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LEGITIMATING SUPERVISION FROM DIFFERENT ACADEMIC TERRITORIES

AN AUTO-ETHNOGRAPHIC ACCOUNT

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BACKGROUND AND INTRODUCTION OF THE STUDY

Much of the current literature (Buttery, Richter & Filho 2005; Hasrati & Hashemi 2011; Lee 2012; Pearson & Kayrooz 2004; Woolderink, Putnik, Van der Boom & Klabbers 2015) on postgraduate research supervision concentrates on supervisors and their different approaches to research supervision. There has been less exploration on the impact of these approaches on the student, particularly in the context of co-supervision, such as the case reported here where the supervisors have different discipline knowledge, namely the pure sciences and social sciences. For Bernstein (2000), the social sciences have “horizontal knowledge structures” in that they are made up of a collection of “specialised languages that are discrete and non-translatable”. The pure sciences, by contrast, have “vertical knowledge structures”, which build general theories. As reported by Henkel (2000), academics’ identities are tightly attached to their disciplines. Given that the disciplinary homes of the two supervisors discussed in this chapter were so disparate, the supervision relationship had the potential to be a triad of conflict and difficulties. This narrative therefore intends to describe the research difficulties that emerged, how they were negotiated, and whether the supervision combination was a productive and positive approach, or not. In doing so I draw on my experiences as a doctoral student. As a point of departure for this chapter, the academic backgrounds of my research supervisors are described. This information helps to provide insight on how their supervision approaches, underpinned by distinct philosophies, helped to deconstruct the messiness of my thinking and research in which I investigated the use of games as pedagogical tools (Vahed 2014). I use metaphors of two strong leading females from video games to demonstrate the contrasting supervision skills of my supervisors that facilitated the provision of epistemological access to research. While the

metaphors may have serious limitations in terms of the extent to which they reflect my supervisors' personal attire and character outside the research relationship, they may illustrate the impact of their supervision styles on my personal development and growth as a research student.

My doctoral study was interdisciplinary as it included three fields: management sciences (Quality), health sciences (Dental Technology) and education (Higher Education Studies). This motivated me to elect a supervisor and co-supervisor who were knowledgeable on quality management and higher education discourses, respectively. It is clear that within two of these fields (Quality and Higher Education Studies) there are multiple theoretical positions. For instance, the epistemological home of Quality is a university of technology and that of Higher Education Studies is a traditional university.

My main supervisor, whose first qualification is in chemistry, was notably the first in the country to acquire a Doctorate of Technology degree in Quality. She lectures, and presents, in Quality and Research methods nationally and internationally. Her current research focus is in quality management and quality engineering in Nano-engineered materials. My metaphor for my main supervisor is Bayonetta, an Umbra witch whose character in the 3D action game (Bayonetta™ by SEGA Co. Ltd) is calm and approaches infernos with casual disregard. At the beginning of the game, she appears to be callous and nonchalant towards the other characters, though later on becomes much more caring and concerned for their well-being. Her signature look is her glasses; these give her a sense of mystery and intelligence. Similarly, my main supervisor's glasses enhanced the confident, calm and intelligent demeanour by which she steadily challenged and effortlessly guided me throughout my research journey.

My co-supervisor, on the other hand, has a PhD in Higher Education and has worked in academic development for 20 years. She is the coordinator of a large PhD programme in Higher Education Studies and currently manages a national research project on the ways in which institutional differentiation affects teaching and learning. Her research interests include how students take on the knowledge structures, norms and values of various disciplines and how quality assurance is used to steer higher education. The metaphor I have chosen for her is Lara Croft, the lead protagonist of the Tomb Raider video game by Squire Enix. Her mental agility allows her to compete with her rivals to escape from dangerous situations.

I was their student, a dental technology lecturer who trains students to fabricate intra-oral dental appliances in a dental laboratory. Essentially, this requires understanding abstract theory and linking it to concrete laboratory practice. In many ways the

three of us came from very different disciplinary territories. Our characters belonged to very different games.

