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From a slave to a critical-thinker-artistic-writer: Emancipating a professional's anthill using action research professional practice with information systems professionals as the crux: Gnothe se auton non, j regrette rien die lichtung and all the world's a stage

Edmond G. La Vertu
Edith Cowan University

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FROM A SLAVE TO A CRITICAL-THINKER-ARTISTIC-WRITER

Emancipating A Professional's Anthill Using Action Research Professional Practice With Information Systems Professionals as the Crux: *Gnothe Se Auton; Non, Je Regrette Rien; Die Lichtung; And "All The World's A Stage."*

Edmond Gordon La Vertu

This thesis is presented in fulfilment of the requirements for the degree of

Doctor of Business Administration (Information Systems)

**Faculty of Business and Law
Edith Cowan University**

October, 2005

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

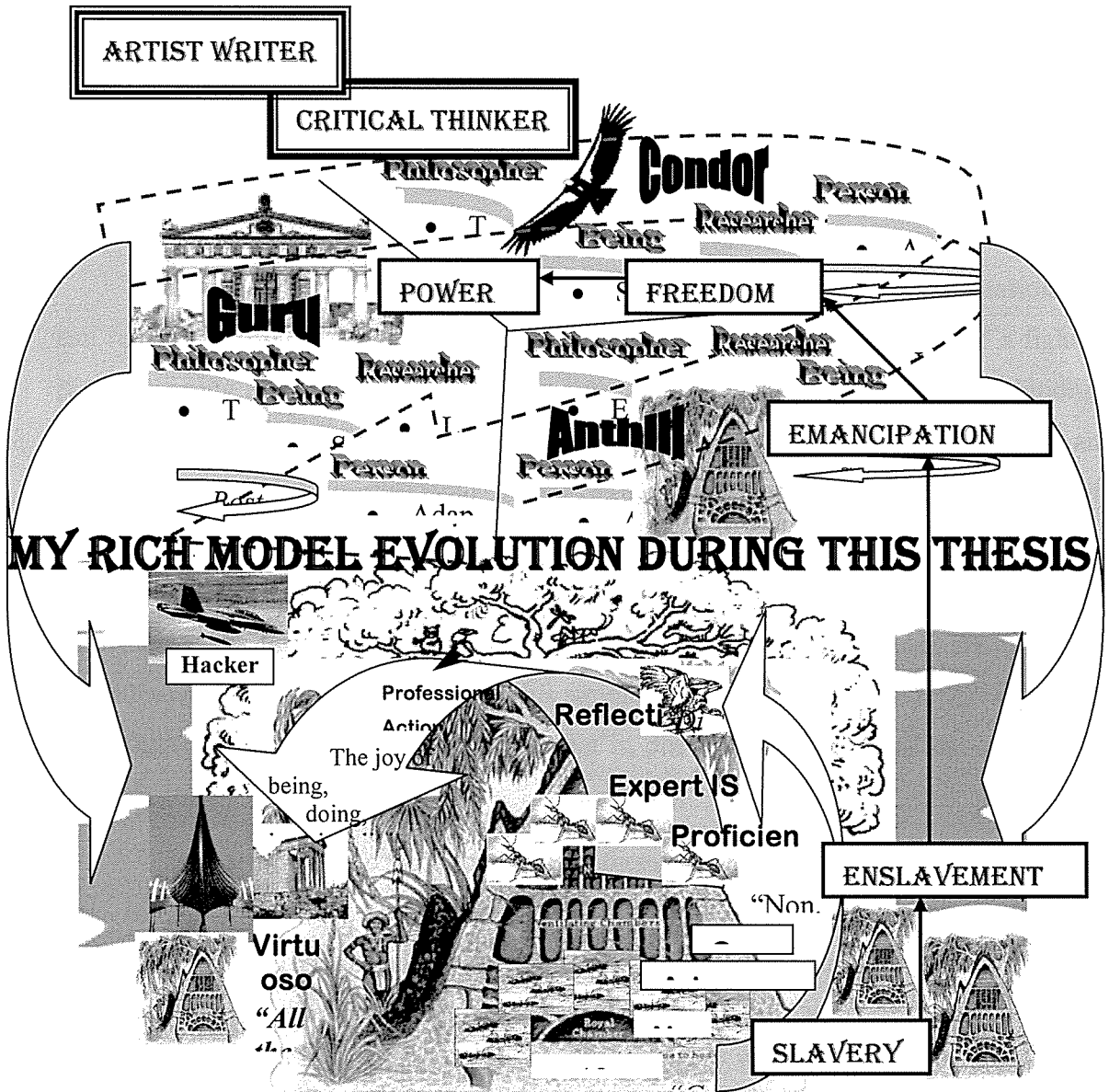


Figure 1.1. A post-modern artistic impression of selected rich models emerged in this thesis impressionistically representing the way in which this thesis revolves around the words *slavery*, *enslavement*, *emancipation*, *freedom*, *power*, *critical thinker*, and *artistic-writer*; and enacts and indeed, if thinking neopragmatically, incarnates the rich modelling methodology that is the central research approach used. I discuss this figure fully in the “Conclusion” chapter to this thesis but it should be noted that I place the figure here because of its importance.

The diagram shown in figure 1 gives an impression of this thesis around the key words *slavery*, *enslavement*, *emancipation*, *freedom*, *power*, *critical thinker*, and *artistic writer*. The text at the centre reads “my rich model evolution during this thesis.” On re-reading the text, I wonder if it is referring to my own evolution during the research,

which could be described as “rich model,” or the evolution of the rich model that encapsulates, and in one sense is, the chief contribution of the thesis.

That I use this sentence and this impressionistic diagram to begin this abstract should signal to you, dear reader, that this thesis tells my truth, with a little ‘t’, in my own way, about my reflective practitioner investigation of my experience of being part of the information systems profession and then part of a Doctor of Business Administration (D.B.A) programme. As such, it is what some may term post-modern, although I hesitate to describe it as such.

Through my lived experience as an enslaved information systems professional, I can relate to the current situation of asymmetric warfare (note the picture of a fighter plane dropping a bomb with the word “hacker” under), asymmetric industrial relations, and some other forms of the master-relationship relationship. In my career as an information systems’ professional I have experienced that here is a constant that permeates the world: that parties desire to achieve greater power over any other competitor while sacrificing as little as possible of their own resources. Whether this is an actual war or just a simple jousting for advantage, the process remains similar: Two structuralist sides in conflict. Perhaps this simple description is the apparent reason why most fights are simply a zero-sum game, that is, one side wins (+1) and the other loses (-1).

There are however variations to this theme. Hegel’s Master-slave dialogue is one. In this case the vanquished who is now a slave, eventually gains power over their master, the original victor, not through force of arms, but by becoming indispensable to the Master. The major and subtle weapon the slave possesses is time with obsequiousness that leads to dependency of the master to the actions of the slave.

Again through my lived experience of near imagined slavery, I can also relate to another form of conflict that is now upon us, that of a structuralist formal army supported by post-structuralist critical-thinkers and the artist-writers of a post-modernist society against a structuralist guerrilla grouping, with a post-modern idealism giving vital quasi or actual intellectual support. This leaves the structuralist formal army seeking effective and favourable counters to this asymmetric situation through the weakness of the guerrilla forces, that is, a lack of critical-thinkers; else, it will see a form of defeat that is reliance upon the guerrilla force not to attack. It is a modern and curious situation where an overwhelming force seems to be impotent against a quick, opportunistic, attack by a much smaller, under-resourced opponent. Yet, if the guerrilla

forces do in fact *win*, what is the result within the territory the guerrillas now control? It seems that it is not an egalitarian-based modern democracy, or even a functioning theocracy. The key is the critical-thinker, without these people who ask questions, embarrassing ones most times, the necessary balance to support a string of freedoms is lacking. The major problem is where do the guerrilla forces find these people, and support them by not exterminating them as counter-revolutionaries, thereby creating the basic weaknesses to the system they wish to impose.

However, the above guerrilla case need not prevail. In my experience of organisational relationships, which are by their very nature asymmetric, a structuralist organisation can defeat even its deadliest asymmetric foe – an enslaved, passed over, disgruntled, and sabotage-prone information systems employee. I was one such employee, one such enslaved person.

How then did I experience emancipation, freedom, and power? In this thesis, through many winding paths, I describe such a journey, which is its core *raison d'être*.

DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education.
- (ii) contain any material previously published or written by another person except where due reference is made in the text; or
- (iii) contain any defamatory material.

I also grant permission for the Library at Edith Cowan University to make duplicate copies of my thesis as required.

ACKNOWLEDGEMENTS

If I were to acknowledge all who have supported me with time, money, and effort for the evolution of this work, it would have to be mainly my family. Several members objected, most supported at the beginning; however, all did at the end, including my youngest son Marc.

The co-researchers who contributed to this work, as I ventured to find out how they currently work in the Information systems industry showed, and proved to me that nothing has changed since 1968 when I was active in Information systems when it was evolving from a job into a profession. The technology has changed but not the nature of the work.

Sometimes when a researcher has their head in the clouds seeking the smell of a resolution to one's research problems, someone auspiciously grabs you by the ankles and drags you down to earth. I have two people to acknowledge for this practice: My father and my eldest son.

My father is deliberately computer ignorant as he considers them a curse rather than a benefactor. His *system* is never attacked, infected, or requires expensive updates. His United States military background endowed him with a brilliant Bull or spurious argument detector, and he can still wield an argument, when given all the fundamentals, with the best. Anyone who can play the U.S. Navy sailor game of chance and strategy, Acey-Deucey as well as he, must be considered among the intelligentsia, and worthy of being heard anywhere.

My eldest son is just the opposite as computer literacy is concerned, a senior manager in a large information systems establishment, his systems has been attacked, infected, and requires expensive updates. He too has a good Bull detector and maybe that is why information systems suppliers have such high regard for him; however, he does not play Acey-Deucey and so his education, in part, is incomplete.

Both men have offered invaluable advice. My father's questions were fundamental and poignant, my eldest son's, at a higher, more industry oriented level, and more current in outlook. The Dreyfus' ivory tower and the swamp at its base, was applicable in so many conversations. Thank you, Dad and Scott.

Financially, this was a drain on the family, and my wife's ability to balance a budget has become legendary, perhaps some monetary rewards will be attracted by this work, and all debts repaid including interest. Thank you, Nola.

My supervisor, Dr. Mark Williams, deserves a notable mention as well. I consider a stroke of good fortune to be under his supervision. There were months of other than supervision, that allowed me to read widely, to seriously contemplate and evaluate the philosopher's of the last 300 years, this year's crop if you will, and others prior to the modern era. This, so that I would become a more and properly educated person aware that the world abounds in phenomenal and noumenal uncertainty, and other forces that we do not yet put a specific name to, even though certain modern philosophers are still trying to do so. Thank you Mark and thanks to your stable of philosophers, both living and dead.

I also will thank the last secular Prime Minister of Iran, Amir Abbas Hoveyda, who under the reign of the Shah of Iran, helped make available the scholarship that allowed me to study during one of the most turbulent periods in modern Iranian history. I believe this was part of the educational program for the White Revolution of Iran. In addition, I wish to thank Dr. Habib Ladjevardi, now of Harvard University, and other unnamed sponsors of the Iran Center for Management Studies whose foresight quite possibly would have changed the course of Middle Eastern History, this foresight was meant to see a situation where Iran was to become the industrial and secular heart of the Middle East.

When the revolution came, the now ex-prime minister Hoveyda was murdered by the new Islamic Republic of Iran, as were so many others at that time. The remains of Hoveyda were unclaimed and not buried for months, in defiance of Islamic custom, that alone speaks volumes for the political uncertainties and realities of Iran today.

Lastly, I will pay tribute to my mother who became very ill and died during this work. She was the one, who, when I left for Iran on a MBA Scholarship, leaving Nola to look after new-born Scott for a year, yelled an Australian term of endearment, but not, it seems, in this case, 'You Bastard!', as I entered the International Departures lounge. Rest in peace Mom, no one really knows what awaits us all, and thanks for a whole lot of fond memories.

As a final entry, I offer the Doctoral Candidate's Prayer: *Thank God, this is over and finished!*

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PROLOGUE

Welcome to my journey of emancipation from memories of metaphorical slavery and real enslavement through to freedom and power. It is not a typical doctoral thesis. Indeed, sometimes I might label it as post-modern (Baudrillard, 1995; Derrida, 1998; Foucault, 1982, 1983, 1994, 1995a, 1995b; Jameson, 1992; Kellner, 2005); sometimes perhaps post-structuralist (Barthes, 1972; Deleuze, 1995; Derrida, 1998; Foucault, 1982, 1983, 1994, 1995a, 1995b; Guattari, 1996; Sartre (Flynn, 2004; Kellner, 2005), Nietzsche (Leiter, 2004; Wicks, 2004)); at some points perhaps humanist (de Beauvoir (Bergoffen, 2004), Sartre (Flynn, 2004), Rorty (Ramberg, 2001), Stimer (Leopold, 2002)); and at others I might think of it as anti-humanist (Saussure (Sanders, 2004, Levi-Strauss (Levi-Strauss, 1995), Marx (Marx, Tucker, & Engels, 1978), and Freud (Freud, 1995)). I am a little more sure that this thesis could be labelled heuristic because it details “eureka” self-discoveries and conclusions, and phenomenological (Hegel, 1971, 1977, 2004; Heidegger, 1962; Husserl, 1989). I consider it a form of action research (Dick, 2003) incorporating a rich modelling methodology (Checkland, 1981; Williams, 2004). From this, I conclude that a conservative writing style would be inappropriate for a thesis like this.

I write more about my writing style later but for now, I will quote from, as did my supervisor Dr Mark Williams, Professor Jacques Derrida.

Because I like him, I can foresee the impatience of the bad reader: this is the way that I name or accuse the fearful reader, the reader in a hurry to be determined, decided upon deciding (in order to annul, in other words to bring back to oneself, one has to wish to know in advance what to expect, one wishes to expect what has happened, one wishes to expect (oneself)). Now, it is bad, to predestine one's reading, it is always bad to foretell. It is bad, reader, no longer to like retracing one's steps (p. 4).

Moreover, to you, a reader of this thesis, I ask, as did my supervisor for his thesis, for your patience so as not to “predestine” or to “foretell” based on my writing style.

In a similar vein, Professor Bob Dick, a leading Australian authority in action research, states, “a colleague Paul Ledington (quoting his doctoral supervisor Peter Checkland, I think) defines a thesis as something ‘with a new sentence in it’”. I have endeavoured to take this advice seriously.

An article concerning Simone de Beauvoir, (Bergoffen, 2004) states that she considers 7 groups of men, with only two groups worthy of freedom, the critical-thinker and the artist-writer, as the others refuse to recognize the experience of freedom, or misread the meanings of freedom. In the model presented later in this thesis, the critical thinker is the Condor and the artist-writer is the guru. For Simone de Beauvoir, “critical thought attempts to militate everywhere against all aspects of the serious but without foundering in the anguish of pure negation”. However, “if he does not assume the subjectivity of his judgment, he is inevitably caught in the trap of the serious. Instead of the independent mind he claims to be, he is only the shameful servant of a cause to which he has not chosen to rally” (De Beauvoir, 1948).

“The artist and the writer, following another way, while not proposing to attain being, surmount existence by attempting to create an absolute of it. However, they can fall into an illusion through idolizing their own attempts” (De Beauvoir, 1948).

De Beauvoir’s ideas form part of the logic of the development of the presented model of the rich pictures in my thesis.

A Story

In the spirit of heuristic inquiry (Bleakley, 2000; Moustakas, 1956, 1959; Tesch, 1990), I will begin this thesis by telling you a story of a journey. Simply explained it is a creative knowledge-bearing piece of writing in the spirit of phenomenology, such writings to give free reign to this way of being in the world (Heidegger, 1964). Alan Bleakley (Bleakley, 2000) commends such an approach on the one hand stating that “reflection on practice through the medium of creative writing offers a narrative mode challenging instrumental approaches to reflection as logico-scientific knowing”. However, on the other hand, he contends that there is a danger of “internal contradiction such as unreflexive accounts of personal ‘discovery’ and ‘growth’ in such writing.” His final word is that creative “language offers the very ambiguity, uniqueness, and value conflict that Donald Schön characterises as the ‘indeterminate zones of practice’ that we must inhabit effectively in establishing practical artistry as the heart of reflective practice” (Bleakley, 2000).

Whatever internal contradictions that are found in this work are entirely mine, and I accept them all not as errors, but as a demonstration of the characteristics of the human being that wrote this work and his failings, foibles, and mastery, such that it is, over the life he now leads. If, as some say, post-modernism abandons objective truth, then these characteristics are neither failings nor advantages, they just *are*, as Martin Luther is attributed to say, "Here I stand; I can do no other. God help me. Amen" (BrainyQuote, 2005b). It seems that contradictions can be a research source, and that contradictions are to be found within most research and research writings, and this work I do not consider an exception to this rule. From this, I therefore suggest that contradictions are a way of determining the current limitations of knowledge, and the examination of contradictions may advance human knowledge in areas that surround contradictions and through the very contradictions themselves

A Narrative Insert

A Journey called Gnothi se Auton - Know Thyself

This thesis is not a typical and pleasant prepaid tourist's trip to the local sites of interest, as I can only guarantee a few things only. Firstly, it is unique because it is mine. All conclusions, memories described here, and interviews taken in and interpretations taken, are mine, though I explain what they mean to me. Secondly, we both, at the trip's end will be able to say that there is something new here and that this something has significance. However, please remember from time to time that this is my journey. It is a shared journey, but nonetheless it is not yours. You will see the picture as I present it, as your guide, which is not the whole picture. However, I must realise that the limited pictures that I present must yield good and fair value to those whom willingly share this journey with me. The whole picture is extra. Probably we both have not the time and resources, at this stage, to spend them looking elsewhere for additional phenomenal stimulation, namely mental and sensual beauty. While at the same time, as is normal for the human being, paying little attention to the non-phenomenal as true mental stimulation enters our being from known, yet in relation to our given and trusted senses, also unknown sources.

What Your Ticket Offers You

This is simply a rough and ready package, whose aim is to allow you to consider returning to this area. If you do, your previous journey, this one, will allow you to seek what you missed on this packaged tour. This does not mean that I have presented you

with an inferior product; it simply means that we both have a limited amount of time to smell the rare flowers and see wondrous sites before we suffer from the world-weariness question of 'so what?'

Firstly, a Sharing

However, in the scheme of things, I am willing to share with you what I have found and sourced from this fascinating, transforming trip of a lifetime (perhaps thirty years too late to save the world, not in a Marxian sense, but in my own sense that will be shown as this work evolves and unfolds to you the reader and possible partner in this journey). Nonetheless, I am hopeful that you will find this journey at least worthy of your time. Any other conclusion at this time is mere speculative hope. Afterwards, you will not be able to regain those hours, so it is up to me to make this trip, nay expedition, worthy of your interest. Perhaps this shared journey will add a particle to the knowledge of the world in a particular area that interests me, and, at journey's end may become an additional interest of yours.

Secondly, a Raft and a Tool-Kit

In this journey, we delve into a personal history, particularly a personal history of learning and philosophy. In addition, the modern conventions of these topics, as well as the external sources found in anthropology, phenomenology, skill acquisition, reflection as a skill and knowledge tool, sources of administrative and other powers together with their uses, and abuses are part of your ticket. These form the raft on which we will journey through deep and still waters, boiling rapids and perhaps confronting water falls which we must carry our raft around, all towards a further conundrum, the endlessly dynamic and ever semi-explored sea of limited learning, evaluated knowledge, and inherent wisdom.

Thirdly, Things Sensed and Things beyond the Senses

However, as human beings we are able to discern two versions of the sensed objects. Firstly, those sensed and explicitly shared by all within our tour group, either during our journey or afterwards. Secondly, those objects which are sensed only and uniquely by ourselves, and remain tacit and therefore unexplainable sensual and extra-sensual reactions and memories that are forever yours and in some manner personally influential. These individual's unique considered, warranted tacit conclusions are by themselves a sum of the individual's nature and nurture and makes the reactions to the

presented and discovered objects range from the memorable through to the commonplace and through to the disposable.

Fourthly, on Avenue for Self-Discovery

Using tools accepted by others as relevant and noting that only what we discover for ourselves, both tacitly and then explicitly, all of this may lead to another spot that may contain either a mountain of treasure or an indication of other treasure, yonder, somewhere. Yet, we may also invent new tools so that we may show and teach to others to enable them to see the utility of our skills of invention and innovation as well. Whether or not these tools would prove useful for others to use elsewhere is uncertain, but for us they may let us perceive things that even our initial pathfinders could not, and this is an important part of this package tour as well. We must not forget, however, that all of this can lead to personal change. Both of us have the responsibility to be different at this particular journey's end. Such is the possibility for development and evolution of both the unique self and as a sum, humanity.

