, that is accepted in the level that we would not maybe imagine to achieve when I do that in Indonesia.

S I'm totally fascinated that you respond to that question – “we”.

J Yeah

S I think that really answers everything

J Yeah

S Because it was your *collective* –

J Yeah, sure

S - goal and you see yourself very much as a member of your department –

J Sure

S - and of your university and and of the future and leading the younger academics, don't you?

J Sure

S That's very very interesting.

J If I, yeah should put what I- I'm not finished yet –

S No

J - but if I should put what is the most yeah ah the the heaviest

S Mmm, the greatest achievement, the most fulfilling – whatever words –

J Yes, that would be that way, so

S And what would that be? Would that be the fact of having published or would it be the fact of having gone the whole journey, learning what you've learned?

J Yes

S More the latter?

J Yes, I I - maybe yeah I tried to be considerate to choose my –

S Your pseudonym?

J - yes, the name –

S You certainly were. It comes up every time

J Yes and that's all about I think a learning process, an achievement to reinforce that process, so and sharing the experience I have and and hope that this will yeah like a –

S Model?

J - yeah wheel of vehicle and goes much –

S Yeah, speeds up?

J Yeah, and it's not only myself –

S No

J - but especially my colleagues there

S Yeah

J So what I consider that we *can*!

S Of course! Did you doubt that at the beginning?

J Not really. It's yeah I don't know but I haven't – I didn't have any proof, come from my my position at that time

S So now you've got evidence?

J Yeah. We have, we have evidence from other colleagues

S Mmm hmm

J Only very few persons that ah could publish during or after their PhD but at least -

S There's some

J - there's some evidence there but the doubt was very big and we could not convince them that we *can*

S When you say – “we” – are you thinking – your department, your faculty? How big are you thinking?

J Ah –

S Who's your “we”?

J The immediate environment is my faculty

S Yeah, yeah

J - colleagues in the faculty -

S Yeah

J - but it's part of ah yeah –

S - the whole university

J - bigger ah

S - and academia and [24: 48]

J Sure, yes. So, yeah, colleagues there they doubted that we could do that. If we take examples from other universities outside Indonesia, that's not comparable. We are as we are in Indonesia –

S Right

J - Don't compare us with those academics, those universities. But yes, you are an academic. Ah, you are a person that live in a university with certain kind of responsibilities that you should deliver to to - yeah at least it is feelled by your peer academics from anywhere in the world that you are an academic still. So that's yeah –

S Mmm. So that was a strong motivation?

J Yeah, sure, yes.

S And therefore, you know, a big sense of achievement. What about challenges?

J It's very big I think. Can I? – when I started – that's the point.

S What was the scariest part? How would you – where did the biggest challenge – Was it just in self-belief or was it actual technical things, or ...?

J I think it's a combination of things –

S Yeah

J - so I ah I did my Master in the Netherlands –

S Yeah

J - as I mentioned –

S - which must have been a source of confidence?

J Yes

S That you'd successfully negotiated and completed that?

J Yes and it gave me yeah some ah “capital”, if you would like to say that

S Yeah, cultural capital, yeah

J Yes, also when I registered here, that's the evidence I used that I have capability to do research independently–

S Sure

J - this is my proofs, some publications, although it's in Indonesian, but still -

S Sure

J - when you put yourself, you are a person from an environment that is not really value publication as it is here, and then you come to this place –

S - to compete on an even footing –

J Yes

S - with everyone here, no-one says “Here, we'll give you all this extra help”. No way. You're just like anyone else.

J Yeah, I was very happy that my supervisors yeah they trust me, tried to motivate me – “Yes you can, you have experience” and and when we discuss content-based knowledge, ah maybe they said – “Yeah, you you have”

S Mmm

J Then ah one of them at that time started to ask me to write a paper. I guess it's a kind of recognition that you can that you can do that. So, yeah that's part of things that strengthened myself that I I I could do this, but yes still sometimes I maybe I also mentioned in previous

emails when we discussed about these things back in Indonesia, and one of my colleagues that is experienced in international publications, ah when he shared what his knowledge about writing and things like that and yeah but nobody believes. And I tried to figure out in the position that I have no yeah achievement like what his –

S Like him?

J Yeah, like him, so I thought at that time yeah I still lacked yeah the quality that I should have to do that kind of achievement. So the first days months here I would say it's a struggle to to yeah lift me up to certain level to be able to do that and and what is good about the process, the whole process is that yeah I did something, I achieved something and it's good, it strengthened my my - yeah, my position in the journey, the the the motivation and –

[30:00]

S Yeah

J - because – through all this ah process –

S Yeah it's really like – again your metaphor for – your choice of “Journey” as a pseudonym is very apt, I think

J Yeah

S Because it is a – a sort of a steady incremental kind of growth isn't it -?

J Yeah, yes, sure

S - with all those different landmarks along the way. What's your take now on what it's like to research and write in English?

J It's still difficult [laughs]

S [laughs]

J Yeah, but yeah and it's it's a process, still a process for me so sometimes I yeah I write and then step back, read again and then 'oh, not this way', try to rewrite, see things and yeah it goes that way. The process goes to refine the ideas the way I write –

S And is that about fitting your ideas into an English way of expressing things?

J Yeah, sure, sure

S It would obviously be much smoother in Bahasa?

J Yeah, sure. That's still – yeah I would say that maybe the problem with me here is that I do not really use my – especially conversational English very much and that's why –

S Oh?

J - when you - when you read things, words, vocabularies come but then when you –

S It's passive

J Yeah, yeah so it goes - disappears somewhere and then sometimes “Oh, what should I use?” and yeah, things like that, so it's still a struggle for me

S I'm delighted you mentioned that [Journey] because there's someone else in this study who's in a very similar position

J Yeah

S You know my real background is in Linguistics, Applied Linguistics and there's a lot of theoretical stuff I could say about that –

J Yeah

S - but in general the theory supports exactly what you're saying, that unless you get an opportunity to um – or - without an opportunity to *produce* that language, but not just conversational English, particularly that academic language and so on –

J Sure

S - um both orally and in writing, it's – it's – it's making it a much more difficult process for you and I think we've now got probably in places like Australia we've got people — scholars like you who are — this sounds rude — I don't mean to be rude, but sort of somewhat unevenly developed, because your academic writing ability is probably significantly more developed –

J Yeah, sure

S - possibly even than some of your conversational English. This woman I'm thinking of, it's certainly the case because she lives her with her husband –

J I see

S - and she, I don't think I'm speaking out of turn, her reason for being part of my study –

J Yes?

S - is that I am the only person in Sydney she speaks English to! Now to me that was a huge shock to discover that. Here's a Phd student who's writing papers like you –

J Yeah

S - in international journals but she she – there's a lot of everyday vocabulary in English she doesn't know

J Yeah, yeah

S So it's a very unusual linguistic profile

J Sure, yeah

S That's very very interesting. So you've often talked, and in fact everyone in this study, every one of the six of you has talked about the lack of a kind of cohort of other colleagues to talk about your stuff, your projects with. And I don't – yeah, who knows what the reason for it is, maybe [name of Journey's university] just has small groups, small areas of interest but if I didn't talk to people – I mean I bore people to death! Mostly they don't want to hear about it, but I'm constantly talking about it and writing about it –

J Yeah

S Yeah, so I've got much more opportunity than you. That's that's fascinating because of course that's going to be harder for you when you get home, isn't it?

J Yeah, sure

S Because here, there might not be much opportunity, but there's some!

J Yes, yes, that's true. But yeah in my case, then yeah my writing English is much –

S - developed?

J - yeah developed than what I yeah use in everyday [laughs] conversation –

S Well 'cause you don't – [35:00]

J But still the process writing is for me a process to refine things on and on

S But I believe there's a word of encouragement, all good writers, even writing in their own language would say the same. I gave a paper in Canada, there was a person in the audience who's a writing researcher and he said "Sara, you were talking about case studies, and you haven't talked about the pain of writing. Why is that?" and I thought, Oh, yeah I actually hadn't included a lot of stuff about the difficulty of it, but he said you know he'd been writing — I think he's close to retirement, sort of forty years of academic writing –

J Yeah, yeah

S - and he writes - I think he writes beautifully, it's profound but it's clear -

J Yeah

S - um but he said it's painful every time he writes. And it's nice to be reminded of that. This is somebody writing in their own language.

J Yeah, yeah. And yeah writing – it's become easier for me and ah because of this process -

S Mmm

J - to yeah write in in Bahasa. I mean in presenting my ideas ah provide back - the backing arguments to what I really thought, or to see critical points for me in in certain issues that sometimes I do not really understand well but this process helps me to see yeah what should I focus on if I see these problems and problems that are maybe new for me. That's ah helped me –

S Well that's also about thinking isn't it? And analysis?

J Yeah, sure, sure, sure. And it helps me a lot in finding my system of thinking. And yeah that's really good for me.

S If um um sorry - if you think back about that view of part of your motivation your goal for doing the PhD at the beginning, and what you thought it would be like and how you look back on it now, has your understanding of what the PhD is about – has that changed? What it involves? Did you have a kind of very clear idea of what it would be like at the beginning? Has that changed at all?

J For me, ah, if I was – if I use the position I was at the beginning, especially in Indonesia, ah, well, it should be a challenge, but most of us would think that that's the final or the end of the process, so if you have done your PhD then everything is finished

S [laughs] It's the end of life!

J Yeah. You are the king!

S You're finished! [laughs]

J Yes. So it's like yeah, you put yourself [gestures with his hand in a higher position] –

S Yeah, superior somehow to others

J Yes, yes, yes. That's not the case. And I would say that I come to know that I know only a little from the vast –

S Yeah

J - yeah of the yeah knowledge that we have produced and I myself am part of that process to produce knowledge and that will never end and and PhD is nothing in terms of that

S Yeah

J You contribute but only yeah tiny tiny small dots in the whole map of -

S Yeah but it's a sort of comfortable feeling isn't it?