A BRIEF OVERVIEW OF DENTAL TECHNOLOGY

Dental Technology is typified as a region as it hinges at the interface between disciplinary knowledge and the field of professional practice. The term ‘recontextualisation’ is used by Bernstein (2000) to describe a ‘region’ where knowledge has been selected from multiple disciplines, de-contextualised from its original field of production and then re-packaged into a new context. The regulatory body of Dental Technology, the South African Dental Technicians Council, ensures that curriculum changes include technological advancements that currently have an impact on professional practice. Dental Technology can therefore be considered something of a traditional region (Muller 2009) because it has a strong relationship to its professional field of practice. This collaborative relationship guides and structures the disciplinary base of the programme, and in the process ensures that the focus of the curriculum is workplace expertise. Herein lies the challenge.

The nature of applied knowledge is more than just the application of knowledge to practical contexts (Boughey 2010). Applied knowledge and applied learning need to be appropriately conceptualised and contextualised in a university of technology, particularly if the teaching practices used are to achieve the intended learning outcomes. Evidence of students’ inability to connect workplace activity to disciplinary knowledge exemplifies the higher education debate of the theory-practice dualism of knowledge (Kilpert & Shay 2013; Wheelahan 2009; Winberg, Engel-Hills, Garraway & Jacobs 2013). The theory-practice dualism increases the teaching and learning challenges in higher education as students in Dental Technology need to acquire theoretical and practical knowledge, and to appreciate the relationship between these domains of learning. I have long been interested in teaching approaches that might make this relationship more accessible to students. Hence, my doctoral work focused on teaching and learning through discipline-specific games to enable students’ access to, and acquisition of, knowledge.

My two supervisors¹ had never met before supervising me and came from disciplines that belong in discrete epistemological homes. The philosophy, concerns and research methodologies differ starkly between Quality and Higher Education Studies. Researchers such as Biglan (1973) and Kolb (1981) have described how academic disciplines construct quite different forms of knowledge. Becher and Trowler (2001)

¹ Note that the two supervisors agreed to have their names revealed, as well as their comments and/or emails reproduced within this Chapter.

describe discipline in terms of academic 'tribes and territories'. Contrary to this conception of tribes inhabiting territories, Trowler, Saunders and Bamber (2012) recently mooted that disciplinary knowledge systems are reshaped to be fluid and dynamic, and are influenced by context, non-disciplinary policies, initiatives and higher education trajectories. Ultimately, these factors have an impact on the quality of research supervision and support given to a postgraduate student. I was aware from the start that bringing together two strangers from such different 'tribes' to guide me through the doctoral journey had the potential for challenge. From the start, instead of envisaging boundaries between my two supervisors' ways of being (Henkel 2000), I focused on systematically understanding their scholarly ways of acquiring the different knowledge bases that I needed to undertake my research. This foregrounded the different approaches used by my supervisors to nurture and sustain doctoral scholarship at the various stages of my research, which Lee (2008, 2012) describes as:

- Functional: where the issue is of project managing my research;
- Enculturation: where I was encouraged to become a member of the disciplinary community;
- Critical thinking: where I was encouraged to question and analyse my work and the work of others;
- Emancipation: where I was encouraged to question and develop myself; and
- Developing a quality relationship: where I was motivated, and supported to feel inspired and cared for.

Lee and Murray (2015:561) assert that these approaches are not independent of each other but "intertwine in a complex manner". The nature of such complexity emerged in terms of the feedback given by my supervisors on my research work, which was embedded in the intellectual territory of their discipline (epistemology). Not surprising, then, that part of this inquiry required negotiating the legitimacy of diverse epistemologies and approaches to research discourses of the two supervisors, while retaining and developing my own doctoral voice. Bitzer and Van den Bergh (2014:1047) contend that to become "doctoral implies personal transformation and change, which extends beyond methodological rigour, epistemological understanding and socialisation into a discipline". In attempting to respond to this position, and based on several key contributions (Boehe 2016; Lee 2008; Mainhard, Van der Rijst, Van Tartwijk & Wubbels 2009; Pearson & Kayrooz 2004; Pyhalto, Vekkaila & Keskinen 2015; Wadee, Keane, Dietz & Hay 2010), this chapter reflects my own experiences of being supervised by supervisors who were differently situated in terms of institutional types, disciplinary homes and discursive positions.