Fifthly, No Warranty, No Guarantees, No Ticket Home until the End

I offer no apology for the incidentals incurred on this journey – the physical and mental diseases which cloud the mind, the destruction of will through pressures from the ignorant or unwilling or both, and a multitude of other traveller's burdens. All I can offer is the simple medical kit of soundly based support from others who have dared to tread some of our route before us. The authors accepted by others as informed and who offer their findings to the world so that others, like us, can use them in combination with other findings to achieve a relatively safe journey, to at least part of the way, to our destination. However, only knowing that place when we get there, and if we can recognise it, a place called *Wherever* leading possibly, to *Somewhere Else*. All we both can hope for is the creation of a pathway and a map so others are able fill in the spaces marked as unexplored.

Please take your seat, the journey is about to begin, down a river that holds much interest to me, the river of information systems careers.

Cautions Concerning Accepting Apparent Truth.

If truth (with our without a capital depending on whether or not you accept some form of realism) is difficult to prove and easier to disprove, it seems to me that Schopenhauer is on the mark when he posited, "All truth passes through three stages. First, it is

ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident” (BrainyQuote, 2005a).

A corollary following from Schopenhauer’s assertion is that truth as discovered in this thesis is subjected to as many caveats as other known and successful dissertations that have paved the way for this research to take place. If I use a previous and cited work that is flawed, then it follows that this work suffers in some minor or major way. However, we as researchers must consider this common and acceptable risk.

Kuhn-Loss

For instance, Kant and others up to the age of Einstein held that Newtonian descriptions of the Universe were unassailable and drew upon the truth as then known to postulate new, deduced, and implied apparent truths. Alas, for them, and their learned and intelligent disciples, Einstein’s new basic truths caused havoc among these that had invested their lives in scholarship founded upon now declared insufficient axioms. This can be referred to as Kuhn-loss (Kuhn, 1970). All of philosophy had to salvage what they could from this new elementary knowledge or rather from a new set of axioms, to re-establish truth as they and others would be able to recognise and know. Not all of philosophy regained its previous status, and not all of it survived the trauma. However, some philosophers gained new credence using the new axioms and new status as major thinkers due to this upheaval; such are the vanities of philosophy and the questions it poses concerning human existence.

A Personal near Truth

My point is that this is my near-truth as I perceive it to be in my era, documented and cited, trans-literated, and interpreted, evaluated and discussed, and accepted and disregarded as deemed necessary by me. For in the final analysis, I have authored this work, for the satisfaction of myself, and for my education and edification. I am also submitting this thesis for approval by others to prove that I am worthy of the privileges and esteem of completing and earning a doctorate.

Such a Document must have a Soul

In following heuristic inquiry (Bleakley, 2000; Moustakas, 1956, 1959; Tesch, 1990), it seems however, such a document, this thesis, must not be a soulless document, lacking the stains of sweat and tears. This document should endeavour to be something that causes the spirit and soul of the author to soar once more within the mind of a

reader, even after many decades have passed. It must possess new evidence for others to use for the benefit of humanity (as Dr Jack Whitehead puts it on his extensive www.actionresearch.net website), if for no other reason than it is a statement of the ethical standards of this current time and place and this work is worthy as an incremental addition to what we call present-day knowledge.

Non, Je Ne Regrette Rien

One of the metaphors of this work, the overarching one in this instance, is the song by Edith Piaf, *Non, Je ne regrette rien* – I regret nothing. Below I have shown the original lyrics and two translations – one from Google and the other from Netscape. Both translations offer a form of transliteration as neither offer meaning from one language to meaning in another.

French	Google	Netscape
Non ! Rien de rien ... Non ! Je ne regrette rien... C'est payé, balayé, oublié Je me fous du passé!	Not! Nothing of nothing... Not! I do not regret anything... It is paid, swept, forgotten I insane of the past!	Not! Nothing of nothing... Not! I do not regret anything Nor it although one made me Nor the evil all that is quite equal for me!
Avec mes souvenirs J'ai allumé le feu Mes chagrins, mes plaisirs Je n'ai plus besoin d'eux !	With my memories I lit fire My sorrows, my pleasures I do not need more them! Swept the loves And all their Balayés tremors for always I set out again to zero... Not! Nothing of nothing...	Not! Nothing of nothing... Not! I do not regret anything... It is paid, swept, forgotten I insane of the past!
Balayés les amours Et tous leurs tremolos Balayés pour toujours Je repars à zéro ...	Not! I do not regret nothing... Neither the good, that me Nor the evil was made, all that is quite equal for me! Not! Nothing of nothing... Not! I do not regret anything... Because my life, because my joys Today, that starts with you!	With my memories I lit fire My sorrows, my pleasures I do not need more them!
Non ! Rien de rien ...		Swept loves And all their tremors Swept for always I set out again to zero...
Non ! Je ne regrette rien ... Ni le bien, qu'on m'a fait Ni le mal, tout ça m'est bien égal !		Not! Nothing of nothing... Not! I do not regret nothing... Nor the good, that one made me Nor the evil, all that is quite equal for me!
Non ! Rien de rien ...		Not! Nothing of nothing... Not! I do not regret anything... Because my life, because my joys Today, that starts with you!
Non ! Je ne regrette rien ... Car ma vie, car mes joies Aujourd'hui, ça commence avec toi !		

Both transliterations are quite similar, perhaps one relies upon the other.

Meaning, that elusive translator's problem is what I seek from these lyrics, poetry if you will, so I offer my own translation, the one I use as the metaphor for this work, and its use as the glue that holds this work together.

French

Non ! Rien de rien ...
Non ! Je ne regrette rien...
C'est payé, balayé, oublié
Je me fous du passé!

Avec mes souvenirs
J'ai allumé le feu
Mes chagrins, mes plaisirs
Je n'ai plus besoin d'eux !

Balayés les amours
Et tous leurs tremolos
Balayés pour toujours
Je repars à zéro ...

Non ! Rien de rien ...

Non ! Je ne regrette rien ...
Ni le bien, qu'on m'a fait
Ni le mal, tout ça m'est bien égal !

Non ! Rien de rien ...

Non ! Je ne regrette rien ...
Car ma vie, car mes joies
Aujourd'hui, ça commence avec moi !

My Translation

No, from now onward, nothing arises from
the now *nothing* that is now my past.
No, I do not regret the nothing that is now my
past:

All that is paid for, swept away and forgotten,
As I was wild with the hopes for new
freedoms of a new emerging technological
age.

From my memories of those times,
I had started fires,
But they gave results that were sorrows and
pleasures that are now forgotten, and they are
useless to me now.

I have swept away my past loves with their
tremulous excitements,
Swept away forever as I set out again,
To restart my life from a new beginning.

No, from now onward, nothing arises from
the now *nothing* that is now my past.
No, I do not regret the nothing that is now my
past:
However from now onward, the coming good
life,
As from today, all that begins with me.

This is my song, sung for me and not anyone else as was Piaf's lyrics, perhaps her lyrics were to justify Edith's place in this world, as I use my lyrics to help justify my place in this world. My version just tells me about me, and why I cannot rely upon my past skills, to restart anything resembling a career as an information systems Competent, as I would only attempt this level out of sheer curiosity. I can only accept the fact that I must be better, more prepared, and accurate in my predictions than ever before, and that means that I must become, using terms from my emergent model, better than an Expert and at least a Virtuoso at the Guru level and that is entirely up to me.

However, the overarching theme here is the transformation of *wondering why to acceptance of the past as personal history*, ready to use as a form of learning irrespective of the effects upon the people concerned. It is perhaps, as the French say, *Vengeance du ciel ou volonté des hommes?* (Bertaud, Leflon, Lefranc, Melchoir-Bonnet, & Mermet, 1976), where the facility where I had encountered my real first

failure ceased to exist two years after my separation, perhaps the inherent problems that I tried to describe came to a negative and compounded fruition. Yet it seems there are similarities that confront the systems industry today. Indeed, I understand that the writings of the French Revolution and the *Collapse of the Third Republic* (Shirer) are also applicable to industry today. The fundamental problems are simple, but described in a complexity of supporting arguments that shed little light other than to support a thesis *A Posteriori*. To take the opposite case, from causes to a probable effect, *a priori* concerns are partly the difficulty of this work.

Prologues and Epilogues of the Information Systems Industry

Reflecting upon the history of information systems, we have seen multi-billion dollar organisations rise and fall, and others to rise to a peak and then fall as have their predecessors. The state-of-the-art within information systems as a profession has changed so rapidly over the last 40 years that new systems are obsolete before completion and skills considered vital at that time, are today worthless, and the human part of the equation repeatedly reverts to a novice state within the new, promoted information systems methodology. Perhaps, never knowing what information systems 'is,' can be understood as the sanity clause within the contract between man and machine, knowing what it is, may be daunting even for those inventing new methods for controlling the mundane. The again, perhaps it is the ultimate seduction – a willing mental enslavement by a non-slave in the hope and promise of more interesting times in the future as an artist-writer, the highest form of freedom described by de Beauvoir (Bergoffen, 2004).

Prologue Description of this Work:

In this introduction, I will be discussing the chronological events that began the search for a title, the use of language, the research space, and the initial assertions that start this research and reflective thesis. This begins the logical presentation of a topic that I consider is of interest to the information systems industry, industry as a whole and to me personally. This latter and personal interest is simply because I was deeply involved in the information systems industry for over ten years. This was until I changed my career path, and in a closed community such as Perth, Western Australia, this led to disastrous consequences for me as my experiences have shown, and my family's financial, social, and general outlooks for a very long time, and it is from this major experience I generate this thesis.

CHAPTER 1

A PRELIMINARY EXPLANATION OF RESEARCH WRITING STYLE AND APPROACH

Introduction

As a study, this is the final issue to be resolved. This is not due to poor planning or practices; it is the fact that this is an explorer's diary. Diversions are a fact within the code of explorers, and it is from these diversions that new discoveries are possible. The model presented as a major outcome of this thesis, now has greater utility than I originally thought, as it also describes the major weaknesses of asymmetric warfare as well, whether it is the larger or smaller opponent. These on-the-way investigations have soaked up hours of my time yet have led to greater intellectual treasures rather than physical ones. As I seem to lack the facilities to carry away physical treasures, I must be content with the intellectual ones, and enter into my diaries the descriptions of the physical treasures awaiting others to carry away (perhaps at their cost), while I consider myself to possess the treasures of greater value.

As this work and study matured, self-reflection and reading outside my topic allowed me to find new perspectives, concerning not only my research problems, research questions, and research methodology but also where I have found other forms, including my final rich model, where the research results could be put that would represent a doctoral thesis and then also to provide, for others, avenues for further research and further uses for the model. All of this to broaden the map's boundaries and utility, the rationale for any research.

I am told that I write in the style of John Dewey, perhaps it is from a combination of my American and Australian experiences, and the American approach to Action Research as a tool for social change and the British/Australian model that emphasises organisational improvement using the same tools (Smith, 2001a, 2001b). From this, we can both see that Action Research, sourced from Kurt Lewin (Smith, 2001a), in all of its guises, has a multiplicity of roles to play in the future.

It is now, however, that I must explain my writing style and to explain my final research methodology, and at first I approach each mutually exclusively, and then as a union of style and method, as each are not truly independent of the other.

Not all of this, however, begins to explain the serendipitous series of event that have led to revision upon revision of this work to yield an inverted funnel of investigations. Typically, a researcher uses a funnel to collect data and resources, and then narrows the topic down to a given few problems or questions or both. In this case, the original situation was already at a narrow point, this by using a rifle approach, but by forces of reflection and with new resources applied to the problems and questions, the irregular shot pattern of the blunderbuss hit many new areas for consideration within this work. Typically, what started out as investigating information systems careers, I found the resulting model could also apply to asymmetric warfare, religion, politics, and a growing list of other applications.

I discovered that all of this is about transition: from slavery, enslavement, emancipation, freedom all leading to power, my now additional key words as well. I had to tell this story, not as a final edit, but as an ongoing heuristic, in an almost diarist style. The inspirations of which I speak were not of the sudden 'eureka' type, but nearly so. They resulted in the consideration of available information, evaluated data, and put with reflection, allowed me to build foundations for warranted outcomes. To tell such a story was going to need support from references, these to support my being able to tell one's truth, whether real or perceived. This daunting task, if truthfully told and based upon honest reflection of what occurred is a story and not necessarily a history.

To find sources for this work was a great problem. No consulting firm would even consider my investigating this problem with them, and their cooperation. The solution was raw interviewing with people in the Information Systems profession, attending recruiting seminars, and interviewing managers of large information systems installations, as well as my information technologist eldest son as one of those managers.

What I found is that almost nothing has changed in the information systems area, what has changed is the technology itself, not the human being side of this business. The interviews with the coalface employees were actually depressing, as they were for the most part looking to me for answers for this problems described here.

To put it into a context, several just changed jobs, one took over a small business, one snicided, though *love* seemed to be the cause there, none could see a positive future for themselves irrespective of their education, real or potential. They seemed to believe seriously that they were *typecast as information systems types*, never to be allowed to expand their horizons within the organisation

I discovered my authorial voice and accompanying sub-voices that enabled me to provide insights into my development as a doctor of business administration candidate, whether or not this is justified is now up to you, dear reader.

A Explanation of My Writing Style

It was suggested to me that as a good deal of the history of Action Research emanated from educational research, and that I should begin there, would lead to a solid explanation of my writing style.

From the point of using autobiography, (Bruner, 1990, chap. 4) proposes that such an approach describes how one's personal history influences the writings of a person when explaining their research. I have done this and sometimes it fills a chapter or it describes a situation where questions arise pertinent to the work. Subjectiveness, metaphor, autobiography, perhaps near ethnography, narrative, all of this is contextually supportive of this project with the end purpose of clarity of explanation through prose and sometimes poetry. Barone (Barone, 1988) posits – 'All educational research is fictive, fashioned by the researcher,' but supportive of the work undertaken by the researcher as is done in this case.

However, the reader is not left to use *their* learning from their own experiences with their now innate definitions of the adjectives that I use as mere words used to describe my research writing style. I do offer some fundamental definitions. I will paraphrase from the College Edition of Webster's New World Dictionary of the American Language, my dictionary that I have carried with me almost to every country that I have visited and have nearly 'loved to death,' ("Webster's New World Dictionary of the American Language-College Edition," 1960) to resolve potential semantic conflict by assuming this resource as the source of standard definitions of these terms.

- Narrative - of, or have the nature of, a personal narration, in a story form that leads to an description of the research problems and questions;

- subjective – of, affected by, or produced by the mind or a particular state of mind, in this instance by the use of the first person and this leads to a indirect description of the author's personality that is able to taint the research, and Action Research expects this to occur;
- metaphorical – of or constituting a metaphor, (an implied comparison in which a word or phrase ordinarily and primarily used for one thing is applied to another, by using many instances of imagination and as such are explanatory but not literally applicable to the situation);
- reflective – meditative; thoughtful, in the manner of using such techniques to describe, then to interpret, and then to yield a possible logical explanation, typically using non-quantitative methods as is described in the research methodology of *Reflective Practices*.

From the above definitions and the previous descriptions, the source of the writing style used within this partially autobiographical work that uses the action research first-person as a valid research tool and as a source of personal inference and influence upon the research conclusions. However, the links to the interviewed, the action research second-person, and leaving the broad picture to those, the action research third-person, who willingly study the model, are either expressed directly or implied.

Explaining the forces that this literary style invigorates, (Zald, 1993) examines the linking of the studies of the Humanities with studies concerning organisations as Zald posits "The scientific and technical model emphasizes logic, clarity, and data representation in its rhetorical stance, to the exclusion of intuition, allusiveness, imagery."

Denzin (Denzin, 1994) expresses a series of writing styles or typologies, that by using major research paradigms with keywords which yield a more direct approach to writing a work of research. There are five styles or typologies within two interpretations. The two interpretations are more like approaches to the manner of explanation and they are tender-minded and tough-minded. The writing styles are:

- positivist (variables, hypotheses – A priori - from cause to effect with accompanying theory propositions);

- constructivist (the emerging of understanding using design and understanding to complete a process);
- critical (using a society, its characteristics to show actions, structures, its various cultures, and power sources - within a general theory of society);
- interpretive or phenomenological (using socially constructed realities and local generalisations with interpretive resources, known and perhaps unknown stocks of knowledge, inter-subjectivity, practices or practical reasoning, and ordinary talk); or
- feminist (gender, reflective practices or reflexivity, directed emotion, and directed action orientations).

My main writing style in my recent research is not positivist, as the terminology that I use eliminates this possibility. Rather, terms such as emergent, culture, ordinary talk, and reflexivity contain elements of all the other typologies when necessary. However, of the two main categories of either being tough-minded or tender-minded, I find that only a sure/unsure research approach can deem tough mindedness to possess any utility at all. An heuristic, discovery approach is, it seems, only able to proceed if one is open to what one actually finds along the research, not a tough-minded and predetermined rejection of embarrassing facts. All of this requires an intuitive and emotional approach, with open-ended answers which lead to interpretation of the word-art presented including the word-art biases of all the actors - the creative artist, the performer, and the listener and reader of these texts, both as a general performance and in the unique personal rendition of what they consider to be the reality they inhabit. The acceptance of Berkeley's nominalism or anti-realism where *table* is a word for a table without any philosophical baggage, this is where a reflective critique determines the value of ostensible and real power structures within a multi-voiced textual representation of perceived and reflected-upon reality. This is where I start anti-foundational, criticism, science as power, multi-voiced texts.

Supporting this approach, (Erickson, 1986) is unambiguous about the theatrical function in social science research, particularly the use of the vignette as an explication tool. Here Erickson asserts that the writer's position covers and becomes grounded not only within substantive theory but also seriously includes "personal commitments" (p. 153). This means that the reader is a serious research partner or "co-analyst" as well as

a source of a research or reader critique for the reader to consider seriously or otherwise, for his or her own purposes. This form of audience participation is also part of the approach that Erickson uses in development of his arguments (Ibid., p. 153). Erickson has four audiences (Ibid., p. 153) - researchers, policymakers, practitioners, and the local community – however, I generally address in this work only the first. To be more specific, I address those who are aware of Qualitative Research; topics such as the Marxian foundations of the Frankfurt School sourced Critical Theory, including both sides of constructivism, radical and critical, plus narrative - all of this with a post-modernism twist. I now assume that I meet Erickson's approach, and I remain on a firm foundation as I present for acceptance this work for the specified group.

To support the telling of my story in a very personal and autobiographical manner, (Lancy, 1993) devotes a whole chapter in *Qualitative Research in Education*, to such "Personal Accounts" (Ibid., chap. 6) He places autobiography (memoir, chronicle, diary, and reminiscence) as the valued "Self-Generated, Life History" of the person or teacher-as-researcher concerned without stating its utility within the research area. However, he cites (Clandinin & Connelly, 1994) in order to identify research value of this approach as "our best access to teachers' and students' understandings of the meaning of classroom experience may be through life history narratives, rather than through structured classroom observations and interviews" (Ibid., p. 169). By examining the entire situation, we get a broad landscape picture from which we may choose to narrow the picture to a few intimate portraits as our research interests, and available data sources will determine.

In addition, John Van Maanen's book *Tales of the Field: On Writing Ethnography* (van Maanen, 1988), proposes and encourages the researcher to tell relevant personal stories that attract the interest of the reader, that are a coherent and complete story and ones that seems to be true in the mind and eyes of the narrator, the researcher and the reader. By suggesting the use of tense to develop and to use the art of storytelling, he suggests the use of the present tense, this give a dramatic flair to the story as if were happening here and now in real-time. It is now that the art of the storyteller become apparent, as when it is done well, it becomes almost a personal experience by the reader or listener as the "characters . . . must be given names, faces, motives, and things to do, lines to speak" (p. 104). This approach is also supported in his later 1989 book *Researching lived experience: Human science for an action sensitive pedagogy*.

Advancing a few years, Richardson, cited in (Lenzo, 1995) persuasively promotes researchers to write in a mode of *seives*, that is to abjure “the censorious hold of ‘science writing’ on our consciousness, a well as the arrogance it fosters in our psyche.” From this a fundamental honesty, of success and failure alike that generates a qualitative research stage that is at least a form of theatrical reality. In the same vein, (Clandinin, 1993) urges researchers to explore this narrative form of research writing. To obtain under the duress, the real life that is denied existence by the positivist writing and research style, she advises the development of a qualitative style sourced from favourite fiction author, to develop a storytelling skill.