J Yeah sure yes

S You don't feel it was useless, it's like –

J Sure, yes

S - yeah but now I understand the big picture. That's interesting ...

J Yes. You – I hope that I yeah I'm becoming wiser to put myself firmly in this yeah interconnection of ideas, peoples and –

S Sure

J - then what – what – what's next? That's – that's - that's the problem. [40:00]

S Mmm

J So it's –

S But that's a good problem, yeah?

J Yeah, sure, yes

S It's not a – it's not a scary thing –

J No, no.

S - it's like, it's a continuum

J Sure yeah. Yes, so so you – in my case I know that it's not finished –

S Yeah

J - it's just a beginning of something else -

S How wonderful!

J - yes and now now I have some more ah "capitals" to do that.

S Yeah

J And I - including networks -

S Yeah!

J - that I have developed in terms of yeah networks with with yeah yeah collaborators maybe because of my experience to publish it's also good for me to access funds -

S Yeah

J - through that and and yeah, many things. So I think ah yeah I come to the point then, yeah.

S So if I go back, if we go back one more time - because again you chose it so aptly, you're - you're very comfortable with that metaphor of the journey for the PhD?

J Yeah

S And in fact your academic journey didn't begin with the Phd -

J Yeah, sure

S - you were already on it, so this is, you know, one stage -

J Yes

S - and it continues, yeah?

J Yes

S So you still think that's a very good metaphor?

J Sure, it is, yes. And yeah the effect of this process and achievements that I have made, it's nothing in terms of other people's - the other famous names, but yeah for us in in especially the university that and especially my immediate colleagues in faculty, gives some confidence -

S Mmm

J - to ah that ah I should communicate, and I did, communicate with them, ah sharing things, just to yeah remind them that it's all about efforts, it's all about ah commitment ah ah yeah sometimes you have to try, it's - maybe come up with failures, but you have to try. Otherwise what can if - what can ah - if you yeah an evidence that you can or you cannot?

S Exactly

J So I've done my part, though it's small and shows us that yes we can! So just try yourself -

S And and you haven't just done your part and that's finished either because of course, once you go home it it continues, doesn't it?

J Yes, sure

S When they see international colleagues coming to -

J Yes

S - collaborate with you and they hear about it and so on

J Yes, that's part of the things that I yeah now try to put in the big arrangement of what I will do after this. So thinking about yeah myself in the whole structure of ah academic life –

S Mmm

J - especially related to myself but but I think, yeah, in in wider perspective as well, so how the universities or other - lead back to other surrounding environment

S You'll have to keep in touch with me. I'm really keen to hear how it goes. In fact, have I given you – I want to give you my gmail address. Have I given you that? I'll give you my gmail address 'cause the [name of Sara's university] one will finish eventually

J Sure

S But um I got it printed on there so um after after you go and I go from here, yeah –

J Yeah

S I'd love to hear how you get on when you get home. Can I ask one kind of almost last question, um, and I have asked you this before but I'll be interested to see how you reply now – If I was [name of Journey's university] saying - "How has your experience been? What more - or what could we have done differently to support you more or better?". Are there recommendations you'd make?

J [long pause] Um, based on my experience I've – simple simple things maybe – [45:00]

S Yeah?

J - real ah. First, yeah, you talk about dealing with knowledge, producing knowledge, yeah, basic resources, especially in the area that I am studying –

S Mmm hmm

J - and writing about, ah, it's not well developed I think, so ...

S Are you talking about journals or books?

J - the literature ... journals probably you can access but -

S Not books?

J - yeah, books ah ... but it's it's still -

S It's ok?

J - it's ok, because you cannot maybe provide all things to everybody

S No but it is interesting when you come from another library like - I also find –

J Yeah

S [Name of Journey's university] *book* sources are

J Yeah

S - infinitely inferior to [name of another university in Sydney]'s -

J Ok

S - where I was doing some teaching and I would go onto the catalogue at [name of another Sydney university] and they would have everything that I was used to accessing

J Yeah

S But here? I think the journals are good here but that's interesting. Anything else?

J Ah, maybe because you are not alone in doing this, the community

S What can [name of Journey's university] do about that?

J I think I haven't - I don't know in other departments

S Ok, no, just your experience

J Ah, but, like like this. I'm doing something that is not really about this, but in relation to other ah -

S Can you make that more concrete for me?

J My research is also about -

S HR?

J It's all about HR but in relation with like Sociology -

S Ok, yeah

J - Psychology

S Right

J And, and sometimes you need access to what is - so I think I haven't seen something that connects us, except you are a person that will find yourself things and and and and and ah - those person that the other places support you

S Mmm

J If they say "I'm busy" - then ah that collaboration across -

S Departments and sections?

J - yeah departments would be would be I think yeah something [unintelligible]. In that I think in relation to that it's also maybe for the department or faculty internally. So I have suggested I think when they did ah like a kind of evaluation or survey, so for me doing this research at this level it's more philosophical. So, it's not, yes, in Economics, Accounting is more about ah technical aspects of the methodology but I think it's -

S It's epistemology as well

J Yes, so and we - not all person has this basic understanding of things producing knowledge, how to put your ah your ah the knowledge that you produce *in* the wider in relation to the connectivity with the ideas -

S And, and, sorry to interrupt but it seems to me it wouldn't be too hard to produce some kind of a course at the PhD level which deals with the history of knowledge –

J I think ...

S - the history of different ways, you know, that we all could click into.

J Sure, sure. It's maybe not a kind of formal unit –

S No, a seminar ...

J Yes, a series of talks, yes

S The contribution of sociologists, psychologists, education people

J That's that's what I imagine, a community, a scientific community would look like. You can come and go

S Yeah, yeah, yeah

J But that's that's available, so part of this community is ongoing talks about ah ah knowledge, and as a person, especially in the research that what I'm doing that is connected with others, then you feel that you are part of this –

S Mmm [50:00]

J whole thing. So you are not somebody ah [gestures scratching on the surface of the desk] just trying to understand very little things about the the knowledge in the other side, in in the other words, and and because if you don't know that words and then you maybe misunderstand –

S Yeah sure

J - what should be understood about ah ...

S Um, can I ask a very specific question? Your feeling about that? Do you think that um your kind of thirst –

J Yeah, yeah

S - or your desire for that kind of community but intellectual discussion and so on, do you think that's different in any way because you're a student from outside of Australia, or is it – or do you think it could be exactly the same for someone who's from here? Do you think ? It's hard to say, because you are who you are, but ...

J Yeah, yeah. I don't know, maybe some some other students have better knowledge about this community, ah campus community better and and and they know how to –

S Perhaps if they were a graduate of [name of Journey's university]?

J Maybe

S It's that sort of thing which is invisible actually isn't it? It may be there for some –

J Yeah, yeah

S - but it's invisible

J But my sense still, that ah I'm afraid that modern universities ah and I think it's understandable that since ah we have developed a vast array of technical knowledge and and people can go [gestures a pinpoint] –

S Too specialised or very specialised

J Yeah, very specific and to other things and and this is also communities that people may have developed and you go deeper within ...

S - your narrow area

J Yeah, but yeah I don't know I'm not a person that is ah - that have ah like yeah some kind of of authority or or resources to create, for example -

S Mmm

J - things like this, and and I don't know what's the academic staffs here think about that

S I mean, from my reading it's simply the enormous pragmatic pressures of everybody's competing for grants and –

J Yeah, yeah, yeah

S - money is attached to certain timeframes and everything people do is is linked to sort of visible outcomes

J Yeah

S - and the sort of thing we are talking about is very idealistic

J Yeah, yeah

S It's in a way, you know I think of sort of Socrates, I think of the old Greek philosophers

J Yeah

S It's wise people sitting around a room without watches and without any –

J Yeah

S - schedule and I don't think that means it doesn't exist or it can't exist but I think there are many factors in the modern university that are mitigating against it

J Yeah, so, yeah, ot put yeah the view that I have into the context of universities like this, maybe what I could yeah think is that just maybe it's available somewhere in this university but you don't know. So the problem is, how people can access, have information about things and and how the environment to go across –

S Yeah

J - disciplines -

S boundaries

J - boundaries of disciplines is facilitated I think so yeah we have some for example events like ah the Vice Chancellor's debate or something like that, that yeah people come together and –

S Mmm, have you ever been to any of those?

J Yes, some of them or yeah

S Public lectures?

J Public lectures, like that yeah, yeah ...

S Yeah [55:00]

J But yeah I would hope those kinds of things more here and more ah –

S Open?

J - open, communicate, communicated to to students particularly ... It's not of course all students will come

S No

J But those who wants to come, they know and they will come. So ...accessible, that's probably yeah, yeah –

S 'Cause that's also about breadth, and when I think of metaphors for sort of the PhD it's also about, as you say, being aware that there's this enormous body of knowledge out there, you know, and here's me coming in from Applied Linguistics and discovering Education is so big. And so your idea is about filling some of those gaps, you know ...

J Yeah and see some friends in Accounting now they are using ah ideas from Sociology as well.

S Sure

J And - so how these Accounting Departments to some extent have –

S - accessed those?

J Yeah, connection to to the Sociology Department, for example, or or – in books, it's there

S Where – where does – where does HR come from? Does HR come from – ok, so Management, but where does Management come from? Does it come from Sociology?

J Ah Management –

S 'Cause Business - Business is sort of –

J Yeah it's an area –

S - amorphous, isn't it?

J Yeah, it's an area that if you would like, so different streams comes together and we in Indonesia always put Management only in relation to Economics

S Yeah?