RESEARCH DESIGN AND METHODOLOGY

To engage in an “extensive self-examination and self-reflection” (Johnson & Christensen 2103:453) of my supervised journey I used an auto-ethnographic approach, which is form of qualitative inquiry. In-text written feedback given on the draft work of my research proposal and thesis chapters by both my supervisors was used to explore my experiences of my postgraduate research supervision journey. Categories were identified inductively by reading and re-reading supervisors’ comments, which were subsequently coded and categorised in terms of Maton’s (2016) Legitimation Code Theory (LCT).

LCT was used to make sense of my experiences during my research journey, particularly as it brings the structure of the knower (student or teacher) into the analysis. Maton (2016) argues that disciplinary knowledge practices may contain assumptions about who may become a legitimate knower. For LCT, knowledge and educational practice are conceived as ‘languages of legitimation’. This chapter focuses on the dimension of Specialisation, which is based on the premise that every practice, belief or knowledge claim is about or oriented towards something and by someone. Consequently, this sets up Epistemic Relations [ER] to objects (what knowledge is being studied and how it is obtained – that is, the knowledge structures) and Social Relations [SR] to subjects (what dispositions or way of being one has to have to be considered a legitimate ‘know’ – that is, the knower structures). As shown in Figure 22.1, each relation can exhibit relatively stronger (+) or weaker (-) classification and framing, and consequently the strengths between the relations generate four

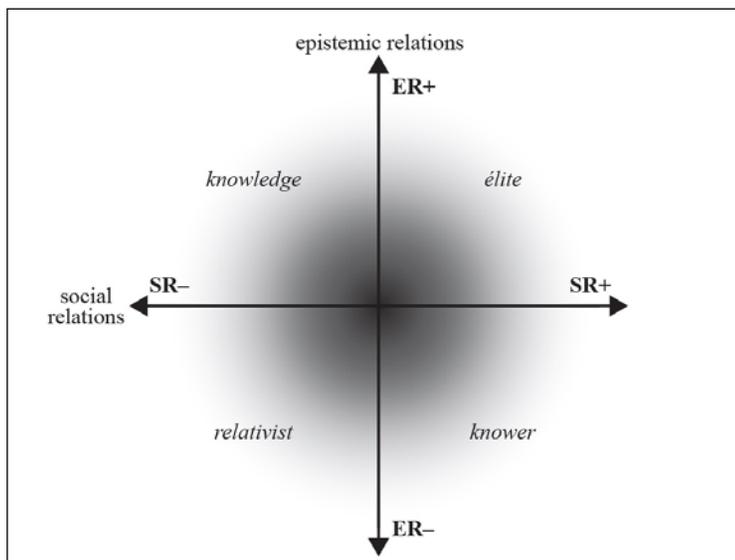


FIGURE 22.1 Legitimation codes of Specialisation (Source: Maton (2016))

play.