I have adopted John Dewey’s writing style which is narrative, autobiographical, subjective (to the point of sometimes being quite personal), metaphorical, allusive, and reflective though sometimes meandering to establish my writing style. At other times Dewey is rhetorical and polemical, however, John Dewey’s rambling, woolly and rather cumbersome style I find somewhat attractive. While I note, V. A. McClelland, the Professor of Educational Studies at the University of Hull, in 1993 where he states: “The most serious criticism, however, is that Dewey based his educational programme upon personal inspiration and shrewd hunches rather than upon rigorous scientific analysis of the evidence” (McClelland, 1983). Although I am aware, that Professor McClelland may use this statement concerning my methodology and style, the professor does not disclose his world-view assumptions, though I have a hunch that in this area he would seem to subscribe to a positivistic research attitude. In any instance, it seems to me that Dewey rises above this positivist based criticism. Operating from his Hegelian notion of the organic interrelatedness of things, Dewey worked within a more encompassing view of science than is understood by positivism (Vernoff & Shore, 1987).

In my case, I am influenced not so much from a Hegelian perspective, that is the thesis-antithesis-synthesis and dialectic as a form of history, as from a Jungian perspective of archetypal explanations of orientations of ourselves to the world. However, it is true that “personal inspiration and shrewd hunches” form the voice of my unconscious that assists me in the “analysis of the evidence” as I perceive it to be. I also stand with (Habermas, 1971, 1972) in his biting critique of positivism that “rigorous scientific analysis of the evidence” is thoroughly value-ridden. By making this clear, I begin to address the concerns that thorough positivists might somehow

subscribe to my research, if by no other means than using the bracketing method of Hegel.

(Freeman, 1968), in the introduction to Jung's *Man and His Symbols* (1968), commends Jung's "spiralling" form of argument which, perhaps initially obscure and rambling, soon carries the reader "on a persuasive and profoundly absorbing journey." On the other hand, I am aware that what Don Cupitt, Dean of Emmanuel College, Cambridge, states of Jung's writing style, may also be true of mine:

Much of Jung's writing is too rambling, rhapsodical, and diffuse, and compares very unfavourably with that of Freud, the apostle of rationalism and a strong ego, who expounded his own thought with great clarity. At his best, Jung is marvellously stimulating; but the fact is that real art requires not only Jungian inspiration but also rigorous rational control and self-criticism (1985, p. 75).

I find this to be a telling comment. My objective is to seek balance. While respecting my subjectivity, I endeavour to exercise "rigorous rational control and self-criticism" in my writing.

I am in agreement with the post-structural analysis that specifies identities that apparently are "multiply sited, discursively constructed, decentered subjectivities" (Lenzo, 1995). In addition Lenzo states that the subjectiveness of both the knowing researcher, and those being researched, as they are understood as being separate entities, having knowledge contradictions as to facts, and as fallible constructors of what each represents of the other. Indeed this is part of the reason that I have constructed much of this book as a dialogue between certain aspects of my own psyche (understood in a Jungian sense). And, also bear in mind that, as (Eisner, 1992) asserts: "scientific research, in the end, is a construction and the more artistic in character, the better." I also agree with (Lenzo, 1995), that: "representations of knowledge in research reports might be viewed as constructed from partial, multiple, local, and historical authorial positioning - at the same time under scrutiny and set in serious play."

Initial Explanation of my Final Research Methodology

The most interesting aspect of Action Research is the speed at which it is developing. From Kurt Lewin's socialist model of "research directed to the solving of social problems" (Smith, 2001b p. 2) and the Lewin Field Theory, where a field is defined as "the totality of co-existing facts which are conceived as mutually interdependent" (ibid., p 3) through to whole schools, such as Bath University's Centre

for Action Research Professional Practice (CARPP). From this, we can see some of the effects of the emergence of Qualitative Research upon the academic world.

What is applicable within the development of the model is an interesting twist on the interdependencies expressed by Lewin – the Interdependency of Fate and the Interdependency of Task.

The interdependency of fate is “where a [member of a] group realizes that an individual’s fate depends upon the fate of the group as a whole” (Ibid., p. 4). The model that I present shows that this is the wall that pressures the individual to consider the group’s possible future rather than their own, to their possible detriment, resulting in a possible voluntary form of slavery. By taking eagerly taking over a share of responsibility for the group, the individual can help ‘lead’ and help determine the fate of the group (Ibid., p. 4), provided the external forces applicable to the group agree directly or indirectly, and this seems to be rare.

The interdependence of task is stronger than the interdependency of fate, as “...the group are dependent on each other for achievement...” (Ibid., p.4). It seems that this describes the model’s anthill, where fate is not considered, or unknown, but the task is vital for the team to succeed. By leaving the anthill, the individual puts the team at some risk of failure, and where a strong sense of team is developed, particularly in a small team situation, the social pressures to remain can be great, a form of mental enslavement to the group.

Interdependence is the opposite of competition (ibid., p. 4), and this may lead to a form of what I can call passive co-operation, where discussion, greater productivity, and mutual fondness rules, this, however, can lead to cliques where new entrants, managers or workers may find hard to break into or break up. In addition, if one member were to leave or to separate from the group, it may well be impossible for that person to rejoin.

The Two Traditions of Action research.

There are two traditions of action research – the British and by association the Australian, and the American. The British model deals with research “towards the enhancement of direct practice” (Smith, 2001a, p. 1)... [while the American model is] “...the systematic collection of information that is designed to bring about social change” (Bogden & Biklen, 1992 p. 223 quoted by Smith). In this work, I concentrate

on the use of the British model, that is, to enhance practice, though there are aspects of social change that may come about using the model presented.

(Reason & McArdle, p. 1) give this comment "...action research is conducted by, with, and for people, rather than research on people." In addition, "it is important to understand action research as an orientation to inquiry rather than a methodology" (ibid., p.1). This leads into a curious situation of dividing the processes of action research into three *persons*. I am unsure why these "three strategies" have a grammatical connotation, but it seems that the interdependency among the *I; you; he; she or it, we; you; they*, of verb and other grammatical declensions in languages study has the effect of describing the number of people involved at each level of this type of research, and interestingly enough, their knowledge bases and their powers to initiate changes.

From Reason and McArdle (ibid., p. 1), the following terms are stated as:

- "First-person research practices address the ability of individual researchers to foster an inquiring approach to their own lives, to act awarely and choicefully, and to assess effects in the outside world while acting. First person inquiry skills are essential for those who would provide leadership in any social enterprise.
- "Second-person action research/practices such as co-operative inquiry address our ability to inquire face-to-face with others into issues of mutual concern, usually in small groups. In co-operative inquiry, a small group of peers work together in cycles of action and reflection to develop both understanding and practice in a matter of mutual concern.
- "Third-person research/practice includes a range of practices which draw together the views of large groups of people and create a wider community of inquiry involving persons who cannot be known to each other face-to-face. Under this heading we include for example practices which 'network' small inquiry groups, the large range of dialogue and 'whole system' conference designs, and the 'learning history' approach (Reason & McArdle, pp. 1-2).

Similarly, (Torbet, 2001, p. 2) stresses timeliness in such an approach. He states "To learn, one must interweave in the midst of ongoing action subjective, 1st -person research into one's own priorities; intersubjective, 2nd- person research into the current conversation and priorities of significant others; and objective 3rd- person research about wider temporal societal patterns."

(Taylor, 2004, p. 72) states that second person research is really "us" research, and from that I assume that third person is "we" and the first person is "I" research, all to gain self-knowledge. Quoting from Heron and Reason (2001), there are four ways of knowing – direct *experience*; a representation of our knowing us *presentational or aesthetic* forms (storytelling or dance); the use of ideas and theories to support our *propositional* knowing and the knowing called *pragmatic* expressed in action. To support these four ways of knowing, Taylor states "The major difficulty with not addressing different ways of knowing is that all knowing gets collapsed into intellectual, propositional knowledge" (ibid., p. 73). He continues "The richness, the textures, the subconscious, the contradictions, the messiness of the felt meaning have been removed and neatly packaged..." (Ibid., p. 73).

The different schools of action research are described in (Reason & McArdle, , p. 2-4), and they include organizational change and work research; co-operative inquiry; action science and action inquiry; learning history, appreciative inquiry; whole systems enquiry; and participative action research; this work uses participative action research.

Participative action research is described by (Reason & McArdle, , p. 3) in the following terms:

"Participatory action research (PAR) is explicitly political; aiming to restore to oppressed peoples the ability to create knowledge and practice in their own interests and as such has a double objective."

These two objectives are to produce knowledge and to empower people by their construction and use of the knowledge that they possess and use this to overcome the *monopoly* of knowledge that the *establishment* possesses and uses for its own benefit and the benefit of its fellow establishment members.

I chose Participatory action research because it allows me to discuss the topics of slavery, enslavement, emancipation, freedom, and power, not in second or third world terms, but in terms of the first world, my world and quite likely yours. Enslavement is known in the first world; we joke about it, we sometimes suffer from it, and we all want to be rid of it, but it is with us not in direct harm to our freedoms, but more subtly, in the form of discrimination and other such negative policies. Whether or not we use the terms 'little f' freedom, or 'little e' enslavement, the problem of encapsulation of humanity into boxes or cubicles is real, and the problems facing the

encapsulated are the same the world over. The 'little cog or even gear tooth' in a very large, perhaps impersonal organisation is a real problem that society, all of humanity, it seems, has to think about and overcome. The critical-thinker is vital, as these people are, I again posit, the strength of a society, though many societies have destroyed, and are by doing so, destroying the cultivation of such people, and these resulting societies are foundationally weak because of these acts.

In establishing the qualitative research base for this work, I now approach Tesch (Tesch, 1990) and add Burrell and Morgan (Burrell & Morgan, 1979).

Tesch offers four major topics for qualitative research – The Characteristics of Language, The Discovery of Regularities, The comprehension of the Meaning of Text or Action, and Reflection. This work uses all of these in some way to work within the meaning of qualitative research. My initial reaction to Tesch was that each topic was mutually exclusive and that a given research project had to be boxed into one of the 25 end descriptions that Tesch provided. In other words, the logical description of a research project such as structural ethnography could not also be described using hermeneutics with an inclusion of heuristic research. Of course, now I consider that initial reaction as trivial, as this project uses *The Characteristics of Language as culture, cognitively and interactively* which yields perhaps four descriptions for part of this work. With *The Discovery of Regularities, discerning of patterns, as deficiencies (for practical scrutiny of human situations) which leads to Action Research*, I have the basis of this work as action research. With *The Comprehension of the Meaning of Text or Action* we have a dichotomy of *discerning of themes or interpretation* both of which occur here, and finally *Reflection*, here I believe only two, *reflective phenomenology and heuristic research* come into this work.

The conclusion that I make here, is that whatever qualitative research is undertaken, there is no single description that applies in all instances of the research, and that at best we can say that a project is mostly, in this case, reflective, heuristic, and Action Research, with the other descriptions logically defining certain actions at certain times. This last point also reinforces the idea that action research is temporally determined, that is, what is available at a given time, in a given manner, in a given place.

The (Burrell & Morgan, 1979) model that splits investigations into a two by two matrix is also applicable here, but only in the Emphasising Radical Change half of the

model. The choice here is of two outlooks – Radical Humanism and Radical Structuralism. With the emphasis on domination, alienation, and emancipation, this leads to the conclusions of this work as Radical Structuralism. However, the use of Radical Humanism to describe the social construction of reality, the overcoming of distortions, to determine whose interests are being served by the current situation, is founded in an heuristic, hermeneutical case study or life history of the study's participants.

From this, I conclude, using Tesch's models, that this project is Radical Qualitative research, that uses the characteristics of language communicatively in part, but mostly culturally, discovering the regularities, discerning the patterns, using action research, of the human conditions of information systems professionals, with the comprehension of the meaning of text or actions or both as interpretations of case studies or life histories using hermeneutics as well as discerning the themes, commonalities and uniqueness as well using phenomenology in a reflective manner with reflective phenomenology coupled with heuristic research.

However the research process does not end with a rather complex description, triangulation as described by (Denzin, 1994) must also be used to offer verification of results from more than one view of the research. In addition, modern proponents of such topics as rich pictures (Checkland, 1981) and from that source, rich models (Williams, 2004), the use of art as well as writing tends to the artist-writer of de Beauvoir (De Beauvoir, 1948) in determining the value of freedom to those who are perhaps unwilling to acknowledge their lack of freedom in their workplace and society.

Crystallization is also a point to be made here as well.

However, there is more to such research than grabbing a clipboard, one's appointment book and set out to discover heuristically problems and then offer solutions that arise from the participation of the co-researchers discussing their version of the confrontations that occur on a daily basis. The main researcher must also confront their prejudices and examine what others, some long dead, and others whose writing is accepted as up-to-date in various areas of describing the human condition, philosophers of various ages or eras, to extract some form of meaning applicable to the research problems, research questions, and methods used firstly to describe, to evaluate, and then, perhaps, resolve all of these.

The artist creates the pictures, in this case rich models, and the writer explains and puts a language-meaning to the models. The artist-writer confronts us as the true researcher as they put together in a form meant to be understandable to all. The creativity of the researcher also plays a part in a works such as this one. This is when a composite character created to explain pertinent points; to validate reflections, and present a case for such points does so irrespective of the actual sources used. This may involve imaginary discussion and dialogues with long dead philosophers, or among the primary researcher and their co-researchers which is the case in this work (Williams, 2004).

There is also the situation where few explicit points seem to reveal a wealth of what cannot be expressed in words. I offer the response of a co-researcher in information systems whose simple "I want to open a true (in a German sense) *delikatessen* in my neighbourhood." This dream, such that it is, indicated to me the frustrations of being in information systems, yet it is possible that this escape to freedom poses a new set of risks to this person, risks that they are willing to take when compared to their almost comfortable current situation of near enslavement.

Nearly concluding, (Taylor, 2004, p. 81) states "...a social system creates and maintains in order to maintain itself..." and on page 86, "When we recognize first person research as an art, we open our research to the full complexity and richness of the human experience."

This is the explanation for this research method and I find no other logical method that allows such freedom of actions and movement, interpretation, and evaluation. This work stands on that conclusion.

CHAPTER 2

THE SEARCH FOR A TITLE AND RESEARCH QUESTION(S)

Research Introduction

It is generally recognised that a doctoral dissertation is the highest form of scholarship in the academic world. It must meet not only the exacting requirements of such documents, but must also be a work that is personally satisfying as the best work one can do on a particular research topic. A doctorate also shows what further work one is capable of doing in the future as well.

In addition, a research thesis such as this ought to be a pathfinder for others to carry on the research described here, in order to create a better world through liberating logic, scholarship, research, and the knowledge resulting from this effort.

An Autobiographical Account of the Research Approach

From January 2000, the time at which I began this journey, I was determined to give it my best shot. I was then 57 years of age and determined to gain what I always wanted in an academic sense, a doctorate worthy of the title. To me it represented the height of scholarship and more importantly, the pushing of the knowledge envelope to a new point. It does not matter now, that I had misinterpreted what such a degree actually represented. It was not a situation where one dons goggles and boots accompanied with a long white silk scarf and is then aimed in the general direction of what interest's one the most. It is really a *Danse Academe*, where one determines one's interests and then substantiates these to the currently acceptable methods used in academic study and from this, to form a conclusion that adds to the store of knowledge. This epistemological waltz is within the ontological ballet and it is, in a sense, a strict set of procedures to ensure that the knowledge presented, meets the requirements of and support of the available approved methodologies. In other words, one subordinates one's naive desire to stick boldly one's researcher neck out and have one's head unceremoniously

removed. Instead, one must submit to the necessary and controlled system of a bureaucratic form of investigation that shows that you know how to discuss and discover, and then how to use and then choose, academic methods supporting what you have learned. It is my experience to say that this does not mean that only a formulaic approach is acceptable or even possible, it means that whatever knowledge presents itself for consideration as learning, using the acceptable epistemological and ontological processes, the resulting work must be a union and not a mutually exclusive relationship between method, process, and research.

I am comfortable with what I have achieved so far, though what it will eventually show is that I have a certain amount of tenacity to carry through this project. The financial costs have been high, and the ability to recover them perhaps dubious, but after this amount of time, money, and effort, the completion of this project is within sight, though I wanted to quit a dozen times and more. I could have quit, but then it would mean that others would win and the knowledge that I have gleaned from my experiences would be lost.

An Autobiographical Description of the Supporting Coursework for this Project.

The Work Load

When I began this project, I purchased a small laser printer, a Brother HL-1250 for about \$600. This printer has printed over 80,000 pages of documentation, though I will allow, say about 5% as waste. Nonetheless, I have a small mountain of coursework notes and articles covering the course topics of Virtual Organisations, The Information Economy, Management of Knowledge, Information Warfare, Research Techniques, these my coursework topics, and what I call *On the Way* resources. These latter resources represent about half of the sources that I have gleaned from the available coursework references with their vital bibliographies, the on-line Library facilities, plus whatever search engine, Google, and so on, would lead. These *On the Way* articles were incidental, but I felt they were interesting enough to provide at least background material on a given topic.

I have read all of this, and it has allowed me to see further and higher than I did before.

Awareness Leading to Ideas

This wide reading base would, I thought, have given me a wider range of ideas and situations concerning the D.B.A./PhD material, plus some wider activities such as including English writing lessons for university students. The project had to have legs, that is, a research method, research processes, topic, and good writing, in order for me to consider the project as worthy of the effort, as I am my own worse critic.

Seeing a Method

I also aware that the most important aspect of a thesis was the soundness of the methodology and an explanation why it deserved consideration for my particular project, and how all of this merged into an entity called a thesis.

Personal Deficiencies

I entered this project with three main deficiencies – current knowledge of business literature, low technical knowledge of PCs and networked computers, and a lack of knowledge of how to put together the necessary documentation to make a D.B.A./PhD proposal and plan. I even questioned my ability to write in good and clear English!

An Expensive Ego Trip?

I sometimes looked at this project as perhaps my last big ego trip. When I did my Master of Business Administration (MBA), it was at an adjunct B-school of Harvard Business School. The method was one where the leader was in the Pit and that we mere mortals surrounded him or her, as we would argue a case study, literally line by line. It was not, and could not be learning by osmosis, the typical classroom situation found from elementary or primary education through to other forms of graduate school, almost everywhere. I took with me those skills and tried to apply them to these D.B.A. course units with quite negative results. I had soon discovered I was in a classroom full of stunned mullet that acted as if they were sponges waiting for the odd bit of academic food to enter their micro filter-like minds. I do not think I made too many Brownie points by questioning apparent wisdom, learning, and knowledge on a topic-by-topic basis.

No Opposition, No Ideas, No Reality Knowledge

At certain times, I expected someone, anyone, to tell me I was speaking nonsense, but much to my disappointment, none did. If Academe means to demand thinking and relating that process to a topic, I felt that this aim failed. I remember a quote from an American President known as LBJ; 'If one fellow is doing all the talking then that fellow is doing all the thinking' rang hollow. However, the lunches were good.

I still vividly remember when I lost mental control over a discussion of an actual situation concerning a serious academic study of the local emergency services. During drills and in real emergencies, all the local emergency services sit around a large table, each with a telephone to act as translators of the jargon of each service to request help from another. I literally yelled, "How many people had to die before this asinine situation was changed?" and I meant it. Another was when the imaginary situation was that an Air Force fighter was loaded with bombs, had lost power, and was about to crash into farmland. I suggested that the pilot ejects, or pulls the chicken-switch, and let the plane crash into the ground. I felt that a pilot was expensive to train and probably had a wife and several children, and that you can always buy another aircraft. The problem poser had not thought of that as a solution, as the pilot, by some strange definition and similar to a sea captain, had to go down with the ship or in this case to land the aircraft, somewhere, anywhere. None except me thought of the fact that bombs are not dangerous unless armed, and arming a bomb carried in an aircraft is a deliberate set of specified actions. The bomb will only burn if not armed; and after all, a fully armed and fused bomb on an aircraft, that cannot drop it or otherwise dispose of it, is cause enough to bail out.

Lack of Knowledge Leads to Nonsensical Decisions

However, the consensus was that the aircraft was too expensive to allow it to crash and that the pilot ought to go down with his ship as a sea captain would have done. I was shattered at this stupidity and the general ignorance of basic military safety processes. Human life is always more precious than a machine, but then I am talking as a person who has read some of the American National Institute of Standards and Technology (NIST, 2000a) manuals concerning American civil or public servants and dangerous situations.