J It's actually ah too narrow ah in viewing this and I'm also now ah starting to to ask my colleagues there back in the department and the faculty to be more open

S Mmm

J - including to recruit people from outside

S Sure

J But we have problems with with regulations made by the government. If you are going to be called a Professor in Management, then you have to do Bachelor in Management, ah, Master degree in Management and then Doctor degree in Management. You are not allowed to do Management in Sociology and then Political Science and then you become a Professor in Management. It's not allowed, so it's a crazy thing, ah isolating –

S Yeah, 'cause knowledge isn't like that! [laughs]

J Yes and and an area like Management which is very much influenced by vast –

S Interdisciplinary, sort of?

J Yes, you cannot you cannot do like that and I say we have to say it's - "Enough is enough." We have to do change, we have to change our perspective on this. It's not for us, it's for yeah – how can we contribute better to – not only yeah doing Education in Management but to the practice out there –

S Mmm

J - if we use

S - tunnel vision

J Yeah yeah. So that's that's the problem I think so –

S So that might have been especially felt by you because of the kind of vastness of your area in a way in that it touches on all these things. 'Cause I know that feeling when you're reading something and –

J Yeah

S - you know for me they're always talking about Bakhtin and Bernstein and and - Vygotsky – I know more about Vygotsky because there's more language stuff in it –

J Yeah

S - but it's like there are vast areas of people's scholarship that you're kind of discovering by chance and trying to catch up on

J Yeah, and to some extent when I read, for example, certain kind of theoretical perspective, and if you read the – like, yeah, the review of developments in using the perspective –

S Yeah

J - sometimes, ah, maybe those who make this kind of works are the persons that knows well this this kind of perspective and they said – many mistakes in interpreting the view perspective happens - [60:00]

S Mmm

J - and I I myself would think that it's probably because of yeah – a person like me which is not well developed in that area come and then pick up and then interpreting –

S Exactly and you're getting like second generation –

J Yeah, yeah

S = versions, absolutely, yeah

J So then that's that's the point, if - yeah, ah yeah put in that context of suggestion of how connectivity is across disciplines could be could be developed it's just yeah because of that. So we don't produce false knowledge –

S Yeah

J - ah because of our misunderstanding about something

S Yeah

J Ah it means that communication across disciplines –

S - is so important

J - that connect in some ways yeah is so important yeah. But that's that's my my experience yeah –

S You've said that before

J I see - ah yeah I think it's difficult sometimes to get - ah yeah ah supports –

S Sure

J - like this here and maybe almost every university is like that, I don't know

S I think you're right. I mean maybe when people have been in an institution longer they know better how to seek it out also I mean if we're a PhD student, we don't have a lot of status to be walking around the campus knocking on people's doors and saying –

J Yeah, yeah

S - "How do you do Professor, I'd like you to talk to me about ..." It's not set up like that so we do need some –

J Yeah

S - some assistance in creating that. Um we're almost at the end of our time and I don't want to make you late –

J Yeah

S - but is there anything else at all that you can think of that you - at this sort of reflective –

J Yeah

S - point that you um might like to raise? Oh by the way, did you have time to read the article that I've got you in, about the writing?

J A quick quick read

S Did I misrepresent you?

J No, no I think it's it's um all about the –

S The writing, that one?

J - yeah yeah, the talks we have

S Oh that's good, that's good. I mean in the ideal world I should have sent you the draft beforehand but this is part of that process –

J Yeah

S - you, you know you're fighting against time and so on, but there you will have read, the other person, the other case subject –

J Yeah, yeah

S - is the one I was talking about who does most of her discussion of her ideas in her first language –

J Yeah

S - and I think that must be so much harder for her

J Yeah

S - um but yeah, yeah. So anyway, blah blah. Anything else, anything else about process or your ... your recommendations, or criticisms or ... insights ... ? [Long pause] Has it made any difference – this is – has it made any difference to you having someone to talk to about the process? Has it made you – I think you're already a very reflective person, aren't you? Because you've probably got those thoughts already going through your mind anyway. Did, did having interviews every three four months change anything in any way? Change the process or make you more aware of something or ... ?

J Sometimes you don't aware but I think you may yeah do change things and ah interacting with people with different views –

S Mmm?

J - and it makes you comes to be more aware of ah –

S - your position?

J - yes and listening to other people's experience and and see how I have no idea about that but that's ah maybe something which is very much related to my problem

S Mmm, mmm, mmm

J So I think in some ways and sometimes you - I don't really aware but yeah ah in my case what I would value is the time to reflect ah to ask ah why have been this way ah –

S Mmm hmm [1 hour: 5 mins]

J - what's wrong ah and yeah try to find answers or give explanations about things and and and yeah it give me some kind of ah encouragement to do - you make - yeah in my case I made some unnecessary things ah and I should not take that way or but I have taken that way, yeah so how can I withdraw from that and then or if you go that way, what's the meaning for for your ah main ... route?

S Yeah, you talked about that quite a bit one time

J Yeah, yeah, so

S About deviations and so on ...

J Yeah so it's it's I think it's part of this whole process that yeah it gives you ah colourful ah views –

S Yeah [laughs]

J - around and and and -

S Yeah, the picture's maybe more interesting when you ...

J But yeah some people would get into trouble, maybe not here because people are well well trained to do PhDs but the other places totally –

S People get lost. Yeah, I think so

J My colleagues had that experience back in Indonesia so ...

S Yeah

J - and he hasn't finished until today

S That's that's hard

J It's it's – he started 2000

S That must be hard for him though?

J Yeah, sure it's it's really big big problem to start again –

S Yeah

J - it's – I don't know, we try to support but yeah he have still problems so it's –

S No I would say – yeah -

J For me yeah it's good also that we have here a person like me, yeah that we manage all things by ourselves

S Mmm

J Um maybe some people would prefer that they have some courses –

S Yeah, but it suits you, this style suits you?

J This style suits me well

S And and the thing is with your own supervisor you made it clear you negotiate relationships so that if you had needed more pushing and warning and reminding, that would have probably happened –

J Yeah

S - I think supervisors sometimes, *some of them* –

J Yeah

S - and I sense from yours that your primary guy did – they have a very good sort of radar for how much to push -

J Yeah

S - or be involved

J Yeah

S - and when it works, I mean to me, yours is one of probably two exemplary supervision relationships in the sense that you you felt comfortable –

J Yeah

S - raising things with your guy and as I, in that paper, I think some of the way you talked about him is the most exemplary respectful, mutually respectful kind of stuff –

J Yeah

S - believe me, it's not always like that

J Yeah, yeah

S Um and that means that he's sort of got you right, you know and he's not going to be interrupting you and bothering you –

J Yeah

S - because he knows you're comfortable with it. I think the sad thing is when there's somebody who really needs more structure –

J Yeah, yeah

S - and there's a supervisor who, because also sometimes students are acting a little bit –

J Yeah

S - and students are saying "yes I'm fine, I'm fine" –

J Yeah, yeah

S - because they're too nervous to reveal their weakness and so they don't get that structure

J Well we um know colleagues in that kind of problem –

S It's difficult

J She felt that she's been fine but we heard her supervisor think the other way and they at that time they didn't really communicate well. So it's –

S It does happen. It happens

J - it's very difficult to, yeah. So yeah in my case that I prefer this kind of arms-length [gestures with his arms, and laughs] -

S Hands-off, yeah

J - ah

S But that's also about maturity and experience I think

J And to some extent that maturity also develop in in this kind of –

S Absolutely

J - grasp

S Absolutely you have to find out for yourself, work it out for yourself

J Yeah

S Totally, yeah

J It sures require some basic platform to do that

S Oh yeah but that actually changes over the three and a half years too

J Sure

S You know there's that metaphor of scaffolding?

J Yeah, yeah [1 hour: 10 minutes]

S There's quite a strong support often at the beginning and then as it's sensed how comfortable you are, you know supports are removed and you know you sort of walk by yourself

J Yeah, so yeah, what else? Ah, sometimes technical things is helpful. I think some students maybe struggle with financial -

S Yeah

J - ah supports and they have to do a lot of tutorial

S Oh!

J - and, I think they they are still doing well with -

S They have to do a lot of tutorials?

J Yeah

S You mean like - they are teaching?

J Teaching as well, yeah, and -

S So that's to help pay the bills and yet it's taking time away

J I don't know sometimes it's part of the motivation -

S Sometimes it's also part of a kind of an unspoken deal -

J Yeah, yeah

S - between the supervisor and the student

J Sometimes, yeah

S That could be -

J And a mix of - a mix of ... [laughs] and yeah in terms of doing PhD like what I ah yeah I have um put myself in that kind of journey, it's difficult I think so it's, it come back to model that you just do, finish your job, done, you've got a degree -but ah for me is that? this kind of - this

kind of yeah education is something I think more ah doing things in in yeah more, as I said, philosophical things and you have to be to some extent open for wider experience -

S It's messier

J Yeah for wider experience so ...

S Yeah, the way you describe your experience is very kind of organic -

J Yeah, yeah

S - you know? It's about unpredictable growth in some places -

J Yeah, yeah

S - and it's about connections and gradual development, and so it's very organic but I think there are many people in the world - perhaps a lot of them are younger, they're in their twenties when they start -

J Yeah

S - for whom it's - come in, start, go out, finish. -

J Yeah

S - and that's a very different experience, it probably fits into a different place in their intellectual life and professional life -

J Yeah

S - I don't know, but it certainly wouldn't have worked for me. I mean that's why I didn't do one until I was 53! You know, or 51 whatever I was when I started. I didn't want to -

J Yeah, so maybe I'm a strange person [laughs] in that kind of world!

S No, I don't think so but I think it is a different pattern

J Yeah, yeah

S - you know from my perspective I think you you chose the right moment to do it. I think - I know you - you know you had some false starts, didn't you?

J Yes

S You kind of had - you were wanting to do the PhD some time before it eventually happened -

J Sure, yes.

S But I think the timing for you has been -

J Yes

S - well it seems to me, ideal. Because you're still young, you've got lots to contribute but you had quite a bit of experience -

J Yeah

S - under your belt and of your institution and of being Dean and all that stuff before you ever came

J Yeah, yeah

S That's quite a good point at which to step back and have this chance to think bigger -

J Yeah, yeah, yeah

S - before you slot back into it.