- Games facilitate the dis-embedding of knowledge. ^{what does this mean} Subsequently, morphological and anatomical concepts may become situated in their meanings, and an embodied feeling may even develop. To have an embodied feeling relates to what we know in the context of Dental Technology, which affects *who we are* (or are perceived to be). Herrington and Oliver (2003: 115, 1991: 254-256) suggest that when learning is situated in context it creates an environment for individuals to self-reflect. These notions of learning resonate with those expressed by Dall'Alba and Barnacle (2007: 683 - 685). Their conceptualization of learning is that it is "not confined to the heads of individuals, but involves integrating ways of knowing, acting and being". In this way, students may become 'skillful', and not just 'skilled'. Examining the pedagogical value of games could therefore potentially provide ontological perspectives of whether students develop

what does this mean
Lost the plot
I am lost
NO NO
No NO how can you say this that is what you have to show
You lost the plot

According to Street (1995: 29-141) literacy is an ideological practice as it is tied to social and cultural practices and ideologies. He elaborates that 'every literacy is learnt in a specific context in a particular way and the modes of learning, the social relationships of student to teacher are modes of socialization and acculturation'. For example, in the pilot study of this research classroom observation of students through video recordings and digital photographs suggests that teaching and learning through games stimulated students in their learning and encouraged them to interact with the lecturer. These interactions were particularly observable when students were revising, critiquing and reflecting on their Dental Technology work. This view of literacy implies that students do not create meanings in isolation, but through social interactions that promote and value particular forms of literacy. This is significant, particularly in the context where students are enculturated by their social and cultural histories that have influenced them to have other understandings of teaching and learning. This understanding is often different from higher education knowledge (Boughey 2010). In an effort to acculturate students to Dental Technology, an assumption underlining this research is that teaching and learning through games enables students to acquire epistemological access to the literacy practices of Tooth Morphology and Oral Anatomy. This thesis will explain the social and cultural perspectives of literacy in order to provide a more comprehensive understanding of pedagogy through games. The notion of literacy as a social practice could essentially provide a useful basis for understanding the quality of pedagogy through games.

FIGURE 22.2 Bayonetta's critique on the research proposal

To: Anisa Vaheed
Subject: Re: Context of Research

Hi Anisa

I hope you're feeling better? I also hope my comments in the attached don't make you feel worse! I have been very hard - but I'd rather you dealt with me being harsh than the audience at your presentation or the Higher Degrees Committee being harsh. I know that you will be upset by some of my comments, but I know what your work ethic and your drive is like so I know you will want me to be as explicit as I can be.

This is definitely coming along in the right direction. Do NOT stop now. But you are still making two mistakes. You are still using conceptual terms in fairly superficial ways. You do not unpack concepts in sufficient theoretical depth and you often just throw terms into sentences without giving them proper explanations or using them in the careful way required by academic writing. You also are still inclined to write in complicated sentences which then leads to ambiguities and grammar errors.

So ...

Read through the attached.

Swear at me a few times (not too many please!)

Read through again and begin reworking by adding the kind of depth I indicate.

Don't go back to the beginning - rework THIS document. It's on the right track and with careful reworking it will take you where you need to go.

Look forward to seeing you tomorrow

--

FIGURE 22.3 Lara's e-mail accompanying her comment on the research proposal

principal legitimization codes of Specialisation. The feedback given by my supervisors had varying degrees of emphasis on knowledge, skills and procedures (knowledge code); and dispositions of myself as the academic writer (knower code), such as aptitude, disposition and positionality; both (elite code); or neither (relativist code). Trustworthiness of the qualitative findings and inferences was corroborated with my respective supervisors.

FINDINGS AND DISCUSSIONS

A number of key elements emerged in relation to the relative presence and strength of the ER to the object and the SR to the subject in assessing my supervisors' critique and comments. A critical point worth mentioning is that early in the research process, I came to know Bayonetta and Lara quite well, even though they did not really know each other yet. Perhaps, my 13 years of teaching Dental Technology, together with my supervisors' knowledge and skills in their respective disciplines, paved the way for a cordial and effective relationship. Consequently, we developed a sense of trust and rapport with each other.