Discovery of the Revolution in Military Affairs

The first year came and went, but my favourite and desired course was Information Warfare. The discovery of the RMA or Revolution in Military Affairs brought home to me how changed the world had become and will continue is rapid change in both technology and most importantly, ethics. I had written and presented a paper at the We-B conference in 2001 concerning the OODA (Observe; Orient; Decide; Act) loop, and now that I look at it, it was not a good example of a paper that I am capable of producing. I presented one to the IWAR (Information Warfare) conference, a year later, and the paper considered the supply of Experts (which seem not to exist!) in IWAR and within information systems in general.

First Proposal

I had to prepare a proposal for this project, however, the project has changed so much, mainly in the processes of research, and constant newly published knowledge that ought to have been re-prepared but not necessarily re-presented. I had to write some more and read more on research paradigms. I have read most of the reputable books on these subjects. If someone had told me that my proposal was poor and discussed with me why, I would not be in this position. However, I cannot imagine now, not to have done more reading over the time I gleaned from my available time, as these widely based readings greatly changed my attitudes to almost everything.

Faults

If I had to pick a fault with this course, it is in the areas of research. We had few guidelines about what constitutes a good thesis, what is good research, and which paradigms are acceptable. Perhaps it is necessarily up to us to self-discover all of this and then to claim the knowledge as our own about these academic processes. However, in my opinion at certain stages, this seemed to have wasted months of my time, yet in the final analysis, this was because of my ignorance of these processes.

Lack of Philosophical Inputs

I now have sufficient material to examine and support my proposal's effort, though aid and real help in guiding me to a series of basic readings in Philosophy would have provided immense value and would probably lead to a serious thesis months before now.

Edward Sek Wong and David Quinlan

Edward Sek Wong, a fellow candidate, gave me the e-mail address of an excellent thesis from the University of Bath. David Quinlan's thesis from the University of Bath, Centre for Action Research for Practising Professionals (CARPP), is and was, for me at least, a mental trip into the excellence of how a doctoral candidate assembles a modern dissertation. I then planned to use his as a model for my own, not because of my high opinion of it, but because it details a trip made by a man that led to his self-discovery within his topic. I expect that we all do this from time to time, but Quinlan used this approach as a form of phenomenology.

Intolerable Delay or Time to Develop

As there are two sides to a coin, the delay has offered me a chance to keep up with my reading and discovery of new and better ways of looking at Information Warfare, however, the basic research question of my dissertation also changed, or matured. This surprises me probably more than anyone else does. Things are now falling into place where it is apparent what the requirements are and why, and I now can see and make sense of this academic process.

The Research Questions

The original research questions concerned Business Continuity Planning (BCP), Business Recovery Planning (BRP), or Disaster Recovery Planning (DRP). The more I investigated these topics, the more I became convinced that there must be a source for these processes, and that must be the people involved. This leads to other comparisons into the type of people involved, beyond those of management. It developed into a source of expertise within Information Systems, in particular those who are in a position to save a business from a disaster that more often than not does not involve fire, flood, or other natural calamities, but can be accidents, sabotage, or both.

The requirement is not just a plan to satisfy due diligence requirements, but an effective group of people who can manage at worst, a determined information attack and at best a simple computer operator error. So from the first questions more questions and by discovery and evolution, a new set of research questions.

The thinness of these past questions did not become quickly apparent to me. I could very well have produced a work that was adequate for the academic process, but it would be something that I could not be willing to show to anyone. However, I would

still have to live with the result, and any result from the past investigations would not be anything of which I would be proud.

The research questions evolved as follows.

First evolution - Major Research Question: 'Where will business find the necessary Experts and above for security and information warfare purposes: Stories from Reflective Practitioners.' This was the effective title of the first evolution.

From this, more questions evolved; there are at least three more sub-questions namely:

In the first instance, what are the real or actual situation and the real political situation of Information systems professionals?

Background - Anthills, Condors, and Gurus

Dreyfus (Dreyfus, 2002f, 2002g) gives three major groupings of skill levels.

- Firstly, there are the rule followers (Novice, Advanced Beginner, Competent), and these I refer to as the Information systems Anthill or Anthill.
- Secondly, in an Information systems sense, are the rule-overlooking skills, which I would call the effects-based decision makers who are more concerned with the effects of their decisions through critical thinking rather than the rules that must be followed to achieve the needed result (Proficient and Expert), these I refer to as Information systems Condors or simply Condors. I point out here that these are the critical-thinkers of de Beauvoir.
- Thirdly, again in an Information systems sense, there are the Expert-Plus groups who are the de Beauvoir artist-writers, the pathfinders, and the dreamers who I define as directionists though I refer to them as Information systems Gurus. These are the very people who set the future directions of an industry, their attitudes ranging from the conservative to the bold, or in the terms of a rich model, from a Grecian temple to a Viking long boat respectively.

From this, we have the basis of discussion about the positive future of the people within the Information systems industry. According to Dreyfus when he speaks of skills acquisition on general, there is mobility upwards because of training completed within the three groups.

One always starts as a novice, but in Information systems in particular, why are there so few, if any, people who have advanced to the Expert level people available? Where do we find the Expert-Plus people who are from the group of experts?

In the second instance, the second sub-question is - Are the Wrong people in information systems?

If we roughly categorise the skill levels of Novice through to Competent as Type A, Proficient and Expert as 'Type B' and Expert-Plus as 'Type C', is it possible that a 'Type A' can become a 'Type B' and then a 'Type C' from within the industry? If the answer is yes, then how do we accomplish this action? If the answer is no, from where does the industry source the B and C types?

In the third and last instance, does the Enneagram provide another avenue to examine the personality types within a given skill level and is there a correlation between skill levels and the personality type as described by the Enneagram or any other models?

However, I discarded or modified these research questions and others as my learning and knowledge improved.

Final Evolution of the Research Questions

The Final Evolution Research Questions - The research questions of this work evolved after much reflection into a series of questions that would yield a work of quality that I would be justifiably proud:

- Are there accurate models to describe current professional activities of information system professionals that use philosophical terminology and knowledge of acceptable current and older recognised philosophical writers?
- Do these models indicate fundamental and other reasons why Information System Professionals are 'typeset' or 'prototyped' and limited in their career choices and advancement within almost any organisation?
- Do these models offer solutions that are:
 - Within the scope of the current art and science of management?

- Descriptive of the power structures, both culturally sourced and those imposed by the organisation, the community, country, and industry concerned?
 - Within the scope of current and future Information System Professional training and education?
 - Leading towards new knowledge concerning skills acquisition and the value to an organisation of these new skills acquired by the Information System Professional that will allow the organisation to consider information systems professionals as suitable managers outside of the information system's area?
- Do the models offer alternatives that are:
- Radical to the extent that the model may show the destruction of the organisation and its management if the model is ignored?
 - Moderate to the extent that implementing only some of the conclusions indicated by the model will allow the current state to continue and only sometimes, as now, falter and fail?
 - Best practices that will allow a new flourishing of organisations that source its management from all knowledgeable and intelligent personnel?

These questions now represent the totality of this work.

Thus, we seriously begin our expedition, an expedition that began with several false and incomplete starts with a determination that we shall arrive with the answers to all of our questions. However, there is some doubt as to the validity of these questions in the rapidly changing real world of Information Systems, as technological and market changes are occurring very rapidly within this industry. However, if we ignore the technological side and concentrate on the management side of information systems problems then the questions should hold for the near future. This ability to be applicable over a long period is a personal requirement of this work as well, and these new questions ought to yield at least interest, more questions would be, perhaps, better, in this fast changing industry that has yet to reach any real level of maturity.

CHAPTER 3

LITERATURE REVIEW AROUND THEMES OF SLAVERY, ENSLAVEMENT, EMANCIPATION, FREEDOM, AND POWER

Introduction

This chapter exposes the foundations of the thought processes that I used to make up this document as a research document and as a record of events leading up to the completion of this work. The title of this thesis encompasses and alludes to all these major words without, in many situations actually stating them baldly, and this applies to the final rich picture as well.

This work relies upon the words, slavery, enslavement, emancipation, freedom, and power within a semblance of three philosophical streams - structuralism, post-structuralism, and post-modernism.

The first two terms, slavery and enslavement are versions of each other, and the others follow when certain directed actions take place, leading to a form of power. The model itself uses the literary and philosophical terms structuralism, post-structuralism, and post-modernism, and uses them within the apparent philosophical impossible relationship with existentialism, without defining them explicitly. A glossary use is preferred, that is, a localised description of the terms without an all-encompassing definition.

Because of the incessant influences of what can only be described as serendipity, whenever I have come to a dead-end or brick-wall, something arises that has allowed me to proceed on more solid ground, that is I obtained support from unexpected but recognised sources. At this late stage of writing this work, repeatedly new sources are arising and these have shed new light and support to this project even as my thesis submission deadline looms large.

Beginnings

From the outset, I felt that Philosophy was a self-aggrandising branch of Academe and that all universities that taught Philosophy were in a self-fulfilling research loop where philosophers taught students to become philosophers so that they could teach other students to become philosophers as well. This infinite loop meant to advance humanity to some unknown source of wisdom that would lift humanity to new and better existences, everywhere. I could not see the results of philosophical study, and I could not relate to the apparent uses of arcane statements that determined whether truth existed in whatever statement, literary piece, or political decision, or whatever else a given scholar was apparently studying at a given time.

It is a sign of my advancement in studies that I now consider the above ideas, were statements made in academic ignorance, and today I can yet make them in the knowledge that I am not particularly ignorant or alone in support of these negative statements. It is part of my role as a thinking human that I pass judgements upon what others have said or written, irrespective of the depth of my actual knowledge about the topic, as it is right and proper that others will and do the exact same thing to me about my work as well. Where these others and I probably differ, hopefully, is that I will at least try to assemble some form of fundamental knowledge *about* a topic before either seeking more information or passing judgement, or I will pass a revisable judgement as I attempt to learn more about the reasons for a given conclusion.

Slavery

Introduction

The words *slave* and *slavery*, as nouns are not used much today except to point out that it still exists in the predominately backward places in the world. Yet we see postcard humour on office walls such as “Slaves can’t be fired, they have to be sold!” and so on, some use these words as pejorative adjectives in describing what some describe as water-cooler humour. What such signage shows is a relative truth of modern office work, without the knowledge of what is the actual terminology that is to be descriptively used for their position within an organisation, and these words are not indicative actually of slaves, slavery, or the any use of those particular words.

In dealing with slavery, I will deal with reference philosophers John Locke, Baron de Montesquieu, Thomas Hill Green, Theodor Adorno, and the philosophical

topics of Human Rights, legal obligation and Authority, Libertarianism, Exploitation, Game Theory and Ethics, Equality, Paternalism, and Positive and Negative Liberty. Any one of these is a thesis unto itself and I have used only secondary sources to present a series of discussion points on the topic of Slavery.

From the references below, I draw some warranted conclusions.

Firstly, slavery does not seem to draw, in a philosophical sense, an emotional hatred of the systemic buying and selling of human beings for the use of others, irrespective of the political age concerned. What I show is the ivory-tower approach to the issue of slavery. If we assume that collecting potential slaves from a despotic and savage tribe is to "save their souls" as was probably thought at the time of Locke, then slavery was a mission of religious based mercy at that time. Yet, from the same philosophers came forth the Social Contract and other social thinking that was meant to liberate the population from political, social, demographic, and economic impoverishment. However, the social contract, only it seems, was to be applied to the European societies coming to grips with democracy.

The ease in which thinkers of yesterday and perhaps today, consider slavery, it seems forms the basis of the lack of concern over the modern day anxiety of what others and I call enslavement, my next topic. The source of such levels of minor concern for the topic of enslavement has, it seems, is a source in the attitude to the topic of slavery.

Locke

Slavery is the "state of being in the absolute or arbitrary power of another" (Uzgalis, 2001 P.20) is a quite interesting discussion point. John Locke (Ibid., p. 19) stated that "Man is God's property" and as such by implication man is God's slave, yet man, according to Locke, also has certain natural rights as well. Locke recognised two forms of slavery legitimate and illegitimate, the former the result of a defeated unjust aggressor in war, and the latter a "state in which someone possesses absolute or despotic power over someone without just cause" (Ibid., p. 20). Yet in Locke's *Second Treatise of Government* we see the beginnings of the Social Contract, where the populace yields certain rights and powers to government in return for the powers of policing, justice, and defence, for example, that the individual cannot do alone (Ibid, p. 18). These actions are not those of powerless slaves.

Baron de Montesquieu

Baron de Montesquieu (Bok, 2003, P. 8) deals with slavery, and perhaps tries to justify it as not as bad as it seems when one considers a despotic situation where the non-slave has as many or as few rights as a slave in a more civilised environment. The main consideration in this article is that “when work can be done by freemen motivated by the hope of gain rather than by slaves motivated by fear, the former will always work better...” (Ibid., p. 8).

Thomas Hill Green

Thomas Hill Green (Tyler, 2003 P. 16) states that a “slave has a right to his freedom in that he is engaged in social relations founded on the movement to attain a common good.” Also, (Ibid., p. 17) “The slave-owner’s right to the free use of his possession - that is, the slave - is thus nullified as it rests on the non-recognition of the slave’s right to freedom.”

Theodor W. Adorno

Theodor W. Adorno (Zuidervaart, 2003 P. 3) describes giving “domination a triple sense: domination of nature by humans, domination of nature within humans, and the domination of humans by others. What motivates such triple domination is an irrational fear of the unknown.” I ask the question who or what creates this apparently irrational fear, more on this later.

Human Rights

Human Rights as the first philosophical topic, (Nickel, 2003) describes the various sources of human rights and among them is freedom from slavery, yet today in the 21st century it still exists, irrespective of treaties, international agreements, and representations from strong, but foreign, governments.

Legal Obligation and Authority

Legal Obligation and Authority (Green, 2003) describes civil responsibility and obligations by citizens of a community and has links with Jeremy Bentham’s Pan-Opticon prison design where prisoners are meant to control themselves for various in-house rewards. This, accompanied by “duty-imposing and duty-excepting laws,” to complete the circle of legal support for the actions of such a prison. Green also quotes Wolff “if the individual retains his autonomy by reserving to himself in each instance the final decision whether to co-operate, he thereby denies the authority of the state; if,

on the other hand, he submits to the state and accepts its claim to authority then... he loses his autonomy.”

Libertarianism

“Libertarianism, as usually understood, is a theory about the permissible use of non-consensual force” (Valentine, 2002). Again, “Libertarianism in the strict sense is committed to full self-ownership, which is a maximally strong bundle of ownership rights... At the core of full self-ownership, then, is full control self-ownership, the full right to control the use of one’s person.” Yet with this ownership, comes the right to dispose of or transfer ownership in a form of self-enslavement (Ibid., p. 3).

Exploitation

Exploitation (Wertheimer, 2005) is nearer to the point of the presented model’s Anthill. Yet I am now beginning to think that exploitation in the Anthill’s case is a two way street, depending upon the time, place, and circumstances of the event. Wertheimer (Ibid., p.3) quotes Goodin

“There are four conditions, all of which must be present if dependencies are to be exploitable. First, the relationship must be asymmetrical... Second, ... the subordinate party must need the resource that the superordinate supplies... Third... the subordinate party must depend upon some particular superordinate for the supply of the needed resources... Fourth, the superordinate... enjoys discretionary control over the resources that the subordinate needs from him...”

There is also a useful distinction between harmful exploitation and mutually advantageous exploitation (Ibid., p. 4). Wertheimer states (Ibid., p. 5):

“Let us say that A oppresses B when A deprives B of freedoms or opportunities to which B is entitled. If A gains from the oppressive relationship, as when A enslaves B, then A may both oppress and exploit B. But if A does not gain from the oppression, the oppression is wrong but not exploitive.”

However, voluntary transactions cannot be exploitive, (Ibid., p. 8).

Game Theory and Ethics

Game Theory and Ethics (Verbeek & Morris, 2004) uses game theory to determine ‘interdependent rational choice. There are three “kinds of inquires in the literature. First, functionalist... to describe problems in the absence of morality... Second, contractarianism... especially bargaining theory to formalize social contract

theory... and evolutionary game theory to recover many traditional moral norms or practices." Section 5 of this work is entitled "Morals by Agreement" and discusses David Gauthier's method of determining which course of action is rational even if it is not the best course of action (ibid., p. 7) ... "where morality is used not to solve one problem but frequently recurring problems" (ibid., p.8). Yet the question remains "Why be moral?"

Equality

Equality (Gosepath, 2001) "deals with social and political equality." Gosepath (Ibid., p. 3) states, "The predicates 'just' or 'unjust' are only applicable when voluntary actions implying responsibility are in question." In addition, "The principle of equal dignity and respect is now accepted as a minimum standard throughout mainstream Western culture" (Ibid., p. 5).

Paternalism

Paternalism (Dworkin, 2002) as described by Dworkin "is the interference of a state or an individual with another person, against their will, and justified by a claim that the person interfered with will be better off or protected from harm."

Positive and Negative Liberty

Positive and negative liberty, and Carter (Carter, 2003) sourced from Isaiah Berlin defines these terms as follows: "Negative liberty is the absence of obstacles, barriers, or constraints. Positive liberty is the possibility of acting or the fact of acting, in such a way as to take control of one's life and realise one's fundamental purposes." On the topic- to be free, (Ibid., p. 3) – "To be free, you must be self-determined, which is to say that you must be able to control your own destiny in your own interests." Carter (Ibid., p. 3) also describes a "higher-self" and a "lower-self." The higher self "is the rational, reflecting self, the self that is capable of moral action and of taking responsibility for what she does. The lower self, on the other hand is the self of passions, of unreflecting desires and irrational impulses." Carter (Ibid., p. 6) also states using MacCallum as a reference, "Freedom is therefore a triadic relation – that is a relation between three things: an agent, certain preventing conditions and certain doings or becoming of the agent."

I raise a thought here, what if social pressures and management pressures within employment make the employee seek not to be free? Is this a form of voluntary or enforced enslavement?

Enslavement

Introduction

One-step beyond being a good and chattel as a slave, is the reality of the 21st century of a person enslaved in some form or another. In areas of the world where an unemployment rate of 30% or more is considered an economic boom period, factories owned by foreign and the domestic partners of these firms are in fact enslaving their workforces with workplace conditions that would not be tolerated in their home countries. This is not, perhaps considered a pejorative action by either the local or overseas governments concerned, as the people concerned are at least employed or earning a living, a "trade not aid" proposition, however what price to the ethical foundations of Western society?

If we go one-step further, into what I have described as an Anthill, we find that the term is not *enslavement* but *corporate culture*. It is here that the humour of being a *wages-slave* ceases to be black-humour, and becomes, in my opinion, a real personal, social, and corporate problem.

The secondary sources I will be using again come from the Stanford Encyclopedia of Philosophy, plus two articles that apparently describes the case of enslavement under two different guises: a specific case study and an examination concerning *Corporate Culture*. The authors are Wanda J. Orlikowski, then of the Sloan School of Management and Hugh Willmott, then of the Manchester School of Management.

There seems to be little consideration of enslavement in the secondary sources that I am using, but the ones that I consider relevant I use here. Max Stirner and William Godwin are the two philosophers and Libertarianism (seen on the topic of slavery).

Max Stirner

Max Stirner (Leopold, 2002) examined in Leopold's work concerning Stirner's assault upon the "expectations about how political and philosophical argument should

be conducted, and seeks to shake confidence in the superiority of contemporary civilisation." Further, "He provides a sweeping attack on the modern world as dominated by religious modes of thought and oppressive social institutions, together with a brief sketch of a radical 'egoistic' alternative in which individual autonomy might flourish." Leopold (Ibid., p. 5) discusses part 2 of Stirner's work *Der Einzige und sein Eigentum* (1844) or *The Ego and Its Own*, where he discusses the avaricious individual who sacrifices everything in pursuit of individual riches. "[Stirner] suggests that the avaricious man has become enslaved to a single end, and such enslavement is incompatible with egoism properly understood" (Ibid., p.5). "Stirnerian egoism is perhaps best thought of, not in terms of the pursuit of self-interest, but rather as a variety of individual self-government or autonomy (ownness)" (Ibid., pp. 5-6).

Stirner (Ibid) also uses the description of the avaricious man to describe not an egoist, but something else, as he describes egoism as self-governance not self-interest. Yet, in the research carried out in this work, self-governance is possible only in the decision to leave the organisation or to improve one's career outlook by education. The choice to join another organisation doing the same thing is not it seems, self-governance, it is merry-go-round decision making. That is, changing, yet repetitive scenery by staring fixedly into the moving view without proceeding anywhere. The option of self-governance seems to be a matter of private judgement.