J Yeah it's it's a - to some extent an advantage, I think, so it connects to things that has started so far and probably -

S - will continue

J - will will go ahead, so I think it's yeah to some extent it's perfectly matched with the context, anyway -

S Yeah

J - so it's good I think to have this this experience -

S Oh yeah

J - here at [name of Journey's university] although there are some things lack here and there but I think overall I I would say that for me it's it's a blessing

S Mmm

J - ah to be here, including other things -

S Exactly

J - that maybe the other people would prefer do the tutorial. I did something else -

S Yes

J - try to enrich myself in terms of my ah -

S Your general intellectual development?

J Yeah, sure

S Much broader. And are your daughter and wife looking forward to going home? Are they - how are they feeling about it? Maybe your daughter - will it be hard to leave school here?

[1 hour: 15 mins]

J Yeah, she prefers to ah continue here but she is also a person I think that yeah can -

S - adapt?

J - adapt and and and when we ask her to yeah put herself in the situation that we should face -

S She will be able to do it

J - she can do that. Yep. Sure she will I think would have some problems in adjustments and especially when we return to Indonesia, she will go to Year Six and in Indonesia it's ah it's ah required to do a national exams and it is standardised -

S Across the whole country?

J - nationally, yes and even though it's already known anywhere already over the country that the best schools in Indonesia, primary schools in Indonesia also has to they have to add more hour for students to prepare for that

S That sounds like Japan, mmm

J That's too much and not good for the kids and then it will give pressure and -

S And especially it's probably been pretty relaxed -

J Yeah, yeah

S - here and pretty open

J But not really, ah what I'm - at school yes, but they have a lot of -

S They still learn -

J Yes

S - but it's just a very different style.

J Yes, they - for example in terms of learning language from simple things, just [gestures lines on a page] every day write the words that -

S The spelling?

J Yeah, yeah, so Monday, Tuesday, Wednesday, Thursday, so every day she has to do something

S Mmm, mmm

J And that's good I mean for -

S Discipline and structure ...

J - repeating practice and so, in terms of doing something yeah school things, it's good. It's not in Indonesia. Students are yeah - they put in some way to receive large amounts of knowledge, it's not maybe too deep I think but too broad, so many subjects -

S Yeah, yeah

J - and in a way that they are ah passive recipients of the knowledge and yeah that's that's the problem really so so she would have to deal with those -

S Changes?

J - yeah, wider range of subjects, yes and it would be something difficult for her

S When does the academic year begin?

J Indonesia we start from July

S So she'll be a little bit late for that? She'll be entering -

J Yeah, yeah

S - a couple of months -

J Yes, it's on the way for the last year -

S Well her father's a teacher, she'll be alright!

J Yeah we are- we have to I think yeah -

S It's part of -

J - set some times to -

S - yeah to work with her

J - yeah work with her at home and and and yeah help her

S So just if I were - I'm still trying to sort of sound this out - I'll just switch this off - but I were to try and organise a social gathering ...

[End of tape 1 hour: 18 mins]

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
INTERVIEW ONE			
PHD IN CHINA SUPERVISOR	Graduated Bachelor’s degree 2004. As a high performing student she passed directly into PhD programme. But she did not make big decision, she just followed the crowd.	1	
	Mary chose supervisor for herself because her tutor was supervised by the same guy; Mary had no personal relationship with him; he was famous and became Dean of the department and earned a lot of awards;	1	8 mins, 00
	In the fourth year, Mary was instructed in the lab by senior students but not by the supervisor; the same thing happened in her PhD. But when he needed a proposal written, he gave that to his PhD students to write	1	9 mins, 19
AGENCY	Until she was 25, Mary made no big decisions for herself; her mother chose her university, her major, and the PhD was no deliberate decision, just automatically went into the PhD	1	5 mins, 00
	In 2007 Mary learned of a Chinese govt scheme to support Chinese students to study abroad but it did not appeal because she would still be tied to her supervisor in China to determine when she could graduate	1	13 mins, 30
	The decision to go to Oz was Mary’s decision (not her mother’s) because she felt the PhD system in China was unfair	1	17 mins, 39
	Mary now does not discuss decisions with her parents; ‘they are not as good as me’ – less experience of the world Mary’s husband would not have left Australia if he had not met her; he was not as frustrated as her		18 mins, 24 Lines 375ff
DISSATISFACTION WITH PHD ‘CHEAP LABOUR’	After 3 years her friends graduated with a Masters degree and started earning money, but Mary still did not know when she would graduate	1	6 mins,00
	Mary felt that she and the other students were just ‘cheap labour’ for her supervisor who did not want them to graduate but just to continue working for him	1	11 mins, 30
MOTIVATION - CHINA AUSTRALIA	In China, Mary had no great ambition to get a PhD, ‘in undergraduate I have no idea what I am doing ... I didn’t think about a career’	1	14 mins, 30
	In looking for a scholarship in Australia, Mary’s motivation was simply to complete the PhD. There were fewer positions in Electronic Engineering at [Name of University] than in Computer Science so she switched fields	1	15 mins, 40

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		Interview	Timing/Line No.
FAMILY REACTION	Mary's mother thought it was even better for her to go to Australia than to complete in China. She is ambitious. Mary says she doesn't like her mother very much!	1	17 mins, 22
COP - CHINA	Senior students instruct junior students in the lab Groups of students collaborate in writing a proposal for the supervisor who then edits it Senior students give feedback on draft papers	1 1 1	Lines 109ff Lines 118ff Lines 131ff
ENGLISH PROFICIENCY PROFICIENCY	Mary sat IELTS twice because she only got 5.5 on the Speaking part first time; W (6); R (8), L (7) Mary recognises the importance of speaking English for improvement Mary says it is difficult for her to describe her project in English	1 1 1	Lines 396ff Lines 420ff Lines 673ff
ARRIVAL IN OZ	Mary stayed in homestay accommodation with Chinese people for 2 months (organised by her supervisor) when she first arrived [Name of University] Accommodation Service offered an apartment to Mary (owned by university)	1 1	Lines 435ff Lines 464ff
FIRST IMPRESSIONS LACK OF CONTACT WITH OZ CULTURE	Mary found Australia very clean, clear sky, difficulty understanding Australian English (esp. Men) No contact with Australian PhD students in her department Sports are different from China; on TV in Oz, you can't see all kinds of sports, can't see big events on TV Lack of contact with culture here - only knows international students Mary's adjunct supervisor is from North Africa, her writing tutor was from the UK, so she still has not met an Australian academic member of staff. She did not expect that everyone she would meet would be foreign!	1 1 1 1 1	Lines 532ff Lines 559ff Lines 606ff Lines 633ff Lines 914ff
COP AT [Name of University] WORKS SOLO AT [NAME OF UNIVERSITY]	Each student has their own computer in the lab Friendly, shares lunch with Chinese students Mary (and all her supervisor's students) are working alone – this is different from China but it makes no difference to her (if she needs help, she can ask her husband)	1 1 1	Lines 577ff Lines 589ff Lines 852ff
WRITING COURSE	Mary completed a course in the second semester of 2008 on writing and presentation	1	Lines 678ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
[Name of University] COMP 901	Mary found the course helpful and interesting; the content overlapped with what she had learnt in China from her supervisor through writing project applications; her supervisor taught her the structure of applications and revised their drafts. With hindsight, she realises she learned something about how to write, and it is helpful even with writing articles. Structure of a project application is the same in China and in Oz – what, how and why – this helped her when she came to write her proposal for the PhD in Australia ‘I think that ... three years [in China] wasn’t in vain’	1 1	Lines 722ff Lines 740ff
ADJUNCT SUPERVISOR	He works for CSIRO. He wants to correct Mary’s writing in her papers. He has helped correct her mistakes. He is from North Africa – still no Australian contact.	1	Lines 878ff
SWITCH OF TOPIC AREA	Mary feels there is not much difference between Computer Science and Electronic Engineering so she feels comfortable about the change. Initially she had to read a lot, but after a while, it was fine. Now she feels it is a better choice than Electronic Engineering.	1	Lines 926ff
FUTURE PLANS	Mary is happy to live anywhere; it depends on where she can find a job Mary has never thought about whether she has to leave Oz when she graduates!	1 1	Lines 953ff Lines 978ff
SUPERVISION IN OZ RELATIONSHIP	Supervisor is Chinese, left China in the 1990’s, did her PhD in Australia Neither of her supervisors asks her to write their project proposals; here she can focus on her own work and the more she focuses, the better she understands it Mary has a good relationship with her supervisor	1 1 1	Lines 649ff Lines 990ff Lines 1017ff
ATTITUDE TO WRITING THESIS	Mary does not expect to have trouble but believes it will be a problem for her supervisor because she has to revise it Mary believes her writing is stronger than her speaking	1	Lines 1060ff
RELATIONSHIP WITH HUSBAND	She has not missed her husband while he has been away; ‘it’s fantastic to be alone’ but she missed him when she first arrived in Oz before he came.	1	Lines 1101