At first glance, the critique given by Bayonetta (Figure 22.2) may appear callous, as it cuts straight to the point that the writing is disjointed and muddy. Although mildly

expressed, the e-mail correspondence from Lara has similar concerns that I “do not unpack concepts in a sufficient theoretical depth and often just throw terms into sentences without giving them proper explanations or using them the careful way required by academic writing” (see Figure 22.3). While the stark contrast in their feedback is noted, it can be argued that their critique valued knowledge (ER+), and the focus on my disposition was downplayed (SR-). Although it was disappointing to receive negative feedback, I knew that my supervisors’ comments were not intended to be malicious or hurtful, but were given in the context of supporting me to ensure the work was robust and rigorous. Significantly, this also prepared me to embrace their comments on the chapters of my thesis.

From Figures 22.4 and 22.5 it is clear that Bayonetta continued providing much more explicit criticism than Lara who was firm yet gentle, in her approach. While this sample of only two supervisors cannot allow for categorical conclusions to be drawn, it is interesting to note that Bayonetta and Lara’s supervisory approaches align to their different disciplinary homes. Biglan (1973) and Trowler’s (2009) argument of how disciplines affect our approaches seems to echo with my experiences of the two supervisors. Lara’s gentle supervision is linked to the soft-pure and “relatively

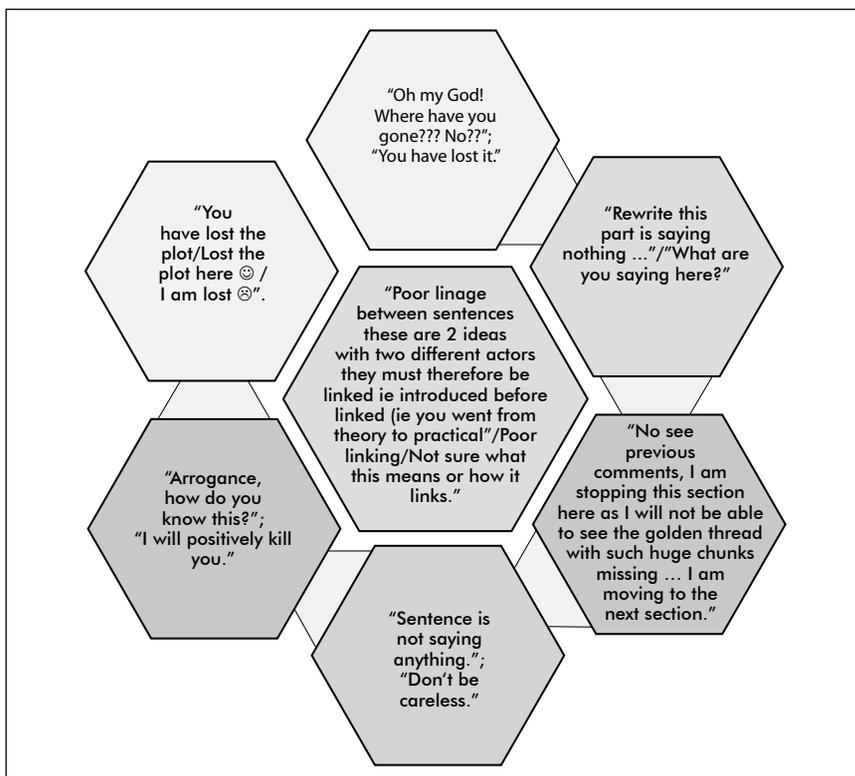


FIGURE 22.4 Comments commonly given by Bayonetta on draft submissions of Chapter 1 and Chapter 2

"I recommend first unpacking the idea of literacy generally – and calling on Street's two models to do so – and then moving on to discuss the idea of games as being a particular kind of literacy. By mixing them you're making your argument a bit jumbled here."

"Why? Again, you are writing stuff that sounds good but if you look carefully, the meaning is vague. Keep it simple. I would simply delete this sentence."

"This sounds good but I don't understand what it really means. Write it simply: "Keep it Simple."