William Godwin

William Godwin (Philp, 2003) "was the founder of philosophical anarchism." "...the rigorous exercise of private judgment, and its candid expression in public discussion, plays a central role, motivating his rejection of a wide range of co-operative and rule-governed practices which he regards as tending to mental enslavement, such as law, private property, marriage, and concerts."

Godwin, (Ibid.) allows private judgement to reject mental enslavement, yet as my research has shown, the use of this judgement is minimal, as the seductive and profitable skills of the information systems professional seem to cloud such judgement. The costs of using personal judgement to the advantage of the professional, that is the advantage of moving up and out as an emancipative and strategic career move, can be

high, and the typical risk-averse organisation may not wish to incur its share of the cost of such moves by its information systems professionals.

Libertarianism

The topic Libertarianism was discussed within the topic of Slavery, here I am dealing with the “objections of full self-ownership... as it permits voluntary enslavement” and within this work of Philips, is a reference to Steiner (1994) who defends “the right to *exercise* one’s autonomy is more fundamental than the *protection or promotion* of one’s autonomy” (Ibid., p. 3).

Orlikowski

I will refer to the Orlikowski article firstly. This article presented during the course work of this degree states “...the framework and findings suggest that in order to account for the experiences and outcomes associated with CASE tools, researchers should consider the *social context* of systems development, the intentions and actions of key players, and the implementation process followed by the organisation” (Italics mine) (Orlikowski, 1993). This article set in train this work.

Orlikowski’s article (Orlikowski, 1993) draws a picture of an information systems professional’s workplace, firstly at SCC, at an extreme, but in some cases a similar level as compared with my experiences. Yet, the intensity of this workplace and its ability to instil a form of loyalty is typical of such situations. It is not because information systems professionals are involved in a typical employment; it is because it is atypical and ever changing that seems to attract and for the most part keep, technical expertise. However, at SCC, “The firm has a particularly competitive culture, which is reinforced by the strict, single career path that every employee follows. “...as well as leveraging the existing technical and managerial skills in the firm.” I seriously question the managerial skill base here, as the manager may only have the skills of a trained supervisor or leading-hand. This skill level was described at my MBA course as follows: “Good morning, how’s the wife and kids, pick that up and move it over there.” The management skills at SCC it seems are in the same vein, not management but the giving of simple orders that are expected to be obeyed.

Because of the SCC standards of operations in the creation of products, any new procedures outside the norm, result in the attitude “...we are not changing the direction

or discipline of our work.” In my model, Anthill dwellers, that is those at SCC are rule followers, and will probably remain rule followers.

PCC, the other half of this paper, is an organisation that was to buy in CASE tools, took another tack, they trained their information systems professionals before installing these tools. They foresaw that “[These professionals] required new training courses with the information systems division... imparted skills of negotiation, relationship-building, and conflict resolution—competencies that as one information systems manager indicated, had never before been considered part of the narrow technical role played by information systems.” This meant, that information systems, in this instance were given the opportunity to be a different type of critical-thinker, critical-thinking other than expected from typical knowledge and information systems professionals. Here, importantly, it seems that their employer *trusted* their information systems professional’s ability to be other than what they were paid.

It must be noted here, that in this paper, SCC had a much higher turnover of information systems professionals than PCC who also had a lower than usual turnover of these professionals than the industry norm.

Hugh Willmott

The second article was a pure serendipity in its discovery. As I was seeking solid references for this work, I used an article search facility at the University’s library, and this gem appeared under the search word *slavery*, but it deals with enslavement more than the term slavery. It links the self-discipline of Bentham’s Pan-Opticon prison with the modern use of *Corporate Culture* with further links to Orwell’s *Nineteen Eighty-Four*. This article strengthened my resolve to finish this work, as it offers sustained support for the model and my thinking about the information systems industry.

The second paper that I refer to by Hugh Willmott seemed to fall from my store of serendipity, as it uses number of approaches to what he calls *corporate culture*, that I call the *Anthill*. Willmott quotes liberally from the Peters and Waterman (1982) book *In Search of Excellence: Lesson from America’s Best-Run Companies* and the most telling conclusion is found in note 6 on page 543 of the source journal:

"...that over a five-year period, Peters and Waterman's excellent companies performed no better in terms of stock market valuations than a random sample of Fortune 1000 companies (Hitt & Ireland, 1987)."

"...that organisations with strong cultures in core values become hardened into inflexible dogmas that impede responsive responsiveness to changing circumstances (Soeters, 1986)."

From the first quote above, as a general statement, that all of these installations of various corporate cultures, their expense and personal trauma, have not yielded anything more than a status quo in comparison with other considered slower-witted organisations. In addition, it means that the valuable assets put into these plans have not yielded anything for the shareholders or managers who supported such a move and these assets could have been used elsewhere, perhaps more productively. In other words, the organisation's managers would have become corporate heroes if they stood up to the supporters of such a move. The conclusion here, as a suspect generalisation, is that such encapsulations of attitudes and career paths resolved nothing, did not recover costs, and did not deliver anything to the bottom line; the role of management was subordinated to a myth.

From the second quote, I can only use the model of International Business Machines (IBM) whose existence today was the result of a stroke of good luck rather than good planning. Its senior managers all had marketing backgrounds selling mainframe-based systems, and they considered the personal computer, a toy. I must admit, at the time, I did so as well. The IBM data-bus, which probably drives most of the personal computers today and as these machines were originally described in disparaging terms, this fundamental necessity for all personal computers, was given away as IBM's gift to the world, which allowed more prospicient entrepreneurs to change the world of information systems. Now perhaps, 100 million units or more, later, it is too late for IBM to respond, as this ill-advised but simple act led to the demise of the mainframe, and almost IBM itself. The good luck for IBM was found in a person who could see the technological changes to personal computers and their advantages, and while based in IBM's headquarters in Armonk, New York, he could pursue his case at the highest levels. Whether this has changed IBM's *corporate culture* is for others to investigate, but IBM at least survived this fundamental change in almost every area of their business.

If we can assume that what Willmott states on page 517 of his article, that corporate culture is incipiently totalitarianism and that such policies are in place solely to gain a competitive advantage within the ideology of *progressive management*, why has it not been seen in increased profitability or returns to shareholders? Is there a link to the famous statement "The benefits of information systems are seen everywhere but in the financial statements of business?" Is the information systems supplier that has adopted a corporate culture policy a benefactor or challenger to its customers who may or may not be using a corporate culture policy as well? These questions will be answered elsewhere, and then perhaps as a question within what constitutes a systemic corporate morality.

However, in my experience, it is the individual who will make the decision to embrace the corporate culture of his employer or not, and to determine whether their acceptance of the corporate culture is genuine and unequivocal. Also within this analysis is the fact that the employee who accepts these policies as a real benefit to their lives must also accept that they have yielded control of their lives to others who have different pressures placed upon them, at different times. This reduces to the fact that being employed, and working for a certain employer is voluntary for both sides, in spite of the corporate culture. Personal identity still exists beyond this strange idea of a corporate culture, as it can do for the slave. However, I propose that a slave cannot be enslaved, as they have no power to reject personal control over their lives, as only a free person can give up their freedoms and then by self-choosing to become enslaved. This to a real or imaginary ideal or even idol created on the premise that the near transfer of ownership of the human soul is a condition of employment.

These two articles Orlikowski and Willmott at least and by themselves, point out the risks of "Flavour-of-the-month" management change and the echoing or indiscriminate acceptance, without argument, of risk-averse decisions from apparent thought-minimal corporate policies. I have found, even though these articles ought to have been obsolete by now, they are currently relevant as if they were published today.

We can see from the outlines given by the secondary sources that there is a common thread of enslavement and it is a personal choice, not one of no choice at all as in the actual case of the powerless slave. Yet as the slave is in a captive state, is quite possible that the slave is not mentally enslaved as they are only physically held captive,

and this forms the basis that it seems that only a non-slave may be enslaved, as enslavement is a mental condition not a physical one.

Emancipation

Introduction

Of the three major points to be raised from this point onwards; *emancipation*, *freedom* and *power*, emancipation seems to be the least resourced. On August 2, 2005, I used the Google search engine using the search term *freedom* and received 133 million 'hits', I then used the term *emancipation* and received a little over 2 million 'hits', and finally I used the term *power* and received 351 million 'hits.' I then used the Google Scholar engine (at this time it is in Beta testing format) and using the same terms in the same order I received 1.2 million, 35,300, and 6.7 million 'hits' respectively. In Google, for every *emancipation* 'hit' there were 60 'hits' for *freedom*, and about 150 for *power*. In Google Scholar, the search engine for academic articles, for every article on *emancipation* there were thirty-odd for *freedom* and for *power*, there were 190 'hits.' The ratios are not important for this work, as I use them to show that power is predominate, freedom is a minor next, and emancipation hardly gets a mention. Yet emancipation, in my opinion, determines the other two terms, as you cannot be free unless you are emancipated, and you cannot have the ability to obtain power unless the sources of your power are free to lend or give some of their power to you. The most astute would recognise a potential problem here, as in the words of a song "... they only paid a nickel, but they want a dollar song!" In the world where gifts are suspect unless proved otherwise, the acceptance of responsibility and commensurate power over that responsibility is the only way to ensure that the power gift is a true gift of power, as the sources of the gift are not necessarily trustworthy in ensuring the receiver of this gift are still free to accept or abjure.

It seems is we are in a situation where the fundamentals of a free people are not considered very seriously at all, that freedom is mouthed, yet that freedom is used to gain power over those who considered themselves to be a free but 'everywhere in chains' as Marx apparently stated. I also posit that the conclusion must be that the current western-based culture is consumed with freedom-based power, but is ignoring the foundations of the idealities and ideals of emancipation.

Sources

Again as a secondary source, I will use the Stanford Encyclopedia of Philosophy. The Philosophers are Karl Marx, Jean Baudrillard and the topics are Critical Theory, and Social Epistemology.

Karl Marx

In the Jonathan Wolff entry in the Stanford Encyclopedia of Philosophy, on the topic of Karl Marx (Wolff, 2003) emancipation is mentioned 13 times, firstly in the terms of religion preventing emancipation (Ibid., p. 2) sourced from Bruno Bauer, a 'radical liberal member of the Young Hegelians,' secondly in Marx's response to Bauer and his differentiating political and human emancipation. Marx also uses political emancipation ('essentially the grant of liberal rights and liberties') as a barrier to human emancipation as well (Ibid., p. 3). However, "real freedom is to be found in our relations with other people ... It is to be found in human community not in isolation."

Interestingly enough, Marx does not elucidate what human emancipation happens to be, though Wolff states "...it is closely related to the idea of non-alienated labour." Alienated labour is described as follows:

"Marx famously depicts the worker under capitalism as suffering from four types of alienated labour. First, from the product, which as soon as it is created is taken away from its producer. Second, in productive activity (work) which is experienced as a torment. Third, from species-being, for humans produce blindly and not in accordance with their truly human powers. Finally from other human beings, where the relation of exchange replaces mutual need" (Ibid., p. 4).

However, Marx is no utopian in his thinking, again from Wolff:

"Marx wanted to distance himself from this tradition of utopian thought, and the key point of distinction was to argue that the route to understanding the possibilities of human emancipation lay in the analysis of historical and social forces, not in morality. Hence, for Marx, any appeal to morality was theoretically a backward step (Ibid., p. 11).

From Karl Marx, we see that the first level of the presented model, the Anthill, is enforced isolation, so the members of the Anthill are unable to fulfil the freedom from the interference that Marx refers. By isolating the information systems professional, emancipation becomes difficult unless by specific actions of the person concerned, that is, Marx's self-transforming actions (Ibid., p. 3).

I for one could not apply alienated labour proposal to the information systems professional as it does not describe at all what these people do, and I support the ideas that neither do they apply to modern industry as well. Nor is alienation described as creating human playthings for the capitalist 'factory' owner; as the modern worker and professional has trade unions and professional associations who can speak for them as a group, and sometimes as an individual, but only it seems, as a member of the Anthill. Here lays the heart of the problem, what does it mean *to liberate*? In this case, using a trade union or professional association, can also limit the possible actions of the worker or professional. However, to shift away from the anthill, in any direction requires courage, foresightedness, and education, plus a determination insufficiently used and experienced within the structure of the anthill, which makes the difficulty of the proposed transition more difficult.

Jean Baudrillard

Jean Baudrillard as described by Kellner (Kellner, 2005) replaces Marx's use-value and exchange-value with sign-value, an item's expression of style, power, luxury and so on (Ibid., p.3). I propose that people also have a sign-value that reflects in their jobs, their businesses, and their social and political power sourced from the sum of their sign-value.

As part of the Structuralist and post-structuralist groupings in France, "where structuralists and post-structuralists argued that subjectivity was produced by language, social institutions, and cultural forms and was not independent of its construction in these institutions and practices," (Ibid., p. 3) Baudrillard has connections with the Frankfurt School through Marcuse, and the *reification* process where people are dominated by things and become thing-like themselves (Ibid., p. 4).

According to Kellner, (Ibid., p. 8) Baudrillard considered

"...modern societies are organized around the production and consumption of commodities, while post-modern societies are organized around *simulation* and the play of images and signs, denoting a situation where codes, models, and signs are the organizing forms of a new social order where simulation rules" (Ibid., p 8).

Using Baudrillard's sign-value idea, it seems that a person's job, calling, or profession determines the sign-value of the particular person, not only to themselves, but to others as well. Let me give you an example. When I was purchasing for the

family hardware business, I could not find a particular item, so I asked the man sweeping the floor if he knew where a particular item was located, his reply is still with me today, "I'm sorry I can't help you I am only the cleaner." Whatever happened to that man to make him say that? His sign-value was in his eyes, almost non-existent, yet if he did not do his job properly, many seen and unseen dangers will arise and employees and customers will be injured. From this sign-value of a product or a person, in this case and in the case of an Anthill structuralist employee, it is then possible that a personal sign-value can lead to a stagnant career and to a form of needless self-debasement of one's inherent creative qualities? All to support a rigid conformist view established by someone other than the person at the centre of this discussion, the given employee? Alienation of the self, it seems is self-inflicted, but is actively supported by apparent determiners of available fact of the existence within the given environment.

If Baudrillard's reification, that is, the domination of things to create people who become thing-like, then do we not have an anthill, as I described previously? Therefore, are information systems professionals living a simulacrum of being a computer themselves? Does their information systems jargon, that confusion of tongues that have a universal multi-language application, and used when normal language is insufficient, create the undesirable and unthinking human, but a desirable employee? Does this indicate they are not thinking in human terms, but only in terms necessary for interpreting the needs of a particular machine or group of machines and its probable need for derivative linguistic solutions to problems that have little or nothing to do with the problems that confront humanity or even themselves?

Consider Baudrillard's *simulation* where codes, models, and signs are the organizing forms. I consider this situation as my Guru level of the model I have made central to this work, that is, the jump from post-structuralism to post-modernism as an employment and personal metamorphosis with the collapse of the distinctions, power of social and political boundaries, and the possibility of extreme confusion to the person making this move. This apparent danger means that the Guru level must still be aware of the real world and its successes and failings, but they are now able to see the real world as an artist-writer, not merely as a station in a community.

Yet Baudrillard dismisses emancipation, as not possible, because it is we who are overwhelmed by the post-modern, and so much so, that we seem to be enslaved to its forms of destructive simulations of reality.

Yet, it seems that a society may be a summation of Baudrillard's simulations, but such a society has a fundamental weakness - if one person rationally chooses not to participate, then as a critical-thinker the whole structure is at risk. This is because if that person apparently profits greatly, either intellectually or in monetary terms, from non-participation, then others will try to replicate the actions of that apparently successful person, as is natural in our society, and society will change because of this vanguard's actions. This is the strength of a free person making decisions for their personal betterment, and the strength of a society are the freedoms that allow such motives, strategies, and actions.

Critical Theory

Critical Theory is described by Bohman (Bohman, 2005) "...a 'critical' theory may be distinguished from a 'traditional' theory according to a specific practical purpose: a theory is critical to the extent that it seeks human emancipation, (he then quotes Horkheimer, 1982) 'to liberate human beings from the circumstances that enslave them'" (Ibid., p.1). He again uses Horkheimer to describe "that a critical theory is adequate only if it meets three criteria: it must be explanatory, practical, and normative all at the same time. That is, it must explain what is wrong with current reality, identify the actors to change it, and provide both clear norms for criticisms, and achievable practical goals for social transformation" (Ibid., pp. 1-2).

Bohman (Ibid., p. 7) makes an interesting statement concerning emancipation where there was a shift of emphasis begun by Habermas: "...shifts the goal of critical social enquiry from human emancipation as such, to the primary concern with the democratic institutions as the location for the realization of ideals of freedom and equality." This apparently is a shift from ideology to a pragmatic solution to the problem of emancipation. Further on within this article is further explanation.

"As I have been arguing, the ideal in question for pragmatism and recent critical social theory inspired by pragmatism is a robust and deliberative form of self-rule—also a key aspect of Critical Theory's wider historical ideal of human emancipation and freedom from domination" (Ibid., p. 22).

Critical Theory is concerned with emancipation; it is the first line of its reasons for being, however it faces the reality of the world as Habermas exclaimed. It must somehow provide a pathway to emancipation but it cannot do so, and Habermas has

shifted the aims of Critical Theory to find the locations of the ideals of freedom and equality. Perhaps this is a mistake.

Social Epistemology

With the title of Social Epistemology, Goldman (Goldman, 2001) uses Geuss' quote of "Critical theory aims at emancipation and enlightenment by making agents aware of hidden coercion in their environment, enabling them to determine where their true interests lie" (Geuss, 1981). This to reinforce the idea of the undercurrents that determine the application of one's efforts in almost any endeavour, whether to one's advantage or otherwise, this is a social epistemology, not an individual's epistemology, and is accepted or rejected at the peril of the person concerned.

Social Epistemology allows the inclusion of social coercions to limit the ability of Critical Theory to seek emancipation, but I believe that a warranted insight is possible here for both Critical Theory and Social Epistemology.

Warranted Assertions

I warrant that from the above references and discussions that an implication is established that puts several points. Firstly, that there are forces, both individually and as a group that are anti-emancipation.

Secondly, in all that I have read, the authors have considered the human being or person as to be a set, constant, and unchanging being. The person or human being is to be fixed so that the presented model is allowed to be simple and to become simpler and easy to explain. When indeed the person is not fixed, is ever changing, and by whatever measure, is not and cannot be a constant, these models become less relevant to the phenomenal world. The problem for emancipation is what is it that you are emancipating? Yet if we say it is the human being from demeaning and belittling work, what are the measures of this work for a given person. Is a Ph.D. driving a taxi demeaning and belittling?

The advantage of the presented model is that it allows for three philosophically different types of people, where each level requires the same physical person but different psychological persons to do that particular job. However, no mention is made for the variability of humanity in the emancipating motives of Critical Theory, as it is meant only to emancipate human beings from their enslavement, voluntary or imposed, irrespective of their abilities or training.

Social Epistemology declares that there are forces within a society that work against the individual who fights against these encapsulating societal forces. 'To reach beyond one's station' and 'Who do you think you are?' are perhaps the phrases to describe moves by an individual to challenge these unwritten and fraudulent forces to homogenize, standardize, and encapsulate and alienate the most vital forces that we are aware, those of the critical-thinking human being.

To emancipate means to set free, but freedom it also has a cost and the resulting situation may not be very free at all, again, it is a matter of personal choice, effort, and decision within their current society as to where and how they wish to live. As meaningless as this may seem, I am putting forward the idea that it is a question of a cooperation between a person, their situation and the restrictions of their situation, irrespective of their education, skills, and motivation that determines their mobility in employment, and other social situations.

Freedom

Introduction

Freedom is the second most popular topic in Google and in Google Scholar. The term has various meanings that depend upon its use in language, language being the most limiting factor in describing almost anything.

Sources

The philosophers used here are Simone de Beauvoir, Thomas Hill Green, Johann Gottlieb Fichte, John Dewey, Jean-Paul Sartre, Baruch Spinoza, Herbert Spencer, and Paul Ricoeur. The topics used from the Stanford Encyclopedia of Philosophy are Positive and Negative Freedom (seen before within the topic of Slavery), Compatibilism (including a supplement), Free Will, existentialism, Liberalism, Personal Autonomy, and Critical Theory (seen before within the topic of emancipation). This list represents freedom as applicable to the models discussed here, and is by no means complete.

Simone de Beauvoir

In her contribution about Simone de Beauvoir, Bergoffen (Bergoffen, 2004 p. 2) has almost 80 references to the word freedom. My first impression is one of overstating de Beauvoir's work. However, on reading this article, my mind has changed. The idea of situated freedom, where the conditions of our situation determines the limits of our ability of agency and meaning, as described by Bergoffen, links quite well with

the anthill part of my model. As described in this article, there is also the link with Heidegger, his use of lived experience and its importance in our ability to determine meanings of the world; this again interlocks with this thesis. Further on within this article, de Beauvoir "identifies the essence of freedom with the uncertainty and risk of our actions" (Ibid., p. 5).