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
INTERVIEW TWO			
WRITING PROCESS	Mary worked day and night with her supervisor to complete a written paper – very tiring Mary writes the full text and then her supervisor edits it Mary focuses first on the structure of the paper, then the language	2 2 2	Lines 51ff Lines 51ff Lines 684ff
INTENSITY	When writing her first conference paper, the deadline was very tight so Mary met her supervisor every day, worked together with her all day and even had dinner with her at night, working until 2am	2	Lines 467ff
DIVISION OF LABOUR EDITING	The post-doc student helps Mary elaborates her ideas, and her supervisors discuss ideas throughout the process Supervisor helps with writing When time is short, Mary sends the paper to her supervisor who edits it directly	2 2 2 2	Lines 98ff Lines 104ff Lines 116ff Lines 154ff
AFFECT	Mary is pleased to have finished those two papers; doesn't feel like doing anything; sits there, doing nothing The most relaxing day is the day the paper is submitted – Mary has 'no feeling' until then When the deadline is a long way off, she feels no pressure 'from her supervisor' so she finds it easy to relax in the evening	2 2	Lines 664ff Lines 696ff
ANXIETY	Mary wants to be able to write without so much help but is not sure how this will develop, supervisor can't explain Mary is not sure if she can get a job after she graduates because her work is so theoretical, not applied	2 2	Lines 133ff Lines 344ff
CONVENTIONAL THESIS	Initially Mary didn't know the difference between the two; because she is writing papers, she thought she was doing a thesis by publication In China, you always have to write a thesis Mary is confused as to what the thesis by publication involves; is it possible to graduate without a thesis? In China, if you haven't also published, you can't graduate	2 2 2 2	Lines 227ff Lines 240ff Lines 257 Lines 282ff
VIEW OF PHD	Mary felt her progress at first was slow and was worried about the pace, but after the first paper, things	2	Lines 322ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
PROGRESS	started going well, so she is less worried She thinks her progress is normal, but is glad she didn't go to the conference in India because it allowed her time to do her simulation, write her paper etc.	2	Lines 411ff Line 416
EVIDENCE OF INDEPENDENCE	Mary had to teach herself how to use the software she needed for her experiment – this took one month	2	Lines 380ff
	Mary studies on the MIT website for Computer Science courses – this teaches her computer terms in English	2	Lines 423ff
	Mary depends solely on herself when she is writing the first draft of her paper, and then she worries about whether her supervisor can help her to correct her English	2	Lines 679ff
	Mary works independently on her writing; she doesn't depend on anyone (except her supervisor for editing); when she goes home, she does cooking, watches TV	2	Lines 691ff
VALUE OF CONFERENCES	Mary found the first conference she attended in Sydney helpful because she found out what people were doing and this stimulated her thinking to produce the first paper	2	Lines 533ff
SUPERVISION RELATIONSHIP	Has changed a bit, because now they know each other better, knows how to get on with her better, she's in her forties	2	Lines 555ff
	In person, Mary calls her "lao shi" but in email, she uses her first name	2	Lines 582ff
	Mary knows her better now and feels more comfortable with her now	2	Lines 622ff
IDENTITY	Mary does not think about whether she's a student or a researcher	2	Lines 707ff
CHALLENGES	Mary finds it hard to write a paper 'from go to whoa'	2	Lines 730ff
	Writing an introduction is the most challenging- especially finding the 'beautiful words' needed to do this	2	Lines 731ff
	Supervisor writes first few sentences for Mary because she is 'never satisfied'	2	Lines 743ff
	Mary has read lots of papers in the past but while she is writing, she prefers not to look at others' papers in case they influence her too much – [is she confusing discourse knowledge with plagiarism??]	2	Lines 750ff
	Mary finds it hard because the paper is long – 10 pages, 2 columns – some sections may be written months before, when new material is added, it's difficult to maintain coherence	2	Lines 876ff
HELP WITH	Mary wants to know how to improve her writing because she feels she has reached a plateau in her writing	2	Lines 771ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
WRITING?	ability Mary considers showing her writing to peers but she feels they will make the same mistakes as her Mary believes her supervisor and post-doc student can give her feedback Mary seems to be convinced by SC's argument that this is a way of becoming more independent as a writer	2 2 2	Lines 815ff Lines 826ff Lines 843ff
PHD IN OZ v PHD IN CHINA	Mary believes that being a PhD student is the same in China and in Oz, but the activities are different In Oz, it is all her own work so this is more exciting, whereas in China she had to help her supervisor all the time	2 2	Lines 945ff Lines 956ff
PHD IN OZ	She hoped that doing a PhD in Oz would be different; this was her motivation in going overseas Mary is aware that some supervisors in Oz still use students to do their projects if the project is a funded scholarship, but she sees this as slightly different from the situation in China where a student can be working for the supervisor without learning, without acquiring some skills	2 2	Lines 969ff Lines 974ff
MORE LEARNING IN OZ	Mary is glad she came to Oz because her friends in China are still doing the same thing	2	Lines 1029ff
SUPERVISOR ROLE	Mary believes this depends on the supervisor; a responsible supervisor will try and make sure that what they ask you to do will be useful for you	2	Lines 1034ff
CONFIDENCE	Mary was worried when she was in China and when she first came here about what she would do after the PhD, but now she feels more comfortable and confident Confidence grows as her knowledge of the area develops; this also reassures her that she has a contribution to make Supervisor gives Mary feedback all the time, emphasising the importance of publishing Mary now knows what others are doing in the field and what she can do – this is the most important thing in giving her confidence	2 2 2 2	Lines 1050ff Lines 1060ff Lines 1069ff Lines 1098ff
INTERVIEWER INITIATES STORY	Interviewer shares her experience of attempting to maintain coherence across a very big document (draft lit review)	2	Lines 907ff
INTERVIEW THREE – WRITING PRACTICES AND PEDAGOGY			
EXPERIENCE OF	Mary valued the opportunity to submit to the conference and found the reviewers' comments helpful to	3	Lines 46ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
PAPER REJECTION	know where her problems are		
AWARENESS OF STYLE OF INTRO EVIDENCE OF TEXT ANALYSIS	Mary is aware of the function and structure of the introduction; this does not seem to help her with writing her own introductions	3	Lines 144ff
	Evidence that Mary has conducted this kind of analysis already	3	Lines 160ff
	Mary explains what she expects to find in the Introduction to papers	3	Lines 211ff
SUPERVISOR'S WRITING PRACTICES	Supervisor has told Mary that she can't use 'plain language' but Mary does not know why, and is unable to do this; because her supervisor has taken over her introductions, this has undermined Mary's confidence [unhelpful]	3	Lines 194ff
	Mary indicates that adjunct supervisor is most focused on the abstract and the introduction	3	Lines 267ff
	Adjunct supervisor provided feedback by handwriting comments and scanning them	3	Lines 282ff
	Mary believes that her supervisor writes perfectly first time because she never sees her supervisor's drafts – unfortunate and unrealistic comparison because she has never seen her supervisor's process [unhelpful]	3	Lines 887 ff
WRITING IS GETTING EASIER	Mary is finding writing easier and easier; her supervisor now edits her writing less	3	Lines 228ff
VIEWS ON PEER REVIEW LACK OF [NAME OF UNIVERSITY] COLLABORATION	Mary objects to peer review (1) people don't have time (2) people won't understand it because they are studying in another area (3) people will find it frustrating (4) people will find it inconvenient	3	Lines 350ff
	Mary explains her own experience of having to read papers from outside her field but still in Comp Sci over and over again in order to understand them	3	Lines 382ff
	Mary thinks that peer review is not common here across people working in different labs	3	Line 393
	'I kind of think it's a bit strange that we don't collaborate' – this is not her decision but it is the supervisor's style	3	Line 419
COP AT [NAME OF UNIVERSITY]	Mary works with her supervisor, her supervisor's post-doc student and her adjunct supervisor (in Canberra) and she is satisfied with this small working group (despite the fact that her supervisor has other doctoral students studying in a similar area) – 'not a student team'	3	Lines 435ff
		3	Line 445

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
SUPERVISOR'S ATTITUDE TO M'S GETTING HELP WITH WRITING	Mary believes that her supervisor considers writing papers to be Mary's priority, not working on improving her writing skills (even though the two are connected!)	3	Lines 460ff
	Mary believes that as long as you can write a paper clearly, that would be ok	3	Lines 486ff
	Mary believes that if she asked her supervisor for advice on how to improve her writing skills, she would consider Mary to be distracted from her main purpose	3	Lines 493ff
DIVISION OF LABOUR - WRITING	Mary sends her paper to her principal supervisor first; she discusses it with the post-doc student, who works most with Mary to get an idea what the paper is about; she then makes suggestions about the structure; after Mary reorganises it and sends it back to the supervisor, she then edits it; then when she is happy with it, she suggests that Mary send it to the adjunct supervisor for comment	3	Lines 524ff
	Supervisor identified a target journal for Mary (Journal paper 1)	3	Line 1520
CONVENTIONAL THESIS	Mary discussed this with her supervisor; supervisor advised her NOT to do it by publication because she felt that a thesis could be turned into a book later and represent more persuasive evidence of the candidate's ability when it comes to job applications etc. (In the supervisor's view, a thesis by publication does not include a thesis of any kind which is a disadvantage.)	3	Lines 578ff
EVIDENCE OF POOR LISTENING SKILLS	Mary explains that in her department there was a conference where two teams debated the two forms of thesis but they spoke very quickly and Mary didn't understand what they were saying	3	Lines 708ff
ANXIETY RE DEPENDENCE ON SUPERVISOR EXPECTATION	Mary is anxious that she is not acquiring the ability to edit her writing for herself; when she expressed this anxiety to her supervisor, the supervisor indicated that when H starts working on a journal article, she will be given some feedback and expected to rewrite it many times until it is better, and will learn by doing that.	3	Lines 760ff
	Mary can't remember exactly how the supervisor responded to her statement of anxiety	3	Line 858
	Mary believes that in five or ten years she will have acquired these skills simply by repeatedly working through her text, identifying weaknesses and revising	3	Lines 869ff
	Mary does not expect to be fully independent as a writer by the time she graduates (line 934ff)	3	Lines 873ff
USE OF L1 IN SUPERVISIONS	Mary indicates that her supervisor automatically spoke to her in Chinese	3	Lines 948ff
	Mary regrets this but does not wish to challenge the supervisor	3	Lines 960ff
	Mary speaks Chinese to post-doc student too	3	Lines 976ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
L2 WRITING EXPERIENCE IN CHINA	Fourth year of undergraduate study, Mary had to publish an abstract in English and her three academic papers written during her PhD studies were in English	3	Lines 997ff
STUDY OF ARTICLES	Writing courses every semester in China – 4 years of general English; 2 semesters academic English once she was a PhD student	3	Lines 1039ff
	Mary read a lot of papers in English and analysed their structure etc. – did that independently	3	Lines 1077ff
SELF ASSESSMENT – WRITING ABILITY	Mary comments that the papers she writes now are ‘far better’ than the 3 papers she wrote during her PhD in China – she attributes this partly to the fact that only her husband gave her feedback on them, also they were written at the last minute and because her supervisor knows how to write, and gives much more feedback; in China, her supervisor didn’t give her that kind of feedback	3	Lines 1105ff
WRITING LIT REVIEW	Mary has produced a literature review for her thesis This was difficult because it took Mary a long time to determine whether a paper was relevant to her study or not; now she can very quickly skim a paper and determine this [Not a WRITING difficulty, but a CONCEPTUAL or READING difficulty]	3 3	Lines 1146ff Lines 1160ff
UNIMPORTANT?!	Mary believes that the lit review ‘doesn’t matter too much so I didn’t pay too much effort on it’ – because it is a university requirement but not something that will be read by others	3	Lines 1175 ff
	Mary comments that the ‘related work’ part of a conference paper is different because now she understands where her work is positioned in relation to the field [my words, not hers!]	3	Lines 1194ff
TYPES OF WRITING	Mary writes journal articles, conference papers, a literature review for the thesis, emails (in English) Mary does planning writing when she is drafting a paper	3 3	Lines 1198ff Line 1245ff
RATIONALE BEHIND CO-AUTHORSHIP	Mary considers it normal that her supervisors and the post-doc student be acknowledged as co-authors despite the fact that she is only person involved in the project since the post-doc helps with the methods, the mathematics and the hypothesis, she writes the programmes for the simulation and once she has results that prove the hypothesis she can report those in a paper which her principal supervisor helps her with in terms of communicating her ideas.	3	Lines 1316ff
NO WRITING EXPERIENCE	Mary has never given feedback on a peer’s writing since coming to [NAME OF UNIVERSITY]	3	Line 1365