Figure 22.5 Comments commonly given by Lara on draft submissions of Chapter 1 and Chapter 2

unspecified theoretical structure" (Trowler 2009: 182) of the Humanities discipline. For her, research is about developing a particular social gaze or valuing a particular position (SR+). For Bayonetta, by contrast, her supervision is linked to the hard-pure and conceptually coherent discipline of Chemistry. For her, research must follow hard facts underpinned by strong scientific principles (ER+). A point deserving mention is that while the critique of the work is stated differently, both supervisors are effectively pointing to the same concerns, that is, to keep the writing simple.

Furthermore, and particularly at the research proposal stage, Lara needed me to clarify the following: "How do games have an epistemological position? How do games raise concerns?" It can be argued that Lara appeared to value a stronger SR+ to the subject as she fostered a particular gaze or disposition. Similarly, her comments in Figure 22.5 were about legitimating a particular way of being (SR+), along with encouraging me to theorise the games in-depth (ER+). This clearly indicates that her academic identity is tightly attached to the soft-pure and relatively unspecified theoretical discipline of the Humanities. Lara's comments on my draft chapters also suggest that she valued a stronger SR+ to the subject as she commented on the conceptual leap achieved through the writing of my research:

Very good and clear - as the reader I feel well prepared for what will follow.

I think this bit here is absolutely excellently argued.

If you don't take the games further in future, I think you could easily do a post-doc on this aspect.

From the aforementioned findings, Lara seems to be located in the elite quadrant (Figure 22.1) on the basis of her clearly valuing the extent to which I developed a particular gaze or way of being (SR+) over explicit technical expertise.

Unlike Lara, the technical presentation of research for Bayonetta must enhance the knowledge aspects. She praised the technical aspects of writing the research in terms of it being “good” and “very nicely expressed” as paragraphs “nicely link to the next section”. This signposting “added to the logical structure of the text, and resulted in cohesive subsequent drafts” (Kumar & Stracke 2007: 465). Bayonetta appeared to be positioned in the knowledge quadrant (Figure 22.1) on the basis of her valuing knowledge (ER+) and downplaying dispositions (SR-).

Importantly, feedback and revision on written drafts enabled me “to engage in critical thinking and writing; thus communicate ideas” (Kumar & Stracke 2007: 463). The supervision approach used by Bayonetta and Lara for Chapters 1 and 2 hinged between functional and enculturation (Table 22.1). Functional because the writing styles to follow were explained, especially on how to make the golden thread of my writing more explicit. The enculturation approach was exemplified by

TABLE 22.1 Supervision approaches used by Bayonetta and Lara in my thesis

Chapters 1 & 2	Chapters 1 & 2	Chapters 1, 2 & 3	Chapters 3, 4, 5 & 6
Functional <i>Directing and managing the project</i>	Enculturation <i>Encouraging the student to become member of the disciplinary community</i>	Critical thinking <i>Encouraging the student to question and analyse their work</i>	Emancipation <i>Encouraging the student to question and develop themselves</i>
<ul style="list-style-type: none"> ▪ Directing my writing by explaining the stages to follow ▪ Making explicit how my writing needs to signpost the research ▪ To remain consistent in the structural format of my research 	<ul style="list-style-type: none"> ▪ Introduction to people and exemplars of high quality work in order to understand the epistemological demands of the discipline ▪ Gatekeeping—providing me with more learning resources, specialists’ opinions and networks 	<ul style="list-style-type: none"> ▪ Improving my ability to think in new ways; and of thinking in different disciplines ▪ Enabling me to analyse; and to recognise flaws in my argument ▪ To explain the ‘so what’ by critiquing my own work, and what constitutes ‘proof’ in different disciplines 	<ul style="list-style-type: none"> ▪ Helping me to identify my own enablers; and to reframe my writing ▪ Facilitating me to become autonomous in my research ▪ Encouraging reflection
<p>Key: Thesis Chapters 1: Introduction; 2: Literature Review; 3: Research Design and Methodology; 4: Results and Discussions (Quantitative Phase One); 5: Students’ conceptions and beliefs about learning through games (Qualitative Phase Two); and 6: Conclusion and Recommendations.</p>			