As freedom requires at least two people to be established, it must also mean that freedom can be evaded or misused. De Beauvoir points out that it is necessary to recognize that the experiences of freedom and the meanings of freedom, and these are found only within the "critical-thinkers" and the "artist-writers," her descriptions of those who will recognize difference and protect difference, and this becomes the grounding of an ethical life (Ibid., p. 7).

If freedom is denied, and there is no way of gaining the ability to be free, then devious and violent methods may arise to ensure the freedom of a captured person, or they may resort to sabotage. In my model, that is the hacker described as an airplane dropping a bomb.

Freedom is a tangible thing for all of us, however if we have recently been emancipated, then freedom may be difficult to define and then use effectively. This seems to be the message from de Beauvoir, and if the freedom of one person denies freedom to another, then violence is acceptable as a solution. However, violence need not be direct as it may be indirect such as sabotage, go-slow, or other similar reactions to either real or imagined freedom loss. This type of situational freedom, in fact, may be the best resolution to the freedom question. If you are free to leave, you can do so, but at what risk do you attempt such a move? This quandary is almost a daily occurrence with information systems professionals so unless one becomes firstly a "critical thinker" or Condor in the model's nomenclature, and then an "artist-writer" or Guru in the model, freedom remains evaded or misused.

Thomas Hill Green

Idealistically we have Thomas Hill Green when dealing with freedom. Tyler's article with the Stanford Encyclopedia of Philosophy (Tyler, 2003), for the first half deals with free will and its connection with freedom, but this is not what is needed here. If we deal with freedom as the antithesis of slavery then a similar line of support for this work arises. Freedom is based upon rights and includes moral rights, which exist prior

to the law (Ibid., p. 16). As with slavery, a slave has a right to his freedom as they contribute to the common good (Ibid., p. 16). Freedom is also allows the creation of wealth by allowing the freedom of the use of resources (Ibid., p. 20).

The bases of Green's freedoms are the necessity of a free will, but more than that, the conclusion is that freedom allows the best use of available resources. If a systems professional is free to leave his employment and by doing so is able to better themselves in most measures of that term, then freedom allows them to do so, not their responsibility, in my opinion, to their community. On one hand, the community needs only to look after groups and not necessarily individuals, and on the other hand, by using Lewin, the individual may deem it necessary to consider the interdependencies of the group's fate and task, the latter is the more important to an information systems group with its tasks at hand and in the near future. Still however, freedom allows an individual's self-centred actions to prevail for that individual.

Fichte

(Breazale, 2001) gives an encyclopaedic overview of Fichte's concept of freedom. "The primary task of Fichte's system of philosophy (the *Wissenschaftslehre*) is to reconcile freedom with necessity..." (Ibid., p. 5). "Freedom, according to Fichte's argument, is possible and actual only within the context of limitation and necessity, and thus it is never 'absolute' but always limited and finite" (Ibid., p. 11).

Fichte attempts to secure a meaning of freedom through a process of what it is not. In common with writers about freedom, Fichte requires two or more participants in a determination of freedom. It is not, as a genie, escaping from his bottle would say, "Free at last!" The questions remain, free from something and freedom to do something; what is the crux here is the answer to these two freedom questions. The ultimate freedom the genie possesses is not freedom if his 'freedom' is oppressive. Perhaps, it is not freedom that I should be discussing here, but oppression, the oppression that makes a person shriek from their soul "freedom!"

John Dewey

John Dewey's Political Philosophy by (Festenstein, 2005) moves us to the 20th century concepts of freedom, at least in a somewhat remarkable American sense. "Freedom in a 'positive' sense consisted not merely in the absence of external

constraints but the positive fact of participation in such an ethically desirable social order" (Ibid., p. 3).

In a section entitled *Freedom*, we see Dewey's development of freedom. It seems the "What is valuable about freedom is not the negative absence of interference but the positive 'power to be an individualized self'" (Ibid., p.5).

Dewey's view of individuality is complex, but three elements see most prominent: Individuality is reflective, it is social and it must be exercised in order to be enjoyed. The first point is that freedom is held to consist in the capacity and willingness on the part of a person to reflect on her or his own goals, aims and projects, and to revise them as a result of this reflection (Ibid., p. 5).

Dewey seems to leave the utility of freedom, to the individual and not to society. The reflective individual has the inherent self-responsibility to use freedom to his or her own personal ends and not for the team as such. That responsibility for freedom lay with the individual seems counter to other authors mentioned here, where freedom is a social asset and not a personal one. It is here that the decision to leave the anthill and use the freedoms, and the risks involved attaining a greater life.

Jean-Paul Sartre

Flynn (Flynn, 2004, p 3) explains Jean-Paul Sartre's ideals of freedom as Sartre says "We are condemned to be free."

"The first part of his [Sartre's] professional life focussed on the freedom of the existential individual (you can always make something out of ...); the second concentrated on the socio-economic and historical conditions which limited and modified that freedom (what you've been made into), once freedom ceased to be merely the definition of 'man' and included the possibility of genuine options in concrete situations" (Ibid., p. 6).

Sartre takes the idea of freedom as a non-blessing, but most importantly, in my opinion is the duality of what is the existential individual, (something to be made out of), and the social environment (which makes the individual into). Again, I venture to say that we are dealing with a seemingly constant form of humanity, something that does not exist. It seems that, and my model suggests, that a person can be a structuralist, and then a post-structuralist, and then a post-modernist as a sequence of events, and in each event, the attitudes towards freedom is different, and that this is a natural course of

events. Even if the social events are the same at each event, the individual is different in a major way.

Baruch Spinoza

Baruch Spinoza through (Nadler, 2005) describes freedom in religious tones, arguments of the 1600's CE, where God, as then described, determined everything and freedom was determined by what God allows man to do, else a calamity may befall anyone who attempts or does that which God does not approve. "In the Mind there is no absolute, or free will, but the Mind is determined to will this or that by a cause that is also determined by another, and this again by another, and so to infinity" (Ibid., p. 9). Nadler also refers to Descartes [who] "believed that if the freedom of the human being is to be preserved, the soul must be exempt from the kind of deterministic laws that rule the material universe (Ibid., p.9).

In a discussing of Spinoza and freedom, I am including this type of discussion to emphasise the 'God-given' freedoms that developed over the last few centuries or so. The obligation of obedience, in a religious sense is probably the source of much of the freedom controlling propositions put into effect probably every moment of every day, everywhere. It makes for a placid population that willingly suffers because it is obliged to under some unwritten rule or unwritten set of rules called the common good. This 'common good' argument and 'faith' as well are perhaps the greatest philosophical vices of all, as much evil in the name of both in order to justify the positions of those using these arguments. It is also difficult to imagine a state without the defined and taken for granted freedoms of a 21st century Western state. Yet the history of freedom and liberty is perhaps the most interesting historical study of all, as it is my opinion, that where such arguments were not developed during a community's history, you will find only primitive societies. These communities where freedom and liberty seems to have been selectively bred out of the population by killing those considered unhelpful with their questions and alternatives in defiance of tyranny.

Herbert Spencer

Herbert Spencer as described by Weinstein, introduced *equal freedom* (Weinstein, 2002 p. 2), " ...liberty of each, limited by the like liberty of all, is the rule in conformity with which society must be organized." There is however from Spencer, a group of moral rights attached to the freedoms that a society offers. If both the

freedoms and moral rights make a society moral then "Moral societies are happier societies and more vibrant and successful to boot" (Ibid., p. 3). Also

"members of a society inherit moral institutions which become authoritative in succeeding generations, and this favours those cultures wherever moral common sense becomes more uncompromising all things being equal. Eventually, the members of favoured societies begin consciously recognizing, and further deliberately refining, the utility-generating potency of their inherited moral institutions. 'Rational,' scientific utilitarianism slowly replaces common sense, 'empirical' utilitarianism as we learn the incomparable value of equal freedom and its derivative moral rights as everyday utilitarian decision procedures" (Ibid., p. 6).

Spencer describes what is not usually found in modern organisations as enforceable policy, equal freedom. The Critic of such a statement would probably respond that even in society "some are more equal than others" to indicate and argue that equal freedom is not possible or is not feasible in any organisation that needs human bosses. Does this mean that if we do not have human bosses, we are equally free, and would have both equal freedoms and equal moral rights? The answer to both questions, it seems, lay in the area of improvements to the humans within the organisation and the organisation's ability to make a profit with a contented customer base and workforce. How this is done is the role of management, however, in today's world of quarterly reporting or shorter time periods, it is the immediate result that makes the manager's manager positively respond or not.

In passing, will the greater and greater use of computer based recording and decision making through the use of Enterprise Resource Planning (ERP) make the employee more free, by disposing of the middle management requirements of organisations?

The time factor expressed by Spencer, of generational evolution of better organisations and their communities is far too long for Spencer's ideas to bear fruit in today's world of quarterly or shorter reporting cycles. However, historically speaking, it is the generational change, evolution if you will, of political actions and responses, violent and peaceful that makes a free society increasingly free, beginning with a local social freedom and continuing through to central governments. However, freedom in a corporation, whose life cycle is probably less than 100 years, has not the chance to evolve freedom over time as it must define and refine freedom in the encapsulated worlds in which they operate. Freedom therefore, is not business foundation; it is

beyond the competence of a business to determine what freedom means, it can only operate within the rules determined by others. This is where a society is able to take the role of controlling the short term for corporate actions instead of a society's usual time span that is much longer. This time span difference is what the corporations of today understand as they operate within a community, the calculus of winning the short term as it is a small part of the long term, while society considers the short term as either good or bad, and things will change to reverse the current good or bad times.

Paul Ricoeur

Paul Ricoeur is described by (Dauenhauer, 2002) as "...one of the most distinguished philosophers of our time."

"Ricoeur argues that the voluntary and involuntary dimensions of human existence are complimentary... Each person has to struggle with the conflict between them. But this conflict is what ultimately makes my freedom genuinely mine, what gives me my distinctive identity" (Ibid., p. 2).

This does not mean that a human being must stand by and be a sitting target and victim; it means that each person has the option of doing something to change the world in which they exist. The initiating of an action is a desire to change,

"...Desire is not only a force that moves or impels a person. It is also a reason for the initiative in question. It is a reason that makes the initiative intelligible and meaningful. Thus desire shows that the self, as agent, belongs both to the order of nature, in which desire impels, and to the order of culture or meaning, in which the initiatives make sense both to the agent and to others as motions aimed at obtaining what it desires" (Ibid., p.6).

Ricoeur presents a form of reality that is applicable to the model I present in this work. The information systems professional must make an evaluation of their situation, and then make choices as to the moves they wish to undertake or even those allowed and allowable. They are not typically in a free society, they are only as necessary as are janitors, accountants, auditors, and other 'hack' occupations to keep the operation of the organisation legal, running smoothly, and honest in the eyes of others. There is little power at this level to change the operations of the organisation, but the individual can initiate meaningful changes within and without the encapsulated situation they find themselves. It is here that consideration of any jump in occupational situation must dominate, as the power to initiate such a move remains with the individual, but the corporate acceptance of such a move is determined by the power of others.

Positive and Negative Freedom

Positive and negative freedom, is discussed under the title of *Positive and Negative Liberty* (Carter, 2003) seen in the discussions on slavery. Originally published in 1958, by Isaiah Berlin using the term liberty, while “many authors prefer to talk of positive and negative *freedom* ... [however, neither freedom nor liberty] can be translated into other European languages, which contain only one term ... where English contains two” (Ibid., p. 1). “To be free, you must be self determined, which is to say you must be able to control your own destiny in your own self interests” (Ibid., p. 2). Berlin is quoted in this article

“...we use the negative concept of liberty in attempting to answer the question ‘What is the area within which the subject – a person or group of persons – is or should be left to do or be what he is able to do or be, without interference by other persons?’ whereas we use the positive concept in attempting to answer the question ‘What, or who, is the source of control or interference that can determine someone to do, or be, this rather than that’ (Ibid., p.2)?

The splitting of the person into a higher-self and a lower-self, that is, between “...the rational, reflecting self, the self that is capable of moral action and taking responsibility for what she does ... [which] marks us off from other animals’ and “...the self of the passions, of unreflecting desires and irrational impulses” respectively determines whether one is free or enslaved (Ibid., p. 3). Christman is also quoted

“...[a] person is positively unfree is her desire to conform was somehow oppressively imposed upon her through indoctrination, manipulation, or deceit. She is positively free ...if she arrived at her desire to conform while aware of other reasonable options and she weighed and assessed these other options rationally” (Ibid., p. 5).

In short, negative freedom is *freedom from*, positive freedom is *freedom to* and also *autonomy* or *self-rule* (Cherniss & Hardy, 2005 p 19). On Berlin’s life, “He was sharply aware of the pain of humiliation and dependency, the hatefulness and hurtfulness of paternalistic rule (Ibid., p. 22). Perhaps we are now getting closer to a point that defines freedom for the information systems professional.

In discussing negative and positive liberty/freedom, we are nearing the central position of this work. What freedoms do information systems professionals have within their workplace as compared with the others in similar professional positions? I would suggest that they would all have the same *freedoms from*, that is freedom from

workplace harassment, and so on. It is within the influence of *freedoms to* and *autonomy* or *self-rule* that difference will arise. The freedom to shift careers or career paths ought to be self evident as the professional matures and develops, yet this does not seem to happen, so can we assume that there are real obstacles to such a move in any profession or just information systems? In conversations concerning this apparent reality, no one has apparently, offered a pathway forward for the person concerned, for the organisation or the community as we allow needed talent with intelligence to waddle in the mire or swamp at the base of the Ivory tower.

Limitations Concerning Freedom

I feel that I cannot give *freedom* a decent run in this limited space, so I must be brief and perhaps shallow in the explication of such things as freedom. There are deep beliefs as to what freedom is and what it is not, and a great deal of what has been written about freedom has been written during or just after war or great social unrest, when freedom was considered expendable so that they may be restored later.

This work does not intend to support government interference in the daily affairs of a corporation; it will only describe the interpretation of a corporation's possible weakness or even demise from a simple string of restrictive policies concerning the freedoms of its human workforce. The imposition or continuance of these restrictions within the micro-society that is a corporation will not let freedom and moral utilitarianism evolve to where it is intuitive to that enclosed corporate micro-society.

This does not mean anarchy, it means process, it means that mobility is natural, it means demanding the very same freedoms that some others have and take for granted, that are denied to some others. It is that simple, and perhaps that is why this idea is rarely implemented.

Compatibilism

In his article on Compatibilism, (McKenna, 2004a) states "According to one strand of Compatibilism, freedom of the sort pertinent to moral evaluation is nothing more than an agent's ability to do what she wishes in the absence of impediments that would other wise stand in her way" (Ibid., p. 7). However, there is a responsibility for one's actions, irrespective of the moral content of those actions.

If we jump to the current thinking concerning Compatibilism, (McKenna, 2004b) dealing with manipulation and responsibility, where he mainly deals with the acts of manipulation and who bears the ultimate responsibility for the acts, the agent or the manipulator? This creates a duality of “internal and external theories of free will and responsibility” (Ibid., p. 1) and that “internalist theories are time-slice or current time-slice properties or snapshots” and are instant determined, that is what happened at a given time. “Externalist theories are historical theories” and they require a history to determine cause (Ibid., pp. 1-2), but I add here history is written by the victors.

Free Will

O'Connor describes free will as follows:

“‘Free Will’ is a philosophical term of art for a particular sort of capacity of rational agents to choose a course of action from among various alternatives. Which sort is the free will sort is what all the fuss is about. ...Philosophers who distinguish freedom of action and freedom of will do so because our success in carrying out our ends depends in part on factors wholly beyond our control. ...much of the debate about free will centres around whether we human beings have it, yet virtually no one doubts that we will do this and that” (O'Connor, 2005 p 1).

“...free will suggests that a –perhaps *the*—root issue is that of *control*. ...our capacity for deliberation and potential sophistication of some of our practical reflections are important conditions on freedom of will. But any proposed analysis of free will must also ensure that the process it describes is one that was up to, or controlled by the agent” (Ibid., p.5).

My response to this short and too brief discussion on free will is that we all have freedom of action and freedom of will; it is the direction of each of these that determines a result that determines our relationship with our chosen society. In the model presented, it means that information systems professionals have these apparent characteristics to determine their fair and considered treatment by their employers to join in the mainstream operation of their organisation. That is, outside of the purposeful and technical to include the operational reason of being that the organisation possesses.

Existentialism

“...‘existentialism’ is a term that belongs to intellectual history” according to Crowell (Crowell, 2004 p 1) whether or not this statement is correct, I will let history itself decide.

“...existentialism was as much a literary phenomenon as a philosophical one” (Ibid., p. 1) and “...‘existentialism’ may be defined as the philosophical theory which holds that a further set of categories, governed by the norm of *authenticity*, is necessary to grasp human existence” (Ibid., p. 2).

It is apparent from Crowell’s manner of writing that he uses the ‘anti-establishment’ tendencies of existentialism to predetermine its demise, when he states that

“...the themes popularly associated with existentialism—dread, boredom, alienation, the absurd, freedom, commitment, nothingness, and so on – find their philosophical significance in the context of the search for a new categorical framework, together with its governing norm” (Ibid., p. 2)

Within this article, Kierkegaard and Nietzsche are discussed as part of the historical content of existentialism.

With Kierkegaard an interesting idea is raised, that of, firstly a religious concept of the individual’s conflict of ethics and faith, and secondly the individual and the crowd, where Kierkegaard states, “the crowd is untruth” (Ibid., pp. 3-4). This in itself, must also mean that the team (at work), the organisation where the team works, and so on is also untruth.

Untruth has the meaning of the subordinating of self to the crowd, as being a self can be difficult if the demands of the crowd are different than the demands of the self, again the MBA problem of personal goals against corporate goals is still to be resolved. Perhaps this is because the differentiated human being is not being considered, however, in the words and pictures of the model, the goals of an anthill dweller are different from those of the critical-thinker Condor and are yet different again at the artist-writer Guru level. What complicates matters further, it seems is that perhaps at any given stage, there is an admixture of a human being dealing with an admixture of an organisation, where certain components fit and others do not and the result is a compromise that works or not and is the source of the tension between both parties.

Another consideration is Nietzsche’s *Will to Power*,

“where the Judeo-Christian moral order is used to thwart the power exercised by the strong over the weak, ...creating a herd animal that has trained itself to

docility and un-freedom by conforming to the 'universal' standards of morality. The normative is nothing but the normal" (Ibid., p. 5).

As Sartre's

"existence precedes essence' creates another outlook upon the rationality and definition of existentialism, is that it offers no definition of what a human being is, "since meaning is decided in and through existing itself" (Ibid., p. 6). "Existential moral psychology emphasises human freedom and focuses on the themes of mendacity, self-deception, and hypocrisy in moral consciousness" (Ibid., p. 10).

"As Sartre points out '...the consciousness of freedom, is not something that human beings welcome; rather we seek stability, identity, and adopt the language of freedom only when it suits us... We are condemned to be free'" (Ibid., p. 12).

This latter quote is probably the crux of this whole idea of freedom, particularly in the information systems industry. By seeking stability in a rapidly changing profession, the information systems professional gains identity, that identity I believe is one of a person who can internalise rapid change and cope with it productively. That is they make change work for all as a vanguard that establishes the direction of localised change, particularly within a given organisation. At a higher level, such as the role of Condor, we see the relationship of change and critical-thinking, as de Beauvoir describes above. Above the Condor, the model presents the Guru or as de Beauvoir describes, the artist-writer, the holder of this role determines the acting-roles that the others will play in the future.

Not one of these however, is an island of professionalism, the common thread with the model itself relates them all, and this thread is their profession, whether this profession is information systems, accounting, or engineering, they are all within the presented model's range.

Liberalism

"This might be called the Fundamental Liberal Principle (attributed to Gaus, G. 1996 – *Justificatory Liberalism: An Essay on Epistemology and Political Theory*): freedom is normatively basic, and so the onus of explanation is on those who would limit freedom" (Gaus & Courtland, 2003 p 1). Gaus also quotes Berlin, 1969, page 122, "You lack political liberty or freedom only if you are prevented from attaining a goal by other human beings."