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
OF PEER REVIEW			
PUBLICATION RECORD	Mary's paper, presented at a conference in India by a colleague, won a prize. It has now been published in the conference proceedings Two other conference papers rejected but useful feedback provided by the reviewers	3 3	Line 1399 Lines 1440ff
POOR TIME MANAGEMENT?	Mary has 'no idea' when she aims to finish the first journal article, indicating she is not a very organised person Mary comments that as there is no deadline for submitting the journal articles, there is 'no rush', so she still spends time reading recently published papers etc.	3 3	Line 1541ff Lines 1624ff
FEELING ABOUT THE PHD – GOALS; WRITING IS A MEANS TO AN END	Mary feels 'pretty good'. Writing the papers and obtaining feedback has helped her know what she's doing and how she can improve it. Now her focus is on adding significance to her project. Mary feels she needs to learn more (conceptually?) and to improve the quality of her papers (but not the quality of her writing) – Writing is not her priority but a means to an end	3 3	Lines 1664ff Lines 1674ff
INTERVIEW FOUR			
CAREER	In Mary's area, it is important for her to have publications in order to get a job, so she needs to continue writing papers as well as writing the thesis	4	Lines 96ff
WRITING PROCESS PROGRESS	Mary comments that supervisor doesn't revise her papers so much; fewer versions required; she works more independently Mary believes that her writing has improved; she can identify her own language problems more easily now Mary feels her process is better now as she doesn't like to have to revise her writing over and over again – the supervisor identifies the major problems and Mary revises it herself more independent	4 4 4	Lines 132ff Lines 144ff Lines 593ff
AFFECT	While focusing on writing, Mary found it interesting to write when she had a new idea, but she found it boring to revise a rejected paper' Mary's attitude to writing is neutral	4 4	Lines 170ff Lines 179

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
FLORIDA CONFERENCE	Mary had 'bad luck' because her paper was scheduled for the same day as the World Cup game of Germany v Argentina so only 10 people attended, mostly friends from [Name of University] – only 3 questions (very easy)	4	Lines 228ff
(3 rd INT'L CONF)	Mary finds it difficult to follow others' presentations because they are very specific	4	Lines 283ff
NOT MUCH NETWORKING	Mary found the keynote speakers' presentations very useful because they talk about trends in the field	4	Lines 290ff
	Mary speaks about the benefits of participating in an international conference – (1) experience of expressing ideas in front of lot of people, making them understand what you are doing (2) networking (3) opportunity to hear keynotes	4	Lines 374ff
	Mary spent most of her time with people she already knew from Sydney and Canberra – most of her time was spent socialising	4	Lines 393ff
CHINA TRIP	Mary says it was 'no big deal' being back in China – lots of family meetings, travelling inside the country – 2 weeks	4	Lines 428ff
COP IN CANBERRA	Mary spent a week with her adjunct supervisor – 'didn't feel scary' - gave a presentation to his research group, read a paper her gave her and gave comments, then interacted with others in the research group (post-docs or research scientists) – very kind	4	Lines 482ff
SUPERVISION RELATIONSHIP	Principal supervisor – no change to relationship – 'the scary time has already passed'; comfortable working relationship	4	Line 569
PUBLICATION TARGETS	Mary has had 3 papers accepted for conferences; she has submitted another 2 to conferences and has 1 ready to submit to a journal (Total: 6)	4	Lines 609ff
	Her target is to have 7 or 8 papers in total	4	Line 619
CHALLENGES	One paper keeps on getting rejected – feedback suggests that she needs to present an example at the beginning to illustrate the problem that she is solving in the paper; the experiment also needs to be improved	4	Lines 623ff
		4	Lines 630ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
REVISION PROCESS	Mary comments that the reviewers' feedback has been useful but 'it's easy to say but difficult to do' [revise] Reviewers may give feedback from another perspective; this requires her to shift her perspective and research the reviewer's area – this is not easy	4 4	Line 657 Lines 662ff
CHALLENGES	Mary needs to find out more about how web servers work in industry but she doesn't know how to do this (she is too theoretical) Supervisors are unlikely to believe that she needs to find out about industry so won't help her with this	4 4	Lines 720 Line 736
RE-EVALUATION OF PHD TIME IN CHINA	At first, Mary thought her time in China was a waste of time but now she appreciates that experience; the presentation skills she learned, the project applications have all been useful for her PhD project in Australia; her previous supervisor was a successful man, therefore a good role model, he taught her how to get on with people	4 4 4	Lines 786ff Lines 822ff Lines 890ff
ORIGINAL SUPERVISOR'S SKILL	Mary feels that (1) she learned things (2) he was a nice man (but not a great academic, rather a good networker) He was able to 'tell a story' about the research that his students had done (that's what a boss needs to do) – but he didn't know the details about the project		
GOALS OF RESEARCH	Mary believes that 'before you do your research, you should first learn how to be a ... good person' 'it's not just about how to do research, it's also about how to be a person being so' Mary's current supervisor is more focused on research and is able to teach her those skills, she helps Mary with her research	4 4 4	Line 851 Line 917 Lines 870ff
FEELINGS ABOUT PHD - PRESSURE	Mary feels pressure now because she had a paper rejected yesterday but she needs to finish by August 2011; now she has to come up with more ideas Mary expects to spend 4 months writing the thesis itself (several drafts, feedback etc.) Quality of the publications is important too; but she can 'only try my best'	4 4 4	Lines 934ff Lines 949ff Lines 971ff
PERCEIVED PROGRESS;	Mary sees development in her writing – now more critical of her own writing and able to revise it independently – this came from collaborating with her supervisor and the post-doc – Mary sees growth in knowledge but not in her ability e.g. skill at doing experiments	4 4	Lines 992ff Lines 1016ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
LIMITATIONS OF COP AT [Name of University]	Lack of teamwork at [Name of University] - Mary doesn't know how to improve her experimental skill because she hasn't had a chance to work with people who have those skills – she would like to work with such people in the future (she had this experience in China, working in a team with people who have different talents) Mary says that now it depends mostly on herself and 'it's difficult for you to improve yourself'	4	Lines 1029ff
		4	Lines 1051ff
SUP 2 PRACTICE	In Canberra, her adjunct supervisor gave Mary a paper written by one of his former students and asked her to read it and comment on it - his intention was to see if this provided an area in which he and Mary could collaborate and write another paper	4	Lines 1082ff
CHALLENGES: NEW LEARNING TIME	Mary wants to improve her ability to do experiments – this is necessary in order to get her papers published Mary therefore has to 'learn more things in this short period' and to do more experiments Pressure of time Her skill at programming and computing is not strong	4	Lines 1105ff
		4	Lines 1106ff
		4	Lines 1106ff
		4	Lines 1119ff
SUPERVISOR ADVICE	"Do better experiments" – unhelpful advice – supervisor does not know how to 'unpack' expertise??	4	Line 1125
MILESTONES	Getting first paper published convinced her that she could make a contribution to the field	4	Lines 1147ff
CONFIDENCE EBB AND FLOW WHAT BOOSTS CONFIDENCE?	Getting paper accepted and receiving feedback – confidence increased but then she learned that it's not difficult to get accepted but it's difficult to achieve excellent work → this led to a lack of confidence Mary compares herself with her husband and his colleagues – they are excellent – she knows she is not at their level	4	Lines 1157ff
		4	Lines 1169ff
	Mary observes a gap between her level of skill and that of excellent students Getting a paper accepted is helpful for confidence	4	Lines 1182ff
		4	Lines 1190ff
ROLE OF ATTITUDE AT	At Florida conference, Mary was focused on relaxing so it didn't help her much, but at her first one, she knew nothing about the field so she wanted to learn a lot, and did	4	Lines 1200ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
CONFERENCES EMOTIONS EBB AND FLOW	Mary explains that in Florida she was tired and needed a break, but recently she has had a paper rejected, so she feels pressure again, so when she goes to the conference in London, she will pay attention to what people are doing and try and network re jobs etc.	4	Lines 1222ff
SCHOLARLY BEHAVIOURS – PROXY FOR SUPERVISORS	Mary now reviews conference papers for her supervisors – evidence of her scholarly skill – she scores the papers on behalf of her supervisors – they give her their logins, usernames, password etc. and she just completes the task for them! Initially Mary found this difficult and time-consuming, now she can do it quickly – she feels that the most important thing is that she can identify the problems in those papers. This year she has reviewed 3 or 4 papers for her adjunct supervisor in this way (none for her principal supervisor)	4 4	Lines 1253ff Lines 1300ff
BENEFITS OF REVIEWING PAPERS FOR SUPERVISOR	Mary can't immediately see the benefit, but feels that she has benefited from it. She thinks that most of her peers are also asked to do the same. Her supervisor in China asked her to do the same thing – to review papers from different disciplines – it was easy to decide instinctively what to accept and what to reject simply by comparing the quality of the papers, but without understanding what they were about!!!!!!!!!!!!!!!!!!!!!! At the time, the students felt it was a waste of time for them.	4 4	Lines 1317ff Lines 1343ff
LACK OF CONTACT WITH OZ STS	Mary does not know any Australian PhD students but believes that she will be more focused on research than domestic students; some local students don't seem very focused, they appear to be part-time students Mary admits that because she doesn't have a lot of family and friends here, it is probably easier for her to focus on her research	4 4	Lines 1384ff Lines 1406ff
USE OF L1 IN SUPERVISIONS RATIONALE	She believes that if she speaks English more, both her writing and speaking will improve, but she does not expect the situation to change [Note the use of impersonal structure – 'this situation', NOT 'my supervisor...'] Mary believes that if the supervisor speaks English well, they choose to speak English, but her supervisor's oral English is not good Mary's husband's supervisor is Chinese but he speaks English to the students almost all the time; the PhD students mostly speak English amongst themselves	4 4 4	Lines 1429ff Lines 1437ff Lines 1459ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
USE OF ENGLISH	Mary speaks English with her adjunct supervisor and his students in Canberra (mostly not Chinese)	4	Lines 1472ff
CONFIDENCE IN ACADEMIC ENGLISH	Mary feels more comfortable doing presentations in English now - academic English – she believes this has come from writing papers in academic English. She also feels that if she is using English every day in her writing, so she becomes more confident with it	4	Lines 1494ff
		4	Lines 1500ff
	Mary does not feel comfortable using every day English	4	Lines 1495
	Academic English v everyday English - Mary thinks the major difference is in vocabulary	4	Lines 1522
	Mary believes she is limited in expressing her feelings in English because of a lack of vocabulary	4	Lines 1533ff
ANXIETY ABOUT FUTURE	Mary is not as confident of finding a good academic job as she is of her husband's success; she believes that publications are important in this	4	Lines 1561ff
	Initially she is focused on jobs in Sydney since her husband will graduate after her (in 2012)	4	Lines 1572ff
SELF EVALUATION	Mary believes her husband is more focused on research than she is	4	Lines 1600ff
PhD MOTIVATION	She chose to do a PhD because she didn't know what else to do and because her parents encouraged her; at first she regretted deciding to do this, but once she overcame some of the problems, she felt better about it	4	Lines 1606ff
CAREER	Mary is 80% sure that she wants to be an academic – "I think I can do this well. I don't know what else I can do."	4	Line 1614ff
	Mary would rather work in academia than in industry	4	Line 742ff
INTERVIEW FIVE			
WRITING PROJECTS	Mary wrote a conference paper Sept-Oct and a journal article, submitted in November; total of six conference papers and 2 journal articles	5	Lines 56ff
WRITING GETS EASIER	Mary explains that it was hard to write her first paper, but now ideas are 'coming out' more and more easily	5	Lines 97ff
SUMMER SCHOOL	This was useful for the overview of the area which the professors gave; several sts from Mary's [Name of	5	Lines 145ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
BRISBANE NOV	University] dept also attended		
CURRENT FOCUS	Mary is focused on finishing the thesis (not yet looking for a job)	5	Lines 185ff
CONFERENCES IN CHINA & HK DEC	Mary gave presentations at both conferences; in Hangzhou the keynote was not very good but in HK the professor was 'very nice' (??);	5	Lines 202ff
CONFIDENCE WHEN PRESENTING	Mary felt much more confident giving her presentations this time; she doesn't worry about English now – she noticed an improvement between this conference and the one in Florida, which was only 5 months previously Mary explains the difference in her preparation this time; this time she didn't practise 'saying it aloud' (Perhaps she should have) Mary rationalises her increased confidence as being due to an increase in her knowledge in the area	5	Lines 272ff
		5	Lines 332ff
		5	Lines 359ff
ENGLISH PROFICIENCY	Mary does not understand the word "exponential" and explains that "if I see it, I knew it" – her listening ability is weak; she does not recognise words in speech that she can understand when reading	5	Lines 297ff
TIMELINE	Mary aims to submit by October 2011 when her scholarship ends Currently she is trying to finish writing a journal article; once she finishes that, she will start writing the thesis Mary's supervisor thinks it will take her about 2-3 months to write the thesis – 'depends on my attitude' Mary feels that there is enough time between now and October for her to complete on time	5	Lines 400ff
		5	Lines 417ff
		5	Lines 471ff
		5	Lines 510ff
MOOD AFTER HOLIDAY (CHINA)	Mary found it hard to get started again once she returned from China – 'just reluctant to see anything more, just want to relax'	5	Lines 433ff
SUPERVISION MEETINGS NOW	Mary doesn't have regular meetings with her supervisor now but 'I will give her the draft, then she'll start ... yeah editing it'	5	Lines 554ff
SATISFACTION,	Mary is pleased to hear that of all my participants she has been the most productive - 'That's good to know'	5	Line 597