both my supervisors introducing me to the work of other experts in the discipline (Lee & Murray 2013). They also demonstrated the ways in which to use the academic work of others correctly. This was done by encouraging me to map my literature conceptually and to examine closely the relevance of the work of various authors to my research. Inevitably, the critique empowered me to establish my creditability as a 'player' capable of adding to the body of knowledge. Lara and Bayonetta showed a stronger ER+ to the object as they emphasised that my chapters needed to be written structurally and academically correct, which relates to the techniques used for presenting the research knowledge.

For the rest of the chapters of the thesis, the supervision styles of Bayonetta and Lara pivoted between expert mentor and auditor (Wadee *et al.* 2010). Their comments were often critical with few detailed and supportive suggestions for improvement and they were generally accompanied by further comments made to revise the writing (Table 22.1). This process entailed moving away from a process-orientated thinking to a product-orientated one. In spite of the different ways of expressing critique, particularly the 'cruel to be kind' approach by Bayonetta, their comments assisted me in terms of the quality that needs to be achieved towards attaining a doctoral degree. Their enabling me to think about my research in a scholarly and critical way suggests that both my supervisors valued knowledge to its object (ER+). Ultimately, both supervisors guided me into the less familiar discursive terrains, coached me in my writing and enabled me to participate more effectively within the discourse conventions of research.

Despite the marked differences in supervision styles, both Bayonetta and Lara focused on facilitating my "vertical academic mobility, of proceeding further, of 'upskilling' from a relatively low vocational knowledge base to relatively higher reaches of the educational and occupational hierarchy" (Muller 2009: 222). In LCT terms, it can be gleaned that the basis of having supervisors from different academic territories is to have an elite code (ER+/SR+), where legitimacy is determined by having both specialist knowledge and skills (ER+) and particular dispositions (SR+). For Dental Technology this is appropriate because the basis of specialisation is to have an extensive grasp of disciplinary knowledge that is appropriately presented in professional practices.

CONCLUSION

Even though this chapter does not provide a generalised theoretical account of co-supervision, I believe that the reflective, auto-ethnographic narrative of my experiences might be useful to those who co-supervise. It is anticipated that this

chapter will offer valuable insight into how different cognitive knowledge, languages and methodologies developed within different disciplinary traditions can be brought together as an Elite Code (ER+/SR+). The condition is that the postgraduate supervision/co-supervision trajectory needs to be premised on mutual respect, possessing sound academic integrity, and behaving professionally. With this in mind, the future of supervision and co-supervision relationships is likely to flourish, particularly in helping postgraduate students develop the core research attributes needed to accelerate and advance their research in a scholarly way. Supervisors who know their strengths, who can identify their limitations, and who understand the supervisor-supervisee relationship to be a peer-to-peer interaction are more likely to induct the student into a community of research practice.

Finally, I declare my eternal gratitude to feisty Bayonetta and sassy Lara, whose different areas of expertise joined together by their dedication, tireless enthusiasm and unwavering intellectual and emotional support, were the perfect formulae for my doctoral work.

To Bayonetta, also known as Dr Shalini Singh (DUT):

Along with your intellectual sharpness this thesis would never have come into existence if it had not been for your commitment, no-nonsense approach and dynamite-like personality. You believed in my work when others lost hope and trusted in my ability to pursue my research when the odds were against me. You were not just my supervisor, but a passionate and compassionate mentor whose door was always open to me. You are simply extraordinary (Vahed 2014: vi).

To Lara, also known as Professor Sioux McKenna (Rhodes University):

You helped me dig the trenches of my study by opening my eyes and mind to the complex world of the social sciences, which was made less complicated by your continued expert guidance. Your unfailing support, commitment to excellence, and patience, and whose title is dictated by these distinctive qualities make you the epitome of a conscientious and caring supervisor (Vahed 2014: vi).

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