Without a strong streak of liberalism in a professional's armoury, the justification for the freedom limiting actions of a client, an organisation, a university, or any other organisation may be, when a freedom limiting action is questioned, a platitudinous answer is to be expected, such as 'it's corporate policy', 'it's for the common good,' 'orders are orders,' 'my hands are tied,' and the list goes on. If things go wrong, however, the Nuremberg Defence comes into play – 'I was following legal orders, therefore I am blameless.'

Personal Autonomy

"To be autonomous is to be a law to oneself; autonomous agents are self-governing agents. Most of us want to be autonomous because we want to be accountable for what we do, and because I posit that if we are not the ones calling the shots, then we cannot be accountable. More importantly, perhaps, the value of autonomy is tied to the value of self-integration. We don't want to be alien to, or at war with, ourselves; and I posit that when our intentions are not under our own control, we suffer from self-alienation" (Buss, 2002 p. 1).

In addition to the above quote, "every agent has an authority over herself that is grounded, not in her political or social role, nor in any law or custom, but in the simple fact that she alone can initiate her actions" (Ibid., p. 2). "The demand to be permitted to govern ourselves reflects the conviction that we are, in essence, self-governors" (Ibid., p. 9).

The points made here are mainly that it is up to the individual professional to make the necessary changes to reinforce their authority over their lives and careers. That this is described philosophically means that personal autonomy is considered a serious topic and that some do not take it seriously or are ignorant of the sources of thought on this topic. Unfortunately, few are willing or able to discuss this to the person concerned as they may be a competitor for the benefits of activating such knowledge, or that it may disadvantage the managerial position they may hold by discussing this topic with that person.

Critical Theory

Critical Theory has the most involvement in three areas of this work, emancipation, freedom, and power (the next topic). With this amount of coverage, it is

little wonder why this topic is so important to this work as well. Though Marxist in its foundations, its survival within the Frankfurt School during the 1930's and 1940's within a National Socialist rabid anti-Marxism and anti-communism reign, must be a story worthy of the telling.

"In both the broad and the narrow senses... critical theory provides the descriptive and normative bases for social enquiry aimed at decreasing domination and increasing freedom in all their senses" (Bohman, 2005 p. 1).

"Democratic norms of freedom can be made explicit in various rights, including civil rights of participation and free expression. Such norms are often violated explicitly in exercises of power for various ends, such as wealth, security, or cultural survival" (Bohman, 2005 p. 6).

One of the more interesting themes to come out from this discussion is the idea that freedom originates from the state, and that a corrupt state that attacks freedom, is unanswerable to its people except through revolution. From this, it seems that a business organisation cannot be described as a paragon of democratic freedoms when its hierarchy is nominated and usually supported by those under its control, whether for self-preservation, attempting a favourable impression for future favours, or generally seeking a positive relationship irrespective of the true feelings of the individual concerned. This is corporate domination, the very antithesis of Critical Theory as critical theory supports "the democratic value of freedom from domination" (Bohman, 2005 p. 12). Yet, the prerogative of management is to issue orders and these orders are interpreted and then followed. Thus, domination can be a tool of management and used to corrupt an organisation until a revolutionary movement begins and is successful in synthesizing a new tool of management.

Power

Introduction

In this journey, so far, we have examined slavery, enslavement, emancipation, freedom and now the final topic prior to examining the three major supports of this work, structuralism, post-structuralism, and post-modernism, is power.

For the most part, secondary references are used, however there one primary reference included here. The philosophers used are Nietzsche, Spinoza, Ricoeur, Foucault, Baudrillard, and Sartre. The philosophical topics are Personal Autonomy and

Fatalism. This is by no means exhaustive, it is only indicative of the thinkers and topics concerning power.

Nietzsche's Moral and Political Philosophy

“The noble human being,” says Nietzsche, “honors himself as one who is powerful, also as one who has power over himself, who knows how to speak and be silent, who delight in being severe and hard with himself and respects all severity and hardness” (Leiter, 2004 p. 14). In other sections of Leiter “The Will to Power” is discussed, however, it seems that this will is to have power over other people, animals, and things. Applied to information systems, it can be shown that information systems professionals have *indirect* power over people, things and animals, by controlling the information flow that controls these very same items. These professionals have stepped back and control their world far more effectively than mere men, their ideas, and their concepts of reality as they control the machine and information that controls men, but they are denied the trappings of their true power.

Yet the actual power to change is determined by those without such powers, the information systems professional can only control what they are given to control. This almost symbiotic relationship is the power structure of information systems. The changing of the attitude of an information systems professional to the use of power and its sources is the crux of this work. It is shown that the powers controlling information systems ought to control an organisation that is at least three levels deep – anthill, condor, and guru. Currently however, the structuralist organisation, the anthill although it is at the bottom level, it seems to retain the financial power to determine the height of the information systems group within the organisation.

“Nietzsche philosophizes from ‘the perspective of life’ which he regards as ‘beyond good and evil,’ and challenges the deeply-entrenched moral idea that exploitation, domination, injury to the weak, destruction, and appropriation are universally objectionable behaviours. Above all, Nietzsche believes that living things aim to discharge their strength and express their ‘will to power’ -- a pouring-out of expansive energy which, quite naturally, can entail danger, pain, lies, deception and masks” (Wicks, 2004 p. 6).

My point on this quote is why people do not think like this. Is it a closed or ignorant society that demands that you are part of that society or you are not, and if you are not an active member, you will be cast out into the wilderness for some perceived anti-community act or immoral acts by expressing a will to power? What amount of

courage or whatever measure you would name, would someone deliberately eschew their community and suffer the individual costs of such an action as an exercise to express this will to power?

In addition, what are the benefits of such a move to both parties?

Baruch Spinoza

"Spinoza's conception of adequate knowledge reveals an unrivalled optimism in the cognitive powers of the human being" (Nadler, 2005 p. 8).

"Our affects are divided into actions and passions. When the cause of an event lies in our own nature -- more particularly, our knowledge or adequate ideas -- then it is a case of the mind acting. On the other hand, when something happens in us the cause of which lies outside of our nature, then we are passive and being acted upon. Usually what takes place, both when we are acting and when we are being acted upon, is some change in our mental or physical capacities, what Spinoza calls 'an increase or decrease in our power of acting' or in our 'power to persevere in being'. All beings are naturally endowed with such a power or striving. This *conatus*, a kind of existential inertia, constitutes the 'essence' of any being. 'Each thing, as far as it can by its own power, strives to persevere in its being.' An affect just *is* any change in this power, for better or for worse. Affects that are actions are changes in this power that have their source (or 'adequate cause') in our nature alone; affects that are passions are those changes in this power that originate outside of us" (Ibid., p. 9).

"Because of our innate striving to persevere -- which, in the human being, is called 'will' or 'appetite' -- we naturally pursue those things that we believe will benefit us by increasing our power of acting and shun or flee those things that we believe will harm us by decreasing our power of acting" (Ibid., p.9).

"'On Human Bondage, or the Powers of the Affects'. He explains that the human being's 'lack of power to moderate and restrain the affects I call Bondage. For the man who is subject to affects is under the control, not of himself, but of fortune, in whose power he so greatly is that often, though he sees the better for himself, he is still forced to follow the worse'" (Ibid., p.10).

These four quotes support the proposition that it is up to ourselves to change things for the good of ourselves, else we are enslaved, as discussed previously, to something we cannot support, and that does not support us. We always have the capacity to think of ways to accomplish this task, and to use the facilities that we possess, can borrow, or buy, to free ourselves from particular classes of problems. Spinoza uses the term perseverance to describe the desire to change for the better, and the word is apt here as well.

Paul Ricoeur

(Dauenhauer, 2002) in his article on Ricoeur presents a model called power-in-common –

“...power-in-common ...springs directly from the capacity people have to join with one another in common action. Together they can do things that none could do alone” (Ibid., p. 13). “...the ultimate objective of all defensible political practice is to make power-in-common prevail as far as possible over domination. But because domination is never wholly eliminable, defensible politics is inherently fragile (ibid., p. 13).

Though the above quotes are used, they are used in the context of the Dauenhauer’s writing about Ricoeur, and the overall impact presented is one of political as well as personal power that is able to initiate change. One can imagine a sole information systems professional or any other professional attempting to alter the reasoning of an organisation towards its promotional and career policies for those outside the anointed and chosen ones able to pursue a career in management. One can also imagine the increased competition for available management positions other than what has been historically successful.

If we can assume that a business organisation is as political as any other is, then it ought to be responsive as a government when employment and individual promotional possibilities are concerned. However, this is not the case. Democratic processes are not part of the management processes of a business organisation, even the shareholders who have such rights, rarely if ever exercise them to anywhere near their maximum level unless a clear disaster has occurred such as bankruptcy or major criminal activity within the organisation.

Michel Foucault

By being marginally within the hated bourgeois society, Foucault and Sartre alike, dealt with the margins of their French society to, if nothing else, explain the powerlessness of being a marginal, and from there to find ways of improving and explaining ways of influencing society to take these margins seriously (Gutting, 2002).

As a passing note, I have approximately 150 references to Michel Foucault on my computer, the rationale for such a large repertoire of writings by Foucault and about Foucault, is Foucault’s development as a source on the topic of power. In discussions with others, some who knew nothing, something, or were quite familiar with his

works, most, as I recollect, seem to think that because he was in fact on the margins of society, his homosexuality but one of the factors of his social marginality, perhaps gave him insights into modern interpersonal, person-group, person-organisation, and person-society power relationships and structures, and from this situation developed the idea of bio-power.

The modern form of disciplinary power, to enforce 'normalcy' Foucault shows that the modern factory, hospital, and school are modelled on the modern prison, and that this is the result of convergence of "hierarchical observation, normalizing judgment, and the examination." This means that by failing to meet normalcy means that a person is to undergo a reform process, not a further punishment or death to correct deviant behaviour" (Ibid., p. 4).

Foucault also links power and knowledge in human beings so that they cannot be separated and by knowing we control and in controlling we know (Ibid., p. 5) or "to know is to participate in complicated webs of power" (Foucault: *Key Concepts*, 2002).

The term power is in itself inadequate to describe power according to Foucault, so the terms bio-technico-power (bio-power) and disciplinary power are used to describe power in Foucault's sense. Bio-power is confessionai based, "where people are taught that their liberation requires them to 'tell the truth,' to confess to someone who is more powerful. and this truth telling will somehow set them free." While disciplinary power has the end of creating 'docile' people that may be "subjected, used, transformed, and improved." This is done with a "form of surveillance which is internalized ...where each person disciplines him or herself."

There is another aspect of power only briefly considered here, and that is critical organizational theory, where "reason can be seen in its central goal of emancipation" (Feldman, 1997 p. 2). There is also the other side of the coin-

"...without a stable organizational culture in which common sense and common standards act as a safeguard against the openness or 'freedom' that these theorists [Foucault inspired organizational theorists] call for, we become vulnerable to totalitarianism" (Ibid., p. 9).

Feldman determines that it is through constraint and limitations to freedom that "we have a truth that is independent of power." "Truth/knowledge is the essence of culture. By making truth a subcategory of power, Foucault relativizes culture, making

truth impossible" (quoting Taylor, 1984). [Quoting Arendt, 1968] "...our truth exists in the present, while based on the past and pressing into the future" (Ibid., p. 9).

In the afterword of (Dreyfus & Rabinow, 1982) we see how Foucault views power. Foucault determines that he is not presenting a theory or methodology but "My objective, instead, has been to create a history of the different modes by which, in our culture, human beings are made subjects" (Ibid., p. 208). Foucault then describes the struggles against an immediate enemy not a chief enemy,

"...as men exercise their power over women, parents over children, psychiatry over the mentally ill, of medicine over the population, of administration over the ways people live" (Ibid., p. 211).

So the struggle is against a form of power, not institutions of power.

"It is a form of power which makes individuals subjects. There are two meanings of the word *subject*: subject to someone else by control and dependence, and tied to his own identity by a conscience or self-knowledge. Both meanings suggest a form of power which subjugates and makes subject to" (Ibid., p. 212).

From a religious outlook of power, Foucault addresses what he call "Pastoral Power", basically the power of an organisation, a church in this example, over the individual, by its promise of an after-life which cannot be proved, or disproved. As the West has advanced, and the power of organised religion has lessened, it seems, that organisations have used the same type of promise to satisfy its employees about their future, as IBMers, for example. Where promises were made to me that would, if the real odds were quoted, probably would never have to be fulfilled.

There is however, one basic promise put forward by Foucault that rings true,

"Power is exercised only over free subjects, and only insofar as they are free. ...Consequently there is no face to face confrontation of power and freedom which is mutually exclusive (freedom disappears everywhere power is exercised)" (Ibid., p. 221).

So are also the enslaved unable to possess power? I think that is the case.

In Foucault's lectures on Parrhesia (Foucault, 1983) he emphasises truth and the truth-teller and truth-telling as an activity and concludes with what can be described as a description of reflective practices and trace this method back to Plutarch.

"One can comport oneself towards oneself in the role of technician, of a craftsman, of an artist, who – from time to time – stops working, examines what he is doing, reminds himself of the rule of his art, and compares these rules with what he has achieved thus far. This metaphor of the artist who stops working, steps back, gains a distant perspective, and examines what he is actually doing with the principles of his art can be found in Plutarch's essay, '*On the Control of Anger*'" (Ibid., p.64)

Jean Baudrillard

"In the 1980s, Baudrillard posited an "immanent reversal," a flip-flop or reversed direction of meaning and effects, in which things turn into their opposite. Thus, according to Baudrillard, the society of production was passing over to simulation and seduction; the panoptic and repressive power theorized by Foucault was turning into a cynical and seductive power of the media and information society; the liberation championed in the 1960s had become a form of voluntary servitude; sovereignty had passed from the side of the subject to the object; and revolution and emancipation had turned into their opposites, trapping individuals in an order of simulation and virtuality. Baudrillard's concept of "immanent reversal" thus provides a perverse form of Horkheimer and Adorno's "*Dialectic of Enlightenment*" (1972 [1947]), where everything becomes its opposite. For Adorno and Horkheimer, within the transformations of organized and hi-tech capitalism, modes of Enlightenment become domination, culture becomes culture industry, democracy becomes a form of mass manipulation, and science and technology form a crucial part of an apparatus of social domination" (Kellner, 2005 p. 12).

If power is shifting as Baudrillard posits, is it truly shifting towards a powerful media and information society? Or is it a revolutionary movement waiting and biding its time? As I stated elsewhere in this work, I believe that a managerial revolution is upon us, and I add here, it will be also evolutionary as management is replaced by systems that are one place removed from a human being. A product is purchased, delivered and installed with minimum human involvement, an almost total de-skilling of all occupations is nearly upon us, where an artisan is no longer necessary to produce a quality product at a price commensurate with its value to the purchaser. In such a situation, true power will not reside with the management, but with the technologist that keeps the processes functioning. Yet the technologists do not yet realize, or perhaps

they do not care about their real power, or is it they are kept ignorant and away from the now management quasi-centers of power for the purpose of continuing an unreality?

Jean-Paul Sartre

Sartre invests in the power of art by proposing that art, through its special powers communicates among freedoms without alienation or objectification (Flynn, 2004 p. 8). This perhaps is the source of de Beauvoir's artist-writer, described by her as the highest form of human endeavor. In the model presented here, it is the Guru level of the information systems professional, and though it seems they exist, they are not recognized or organized to function as a group of independent thinkers, they are, analogously, prophets in the wilderness, until, it seems, someone allows them to join in the broader world.

Personal Autonomy

As the first of the philosophical topics in the explanation of power, it is here that the fundamentals of an individual's power resides,

"every agent has an authority over herself that is grounded, not in her political or social role, nor in any law or custom, but in the simple fact that she alone can initiate her actions...Despite the special inalienable nature of our authority over ourselves, it is possible for us to fail to govern ourselves" (Buss, 2002 p. 2).

"The puzzle... is a puzzle about the relationship between the agent's power and the power of the forces that move her. And it is a puzzle about the relationship between the agent's authority and the status of these motivating forces. What distinguishes motives whose power is attributable to the agent herself from motives whose power is external to the agent's? What distinguishes motives on which the agent has conferred her authority from motives whose power has reduced her authorization to a mere formality? When the governing agent and the agent she governs are the very same self, we cannot answer either of these questions without answering the other. This is why it is so difficult to produce a satisfactory account of personal autonomy " (Buss, 2002 p. 3).

The major question here seems to evolve concerning the idea of what right do we have to control our decision making, and what rights do we forgo in allowing others to make certain decisions for us. The role of information systems professionals is one of using their power productively for the organisation that hires them and their skills. Yet the final power resides in the hands of those who do not have the skills to utilize their facilities best. The decisions of management concerning information systems are not those of information systems, but of management. The power without control over

that power is no power at all; similarly, responsibility over that which one has no control is a disaster for the one holding that appointed responsibility.

Fatalism

"Fatalism is the view that we are powerless to do anything other than what we actually do" (Rice, 2002 p. 1). Throughout this article we are confronted with logical arguments that attempt to prove the logic of whether or not we can change the future or is it ordained that certain events will happen because they must as a line of logical and perhaps supernatural events occur that allow a certain event to occur at a certain time and place. Perhaps a discussion of fatalism has no place in this work, but I use the word, as do others, serendipity, a happy unexpected event that yields positive result. Is that not fatalism seen in a positive light?

Structuralism

"Most structuralists share a conviction that individual human beings function solely as elements of the (often hidden) social networks to which they belong" (Kemerling)

Introduction

Structuralism originally comes from the work of Ferdinand de Saussure, in his works in the structure of language, and not its use, and by bracketing, enabled him to view the way a thing is experienced in the mind (Quigley, 1998 p. 2).

The connection between structuralism and the anthill part of the model can be described as firstly, the anthill is a structure with various symbols and symbolic structures which make it what it is, a center for information harvesting. The language is unique and the communication is by strict structures of symbols in a near verbal series of stages. Klages states that structuralism has three arguments-

- "that the structure of language itself produces 'reality',

- "language speaks to us; meaning doesn't come from individuals, but from the system that governs what any individual can do with it,

- "Rather than seeing the individual as the center of meaning, structuralism places THE STRUCTURE at the center—it's the structure that originates or produces meaning, not the individual self.

-"Derrida and deconstruction looks at philosophy (Western Metaphysics) to see that any system necessarily posits a CENTER, a point from which everything comes, and to which everything refers or returns. He also states that speech is always more important than writing as writing is just the transcription of speech" (Klages, 2003 p. 2).

(Velibeyoglu, 1999) states (sourced from Jones, <http://www.rogue.demon.co.uk/frames.htm>)

"For the structuralist the individual is shaped by sociological, psychological, and linguistic structures over which he/she has no control, but which could be uncovered by using their methods of investigation."

I suggest that what a structuralist world consists of is a symbiotic relationship. This relationship consists of people, language, and tools where each reinforces, modifies, and recreates their environment when necessary to perpetuate the world in which they live. There is no apparent escape from this world, even though there are no physical walls preventing escape, one can leave at any time, but the value of the persons learned skills evaporates to the point that they have little to offer except a curiosity, and remote experiences that may have no relevance in any other world. It seems this describes an anthill.

Post-structuralism

Introduction

In the presented model, post-structuralism is structuralism with less structure and more critical-thinking. This jump for an individual undertaking such a personal strategic move is one where one is no longer concerned with processes and symbols, but with critical-thinking, similar to the ideas of de Beauvoir and her seven groups. In this grouping, only two are meaningful—the critical-thinker and the artist-writer, the rest are of little or no consequence in discussions concerning the value of freedom.

(Lye, 1997) expresses the idea that post-structuralism sees things differently than structuralism. "Post-structuralism sees 'reality' as being more fragmented, diverse, tenuous, and culture specific than does structuralism." Commenting on Foucault "Foucault is post-structuralist in his insistence that there is no great causal flow or plan or evolution of history, that what happens is mainly by chance." (Ibid., p. 3)

Additionally,

"Post-structuralism and deconstruction can be seen as the theoretical formulation of the post-modern condition. Modernity, which began intellectually with the Enlightenment, attempted to describe the world in rational, empirical, and objective terms. It assumed that there was truth to be uncovered, a way of obtaining answers to the question posed by the human condition. Post-modernism does not exhibit this confidence, gone are the underlying certainties that reason promised. Reason itself is now seen as a particular historical form, a parochial in its own way as the ancient explanations of the universe in terms of Gods" (Jones, 2003 p.1).

Post-modernism

"In philosophy, postmodernists typically express grave doubt about the possibility of universal objective truth, reject artificially sharp dichotomies, and delight in the inherent irony and particularly of language and life" (Kemerling).