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
PRIDE			
HELP FROM SUPERVISOR	Mary feels that her supervisor has helped her a lot with advising her on the timeline to follow and advising her what to do	5	Lines 615ff
JOURNAL PUBLICATION TIMELINE	Mary is shocked to discover that it can take up to two years for a journal article to be published	5	Lines 641ff
FEELINGS RE PHD, METAPHOR	Mary says that before she went to China, she felt very anxious about finishing the PhD – metaphor of running a race, keen to get to the finish line; now she feels more relaxed and not so concerned to submit as early as possible	5	Lines 693ff
BEING RELAXED	Mary explains that after returning from China, she felt more relaxed so now – “I just don’t care how long it will take ... I just ah relax I think ... just relax, enjoy the moment!”	5	Lines 709ff
SELF-CONFIDENCE; RELIEF, FEEDBACK; CONFIDENCE	Mary might have had some feelings of self-doubt at the beginning or in the middle, but <i>now</i> she does not doubt her ability to finish Mary explains that once her conference papers were published, she felt a sense of relief (cf grad sts who do not get any feedback and don’t know how they are doing – Ingleton & Cadman, 2002) Mary feels more confident now because she knows more about what others in her research area are doing – knowledge of the disciplinary area	5 5 5	Lines 736ff Lines 749ff Lines 837ff
BITTERSWEET PHENOMENON; QUALITY WORK	Mary reiterates that she now realises it is easy to get a paper accepted but not to get a paper accepted in a top conference – this is another measure of progress – the ability to evaluate different standards of work	5	Lines 770ff
SELF ASSESSMENT	Mary comments that her research skills are inferior to those of her supervisors e.g. she believes that her supervisors can evaluate a conference paper much more quickly and efficiently than she can	5	Lines 798ff
INDEPENDENCE	Mary is now more confident in her ability to do research independently but still expects to learn from others in her research team when she gets her first job; she believes she still has a lot to learn from more expert researchers	5	Lines 824ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
HARD WORK	Mary does not see the remaining work as particularly challenging; it is just a question of hard work – ‘now it’s just clean up the ...’	5	Lines 844ff
NATURE OF HER PROJECT	Mary talks about the nature of her project and the relationship between the different things she has done for it; her work started with ‘a single point’ and then consisted of her going deeper and deeper into that area	5	Lines 852ff
CONFIDENCE PERCEIVED CHANGES	Mary remembers feeling less confident at the beginning before things settled down; she attributes her greater confidence now to her supervisor having taught her how to do research	5	Lines 917ff
LACK OF CONTACT WITH OZZIES AT UNI AND BEYOND	Mary doesn’t know how people in Australia viewed her because she had so few dealings with Australians and has no Australian friends Most sts and the secretarial staff in her dept are from China and Hong Kong ‘I think there are supervisors from Australia but I don’t have a chance to meet them to know them’	5	Lines 940ff
		5	Lines 955ff
		5	Lines 964ff
HUSBAND’S EXPERIENCE	Mary relates her husband’s experience of an Ozzie professor at UNSW – ‘the guy is strict ... but if you did really good enough, he will be nice ... and will give you a good comment’	5	Lines 990ff
COMPARISON PHD CHINA AND OZ	Mary can’t see many differences, apart from the style of supervision – here you can focus on your own project	5	Lines 1029ff
DOING A PHD AT [Name of University] GOOD FINANCIAL SUPPORT	Mary feels [Name of University] has been very supportive – ‘... from I think the first day I come here and all the way through I just feel welcomed here and yeah in my department ...’ She feels that students are able to concentrate on their work and get good financial support for attending conferences etc.	5	Lines 1051ff
		5	Lines 1076ff
	Mary feels that students’ progress depends on themselves, even though there is positive support from outside Mary believes that conference funding for PhD students is better at [Name of University] than at UNSW	5	Lines 1082ff
		5	Lines 1098ff
SUPERVISOR IN	Mary feels that he was a good manager and was able to teach her how to get along with people	5	Lines 1152ff

THEME	Appendix E Sample Thematic Interview Summary	Location	
		Interview	Timing/Line No.
CHINA	Mary explains that she liked her supervisor, even when she was still in China, but she was not content with the <i>system</i> of supervision which prevented her from doing her work; it was not about <i>him</i> though Mary summarises – ‘Maybe he’s a good friend but as his student, you just ah maybe waste your time ...’	5	Lines 1158ff
		5	Lines 1167ff
DIFFERENT STYLES OF SUPERVISION	Mary believes that her Chinese supervisor was an excellent manager; he needed to be because he had a lot of projects. But her Oz supervisor does not have a lot of projects, so she does not demonstrate good management skills Mary believes that ‘different supervisors have different ways of supervision’	5	Lines 1185ff
		5	Lines 1185ff
DIFFERENT DISCIPLINES	Mary explains that in Engineering, students work as a team with their supervisors, so may have less time for their own projects and papers (cf her China experience) but in her dept, she only had to focus on her project The advantage of the Engineering model is that you can complete a project and get a job more easily; the disadvantage is that you have less time to write your own papers, and sometimes the group projects have nothing to do with your PhD project (she is thinking of her husband’s experience in his Engineering dept)	5	Lines 1200ff
		5	Lines 1205ff
EVALUATION OF EXPERIENCE AT [NAME OF UNIVERSITY]	Mary feels she was given everything she needed; all she needed was a computer and a room to work Mary feels, on reflection, that her experience at [Name of University] was ‘not quite international’ because she did not have the chance to meet any Australian students or people; with hindsight, maybe the university could have tried to do something about this – ‘I think the university didn’t try ...to do anything, I didn’t see any ...effort of doing this, so I think maybe this university can do more on this aspect’	5	Lines 1240ff
		5	Lines 1250ff
		5	Lines 1264ff
ADVICE TO NEW PHD STUDENTS	Mary feels that new students need to know not to panic if they don’t know what to do at the beginning; she advises them to read until they find a ‘little thing to do, no matter how simple’ and eventually their knowledge will build Once the project is underway – ‘Just be persistent and believe in yourself’	5	Lines 1277ff
		5	Lines 1299ff
PLANS POST PHD	Mary’s husband hopes to finish this year too; they want to stay in Oz for a few years so they can save money to buy a house in China; her husband’s supervisor would like her husband to continue working in his lab so they expect to stay in Sydney	5	Lines 1319ff
ATTITUDE TO INTERVIEWS	Mary comments that she has found it very interesting to be part of the project and that it has relaxed her!	5	Line 1385

Appendix F Thematic Map

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	Jack (5)	Journey (5)	Mary (4)	Ariunaa (4)	Emily (6)	Dev (6)
Australia						
First impressions			x		x	x
Lack of contact with Australians	x		x			x
Australian social style					xxx	
Fallout from negative image of Oz in media						x
Racism (classmates G, accommodation Oz, SCIC)	x					x
Sydney – familiar, likes it (2 years down the track)				x		
[Name of University]						
Application process					x	
Lack of contact with other students in dept (effort to create a group)	x		x		xxx	x
Lack of contact with Australian students	x		x		x	
Lack of welcome					x	
COP – beyond supervisors [Name of University]	xx (small)	x (limited)	xx (limited)	x (no)	xx (positive)	x (limited)
Collaboration, networking (lack of; presence of)		x (lack)	x (lack)	x (lack)		
Evaluation of training gaps		x				
Exercise of power over candidate (bullying, unexplained change of sup., email, ethics)	x	x			x	x
PhD – nature of, personal process						
View of the PhD	xx					
Evaluation, re-evaluation of PhD experience in China			xx			
Motivation for doing PhD		x	x	x	x	x
Reason for doing thesis by publication		x			x	x
Expectations v reality (Oz, elsewhere)	xx (Germany)					
Academic socialisation elsewhere					xx (Sweden)	
Grad study in Oz v approaches in other countries (cf Germany, Japan, Mongolia, China, Sweden)	xx (solo – Oz)		xx	x (Japan)	xx	

Appendix F Thematic Map

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	Jack (5)	Journey (5)	Mary (4)	Ariunaa (4)	Emily (6)	Dev (6)
PhD – nature of, personal process (ctd)						
COP – pre [Name of University]	x		x		x	
Sources of learning		x (many)				
Personal milestones, critical moments, major steps		x	x (proxy)	x	x	x
Personal progress (lack of – ‘dark tunnel’)		x (lack)	x	xx		
Contribution of conferences (networking, presenting, positioning, feedback, impact of attitude)	x		xx		x	
Metaphors (initiation, complex journey, flowing water, journey, having a baby, staircase, retrospective map – Journey, 5 – joining the dots)	xx	xxx		x	xx	
Identity (student v researcher v clinician; Journey (4, Lines 1141-1151)		xx			xxxxxx	
Scholarly activities (reviewing papers for supervisors, writing/submitting articles, conferences)			x (proxy)	x		
Being taken care of					xxxxxxxxxxxx	
Support, supporters (lack of)	X (more in G)				xx	x
Pressures (e.g. time, understanding concepts)	x x	x	x	xx		x
Pressure as a positive	x					
Challenges (PhD- related e.g. reading articles, understanding sup, accommodating sup’s interests etc)	xx (in G & Oz)	x		xxxx	x	x
Importance of maintaining physical health	x				x	
Networking/COP beyond [Name of University] (experience of, value of, manuscript group Sweden)		xx			x	
Collaboration (e.g. with Dutch colleague)		x				
Supervision						
Australia compared with other countries	x (G)	X (cult. diffs)	xx	x	x (Sweden)	
Supervision relationships (adjusting to clash of style)	xxx (friction)	x	x	x	xx	x
Development of supervision relationship	x					x
Changes to supervision team		x		x		x
Second or third supervisors (e.g. ‘passive’ 2 nd supervisor; busy high status 3 rd)	x				x	x

Appendix F Thematic Map

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	Jack (5)	Journey (5)	Mary (4)	Ariunaa (4)	Emily (6)	Dev (6)
Supervision (ctd)						
supervisor)						
Supervisor's attributes					x	x
Supervisor's practices (e.g. lack of feedback, writing, feedback, uses simple words)	x	x	x	x	x	xx
Pedagogy		x	x			x
Challenges in dealing with supervisors (different style; different expertise)	x					x
Impact of power dynamics (bullying, sup. use of L1, neg. feedback ex Brett, bullying by SCIC – PhD student is “powerless”; SCIC situation occurred because SCIC wanted to show their power)	x		x			xx
Nature of supervisor's contribution (disciplinary difference) – 40 years experience of Maths	x					
Writing						
Experience writing in English pre MQ	x	x (Neth)	x			x
L2 academic literacy			x		x	
Writing course - MQ		x	x			
Attitude to writing (enjoyable, anxious, very difficult, valuable, enjoyable)	x		x	x	x	x
Co-authoring (division of labour)		x	x	x	x	
Writing practices		x				
Writing pedagogy		x			x	
Writing challenges (difficult, time-consuming)		xx	x	x		x
Cultural differences (rhetorical practices) in writing		xx				
Writing process					x	x
Writing skill development (evidence of, strategies for)		x	x			
Discourse patterns, genres, disciplinary conventions (discussion section of article)		x	x		x	
Supervisor's attitude (e.g. to candidate getting help with writing)			x			
Peer review (lack of)		x	x (no)	x (no)		x (no)

Appendix F Thematic Map

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	Jack (5)	Journey (5)	Mary (4)	Ariunaa (4)	Emily (6)	Dev (6)
Writing (ctd)						
Negotiating sequence of authors - power					x	
Feedback (sources, evaluation)		x	x			x
Publication process (experiences, review, rejection, revision)		x	x			
Emotions						
Anxiety (sup. dependence, ability to find a job, slow progress, submission then leave Oz, wedding plans, project delay due to SCIC)			xxx	xxxx		xx
Upset/trauma (death of mother, hospital story, relationship impact)		x		x		x
Confidence (ebb and flow - Journey, Mary), timid to ask certain questions (Dev 2)		xx	xx		x	x
Angst re confidentiality					xx	
Frustration (living out of a suitcase, email address, SCIC and [Name of University] ethics mismanagement, SCIC presentation debacle)					x	xx
Irritation (Dev - SCIC presentation)						x
Low self-esteem (Dev, 6, personal, academic)						x
Motivation, enthusiasm, 'comfortable' (Dev, 4)				x		xx
Isolation, loneliness (initially Dev)				x		x
Boredom (data-gathering in Melbourne archives)		x			x	
Fatigue		x				
'Flow'					x	
Control, well managed		x				
Lacking momentum		x				
Excitement (at adding adjunct supervisor to team)						x
Homesickness						x
Stress (Dev, 6, hiding upset re girlfriend from his parents)				x	xx	x
Current feelings about PhD	xx	x	x	x	xxx	x
Eagerness to finish	x					

Appendix F Thematic Map

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	Jack (5)	Journey (5)	Mary (4)	Ariunaa (4)	Emily (6)	Dev (6)
Emotions (ctd)						
Emotional rollercoaster of PhD					x	
Lucky to be studying in Australia (Line 273, interview 1)				x		
Personal Attributes						
Agency, independence (learning, contacting experts, coming to Oz, starting student group)	x	xx	xx		x	
L2 proficiency		x	xx	x	x	
Endurance ('the hardening of Jack')	x					
Future self/plans						
Aspirations, goals	x	x	x			x
Future challenges		xx (Ind.)				
Non-academic matters						
Family responsibilities, financial pressures, living out of a suitcase, shock at girlfriend breaking up with him, pressure of concealing from family the fallout over his girlfriend's family's reaction (3, 6)		x		xxxx	xx	xx
Miscellaneous						
Evidence of reciprocity in interview (asks SC questions)		x		x	x	
Evidence of awareness of interviewer bias/interests	x					