The topic of ultra-philosophy, seems to go through the thesis-antithesis-synthesis cycle and as (Jackson, 1996 p. 3) implies the cycle is now 'counter-philosophy-meta philosophy-post philosophy, where the latter is the

"...limit of ultra philosophy [and] is reached in the post-modernism which declares both the dogmatic and the critical forms of the opposition to philosophy self defeating, and proposes instead to expose the whole legacy of reasoned discourse as spurious and annulled in itself."

Jackson complains of too many answers, perhaps to too few questions.

Within this article, Jackson, strips post-modernism of its credentials, and denies that philosophy, as the Prince of university faculties, is doomed to irrelevance, it can only be so if philosophers allow philosophy to be so mistreated.

However, if post-modernism is to be discarded as a semantic term, with what shall we replace it? De Beauvoir uses the term artist-writer to indicate the highest form of character, and in the case of the model presented, I use the term guru to indicate the highest form of information systems professional, though I do call gurus post-modern, what then shall I call the guru in philosophical terms? If Jackson calls post-modernism an overthrow of reason, perhaps unreason as Foucault calls it, has a place as well.

Conclusions

The difference between a tribe and a community is not the desire to join. You are a member whether you like it or not. If the alternative to freedom with power is

enslavement with some or no power, what then is the alternative to power if power does not exist?

I would suggest that the enslaved and powerless gain power by taking that one step away from the responsibility that the empowered would foist upon them. Responsibility without the power over that which one is responsible is at least unfair and at best poor management practice. Without necessary controlling power, they cannot be legitimately be given responsibilities, yet this responsibility transfer is done by using power dominance, and the only choice for the powerless is to take one step back from assuming responsibility. Having done so, the powerful would respond by using the words, 'untrustworthy,' 'lack of commitment,' and so on in order to isolate the powerless and thereby appeal to their own superiors to gain and keep power which ought to have been passed on with the given responsibility. However, this retained power also has little value to the manager other than to state that control resides in their hands rather than those who truly need power to support their responsibilities, but are kept ignorant of the value of their surrendered power. This power also could be used to control the actions of their managers in certain areas, and perhaps this is the reason why power is so greedily possessed.

From the reference presented above, I consider that I have more than triangulated the model by engaging with the literature. The three sections are supported by several recognized writers and philosophical topics, and that the model can be seen to satisfy the validity and other tests.

CHAPTER 4

A REFLECTIVE AUTOBIOGRAPHY OF MY INFORMATION SYSTEMS CAREER: A STORY OF VOLUNTARY SLAVERY AND ENSLAVEMENT WITH GLIMPSES OF EMANCIPATION

Love at First Sight

My introduction to information technology was probably in 1958 when I was 15, when I saw, in a large American Army hospital, a group of strange machines that read punched cards. The sources of printed reports using these quite large, for me at that time, and noisy machines were 80 column cards as individual or unit records. To produce these reports, these unit records were, at separate times, read, sorted, collated, and read again in a logical set of procedures. I then felt that this really had possibilities, as the punched card was variable as to what it could contain and where on the card the information resided. I had seen accounting or ledger machines working at places such as department stores in their accounting section, and observed how that record-keeping system worked. This was where numbers of women put large pieces of cardboard into these machines and punched a few keys and then the machine went into a frenzied state of printing onto these same pieces of cardboard. When the machine was finished, the lady removed the cardboard, and placed it onto another tray of completed work and replaced it with another piece of cardboard and repeated her actions, over and over and over again. However, this punched card thing was, I felt at the time, so superior that somehow I would get involved with it and IBM, the machines that this hospital was using at the time. The soldier who was in charge of this set of machines explained to me what this punched card represented and this, to me and at that time, was an amazing technological tool that was as powerful as one's imagination would allow it to become. I was captivated at this early age with information systems and I remain so to this day, but my attitudes and opinions have changed greatly over these years, and not for the obvious reasons of technological change.

Love and Marriage at 15, Divorced at 30.

People have told me that many professionals, who made ostensibly irrevocable decisions as a fifteen year old, are still regretting the decision made to become a doctor, dentist, lawyer, accountant, or information systems professional now, during their apparently most productive years. They have learned to dislike their professions, but have no way to escape or leave with some semblance of self-esteem or financial benefit or at least financial equivalence. Yet we seem blinded by the apparent truism that 'one cannot expect to maintain a decent living standard by abandoning one's profession, does one?' I how do however believe that it is possible and necessary to be able to do so. This is not a case of middle-age crises, the lack of mobility is simply an artificial specialist situation created by the particular industrial society that we choose to live in. My contribution through this work is that I believe that such occupational moves ought to be the norm and not the exception as it is today. Perhaps it is my upbringing, where change was normal, radical change the exception, and all of this within the normal human experiences of a military brat, or military child. Some have told me that it was a disadvantageous upbringing, because it was so unstable, as every two years or so, we moved or threatened with a move. Yet I considered it quite advantageous as I learned to change to suit new conditions, and from this, I learned to regard change as normal and to tolerate change, as there was no other actual choice.

My American upbringing was unusual for Americans, but I believe that I was a foreigner of excessive instabilities when my father retired from the American Navy in 1961, and we moved to Western Australia.

University

Looking back, if I had had the funds, I would probably have entered the University of Hawaii, Engineering faculty, where I was accepted as an undergraduate for the following academic year, while still completing High School. However, I was in Western Australia, and the local university denied entry to me at their engineering school and I had to spend the next two years to engage the examination system that allowed entry into this University, the only one in Perth at that time. This examination system gave the young student one chance during an entire year to defeat an examination, something that was a totally foreign process to me at that time. Eventually, at the second try, I gained entry to the faculty of Economics and Commerce, a brand new faculty at this university. Eventually I gained a Bachelor of Commerce,

and my first job was with the Federal Government Taxation Department, but I had previously interviewed with IBM. During my first few weeks as a clerical worker with the Taxation Department, I became aware of the human burden of information processing. I was involved as a junior clerical worker to check adding machine lists of employer and employee receipts of annual taxation deductions from their pay. In my naivety, I suggested that a punched card could do this far more efficiently as the Americans used them but my manager, as so many managers after him had done, told me that if I liked America so much, go back there and live, otherwise be quiet, and check the lists against the certificates. That was my first serious initiation to the *Australian Way*. I soon joined IBM Australia as a trainee Systems Analyst working for the then named Service Bureau.

Electronic Data Processing - EDP

At that time, there were no training courses for programmers or systems analysts, other than what was available in-house. IBM trained me in 1401 Auto-coder, an assembler level language, and this was my introduction to advanced programmable punched card accounting machines, unit record accounting systems still, but at a more sophisticated level. The punched card was still the unit, and the data it contained was the record. However, I had always wanted to work for IBM and so here, I was.

It was a curious existence; we programmed a machine using a form of programming logic, without real training in what programming a machine represented. My eldest son, is now employed in a senior position in an organisation as an information system professional, had learned about this art form during his university courses, and from this the industry has recognised programming as a form of art as well as a science. We, on the other hand, had to discover and live with what we wrote. The Service Bureau was, up to its demise, a loss-making organisation; it could not make a profit with Methods and Programming or Applications. The production side subsidised the writing of Applications, and that was where I was employed cutting code. We saw, at various times, that this was the situation across the continent of Australia and perhaps worldwide. The Control Data Case was its demise as it was handed over to Control data as part of the out of court settlement of the case of Control Data Corporation Incorporated vs. International Business Machines Incorporated. Was IBM foolish to give away such a valuable asset? Was the Control Data Corporation case that strong? Was this a smart move by IBM? I can only assume that the answer was yes to both these last two questions.

Cinderellas, Perpetual Bridesmaids, or both?

While the Systems Engineers, the people who installed computer systems sold to new and existing clients, went for advanced training and won prizes for efforts, we were effectively isolated from the rest of the organisation. We received no invitations to the weekly meetings concerned with progress in various areas, sales and technical, however, the latter seemed important to us as well. We started with Auto-coder with a 1401, then FORTRAN with an 1130, and eventually PL/I with a system 360 that was too small to run the full implementation of this language. It was apparent to me that all of this equipment was either obsolete or apparently inadequately resourced for the jobs intended. Even though the IBM System 360 was three years old when I joined IBM, it was not for another 3 years that the Western Australia IBM Data Centre Services, as it was then, received its System 360. Interestingly, it arrived on the actual day of the System 370 was formally announced in Western Australia. It seemed that Western Australia was deemed to be the Cinderella branch, having to use the cast-offs of the major organisation.

The Pink Slip and the Decree Nisi.

I was there almost three years, and the last year was a trial. We had three managers in three years, all of whom tried but failed to produce a profit in methods and programming, while relying upon billing from the production side. I was also weary of being stigmatised as a Dumb Yank, and actually gave up my American nationality when I discovered that I had dual nationality, Australian and American during my term of employment with IBM. It was strange listening to a group of noisy technocrats belittle America while at the same time working for an American subsidiary of a very large American corporation using tools developed by that organisation. Stranger indeed when one followed an edict from the highest officer to 'Question everything.' I was told that was Armonk or corporate headquarters twaddle and to keep my ideas to myself, by all and sundry.

Being an optimist, I felt that if I could wait long enough I would get out of Perth and get into some IBM international office. I went to Britain on one leave, and I could have worked there, but decided to return to girlfriend and home. It was not an auspicious move.

The latest manager, who had arrived about a month before I went to London, was an accountant. He arrived, and he spent the first month or so in his office

determined to fix the problems that seem to plague the costs of writing programs and installing suites or systems of programs. He eventually gave each of us six gold coloured binders, each marked 'The Golden Rules of...' and detailed how he saw how professional programmers ought to do things in each of six areas of methods and programming and production. My annual review was coming up, and I had several serious points to make about these gold coloured binders. I was fired three months afterwards. I lost contact with the group, but I still wonder if Harry's magical books worked, however I do not believe they did, because of the wider industrial history of the failure of such moves at any level of management.

Reflections about Why-A Self-Justification of One's Actions?

I now look at this event as a god-given blessing, though it devastated me at the time and for years afterwards. I had married that job, gave up my weekends, social life, and other irrecoverable time to do a decent job as I perceived it to be, and I was not alone. We all did it as it was non-billable time, and to be a low cost producer meant kudos, being honest was near death. This really was the source of the entire costing system problem as the costing system did not use reliable data and relied upon the sacrifices of the programmers and systems analysts to function at all. It betrayed the idea of true costing leading to better estimations of the costs of future systems. I will wager the same things are still occurring today, particularly in such uncontrolled structures in profit-orientated organisations. It seems that if to keep one's job one has to sacrifice weekends and holidays, there is something wrong with the organisation, not the employee.

New Job, New City, Going Broke Slowly.

Eight months later, I was working for Burroughs Australia as a Support Analyst, or Systems Engineer, in IBM parlance. It was at Burroughs that I really learned the business of computing, as I was involved with just about everything to do with mainframe computers at that stage of technology. I stayed three years, and I reluctantly left as my wife and I, both working, could not afford to live in Sydney. I accepted a job with the Western Australian Treasury as a Programmer-Analyst at treble my Burroughs' salary.

New Doubts and a MBA Scholarship.

Again, I started to have pangs of uncertainty. Did I want to create computer systems for the rest of my life? I became rather despondent and one day I went down to a newsagent to buy a lottery ticket whose first prize would allow me to have many more options. I did not buy a lottery ticket; instead, I bought a copy of *The London Economist* as it had a picture of the Shah of Iran on the cover. I had a soft spot for Iran which itself is a coincidence worthy of noting.

A Simple Coincidence?

Many years previously, I was with a school friend at Hickam Airforce base, next to Pearl Harbor, in Hawaii. We for some reason stopped at the passenger terminal for military flights. The nose of an American Airforce Lockheed Constellation aircraft had the words 'The City of Tehran' painted on it and I told my friend I would be going there one day, we both laughed at my prediction, but I always remembered it.

The Advertisement in the Back of The London Economist

As I perused *The London Economist*, there was an advertisement in the back for students for the Iran Center for Management Studies MBA program as part of the Harvard Business School adjunct business-school program. I had been seriously thinking of educating myself out of Information systems by doing an MBA locally at the University of Western Australia. However, the University of Western Australia's advertisement for this degree specifically excluded those with a business background as it wanted engineers, science graduates and so on, with no business background at all. The idea of going to Iran had another point as well; my wife was pregnant with our first child.

'If You Don't Try, You Will Always Regret not Trying.'

My wife and I had been discussing this move to study for an MBA and we discussed the situation of where I was working and the possibilities of starting afresh. I was 33 years of age, feeling burnt out and I needed a new direction, and I believed that education would provide that route. I applied for the scholarship, our first son was born, and while my wife, Nola was still in hospital, I received an International Telegram stating to reply within a week if I wanted the scholarship to Iran. I went to the hospital that night and explained to Nola the contents of the telegram. I said it was up to her, to say 'stay or go,' maybe she was not thinking too well but she said 'If you do not go you

will regret it; you will always wonder what would have happened if you had taken the scholarship.' I replied to the telegram and within two days, I received telephone call from British Airways stating that a ticket was ready at their downtown office. A day later, I received another telegram stating what I had to take with me - bed linen, US \$1000, and so on.

After a parting kiss from the wife and infant, mother and mother-in-law, shaking hands with my father and father-in-law, and a parting condemnation from my mother about leaving Nola with a newborn child, I was off to Iran.

Flying Carpets, Harvard Business School, and Tehran Tummy.

Free at last, I said to myself, free of the nonsense of designing systems to last 18 months, and all the other nonsenses of computing; now for the real world of business in the oil rich Middle East as well! Reflecting, I do not think that I regretted going to Iran, as it was a boom time in every sense of the word. In Australia, we had the 'Nickel Boom', but this particular oil boom was simply extraordinary as it changed the fundamentals of marketing crude oil, as it was the customer who became the price taker, and not the price setter. The changes to Iran in particular were going to be monumental; as it had always considered the lack of capital was its main problem. Then it became awash with capital, but could not invest it all, as the time lag between educating a nation, building industries, building the necessary infrastructures, was a medium to long term solution, not a next week start and finish, as many Iranians thought at that time.

Iranians were, and possibly still are notoriously short-term thinkers when it comes to business and life in general. You made your money as quickly as possible, put it into places where you could get at it quickly and if necessary have some put overseas in case you have to leave the country. This short-term attitude led to great levels of dissatisfaction among many Iranians who would not believe the necessary period for grand projects was in years and not days. This meant that projects, such as a clean water supply, could not occur overnight and because of that, we foreigners had a bad complaint called 'Tehran Tummy,' a very unpleasant version of 'Montezuma's Revenge.' I lost 25 kilograms over three months because of this local 'belly bug.'

The Iran Center for Management Studies - ICMS

The school itself was the only private university in Iran, and although a group of Iranian industrialists who had experienced Harvard Business School started it, MIT and

Stanford business schools were in the process of setting up facilities in a similar manner, all under similar government auspices and support. The theory was that Iran was going to run out of oil in twenty years, that is by 1995, and it would have to become the 'Japan of the Middle East' if it were to survive into the 21st century. To be able to do this, massive amounts of investment in education was necessary, as the country was 75% illiterate in 1975.

The Reason for ICMS

The government knew that the country lacked western-trained managers so the quickest way to do this was to utilise the techniques of short cutting experience by using education. The first year MBA intake was not as successful as was hoped. They told us that all of the students were western-trained Iranians without the necessary experiences to make them valuable in the sudden expansion of export-oriented or import replacement industries that were occurring throughout Iran at that time. The second year intake, my year, had 13 foreign students who would provide that necessary foreign exposure. We were there to show our fellow Iranian students our way of thinking. It was only as the year progressed that we could see that the stereotypes of both sides disappearing into understanding. The Iranians no longer believed that lavish entertaining of buyers were necessary, and the foreign students better understood the problems that Iran had in the past, what Iran was then having in its present and how it was going to resolve the problems of its industrialised future.

What ICMS provided

In general, it was about 1-½ years of Harvard Business School, as it could not supply the concentrated courses of Harvard's final year. It was extremely interesting nonetheless. We were, in local case studies, 'a well known Middle-Eastern business school.'

Before and After the Revolution

The later overthrow of the Shah's government also overthrew a possible industrialised future and I feel that it is unlikely that Iran or any other Islamic country will ever become industrialised in the Western sense as Japan had become over a similar period. Even though Iran at the time was a declared secular state, the difference in values, social, economic, political, and of course the religious interference in almost every aspect of daily living, means that the necessary diversity of critical thinking was

just not there. There are many interpretations of the Qur'an/Koran, but there are many common beliefs, one is that the Qur'an/Koran is the final arbiter in everything, and civil law as we know it to be, and function, does not exist. In addition, the concepts of and the reality of modernity and its world, have yet to be realised, and cannot be recognised and practiced without religious and political interference from the highest political and religious levels. This one assumes, is to maintain a form of *purity* of dogma, yet the environs of this dogmatic evaluation of the modern world, historically at least, and seems to be heading for a crisis of great importance to the non-Islamic world.

Graduation

My wife joined me prior to graduation and we toured Egypt for two weeks and returned to Iran where I graduated, said goodbye to my fellow graduates, staff, and friends. I was prepared to return to Australia and try to utilise my newfound skills in a new career, all I needed was support from the business community in the form of employment.

Reality vs. Mail Promises Received.

My actions prior to graduation were similar to other near graduates of all universities, that is, to send letters to 'head hunters' back home in order to generate interest, and to seek information about employment opportunities. By and by, I received almost glowing letters stating that there were many opportunities awaiting someone with my newly gained qualification. Because of these letters, I declined even to interview with international banks and other interesting organisations operating out of the Europe and the Middle East, as I was looking forward to living in familiar surroundings with my now 1-year-old son and to get my new career started. After taking a few weeks to get home, the reality was that all the glowing letters were invitations to interview about the possibility of being available for employment.

The Great Australian Immigrant Lie

To say that I was simply disappointed is a gross understatement. I was a victim, as experienced by many of my immigrant friends, of the Great Australian Immigrant Lie, that is 'you are most welcome to come to our country and set up your own business at your risk, but do not expect us to want to hire you. First, you must abandon your ways and adopt ours without criticism, and then you may be considered of value as an employee. Once here we know it is too expensive to return to your country, if

you can return at all, so you are stuck here.' For example, I once knew a surgical nurse working out of a large Sydney hospital whose credentials were from the leading hospitals in London. She came to Australia for a working holiday and could only find work in this hospital as a junior ranked surgical nurse, and that she had to accept the idea that she had to 'prove herself.' During a rather complex operation, the surgeon had a problem, and asked if any of the attending nurses were familiar with a particular form of this operation. My nurse friend said that she had been involved with this operation in a particular large London hospital. She aided the surgeon, and from that point on, the nursing staff assumed that she 'could do anything.' The adage 'go in as a stand-in and come out a star' is probably apt here. To be invited to come to Australia precludes this type of action; to come out unannounced may yield disappointment. This was my predicament, I returned to Australia without any other credibility other than a MBA from an adjunct school of Harvard. I would also suggest that even if I had a full Harvard MBA degree, the local results would be the same. My experiences meant that I had to eat a lot of 'crow' after returning to Australia, and I have not forgotten a moment of it.

The Arrival of the Personal Computer – PC

During the years that followed I worked as a computer consultant on a particular job, a commodities broker for three brokerages, the family paint and hardware business, sold or tried to sell mainframe computers, and smaller business computers, computer networks, the list goes on. The arrival of the personal computer as a serious contender for the mainframe, to me was comparing a child's toy car to a formula one racing car. I was not alone; IBM did the same and almost ceased to exist. My first attitude toward the Apple IIe was that it was a toy looking for a child to play with it. It worked quite well indeed and I was impressed, as it was able to run on-line and collect market data and analyse it when used with the proper software. I did not want to get involved with it on a technical scale. I considered myself to be so far away from the current technical level as to be a walking relic of another age of technology. I was so far away from the technical side and I did not want to get back and in fact could not do so then or even today, except as a curious onlooker. As my eldest son recently told me, "Ageism is rampant in information systems." Perhaps this is another venture for a researcher!

The Family Business

I eventually bought into the family paint and hardware business as one of the partners retired. During that time, I went to technical school and studied French, German, and Russian, just to stop myself from going mad from boredom. The business lasted another 8 years until we decided that we were too small to compete with the major chain stores as they were selling goods beneath the price we could buy them.

Another Newspaper Advertisement Changes Everything – Again.

I will admit that at the time I was going slowly insane from boredom. I had seen it happen to others, and I sensed it was going to happen to me. A newspaper advertisement for a Doctor of Business Administration appeared in the local paper, and I mailed an inquiry and eventually I was accepted into that course.

I am unsure of what will become of this degree, from experience, I am probably considered too old to work for anyone, too impecunious to start a new business, but that does not mean that I have nothing to offer the world. This work is the result of my time reading, evaluating, reflecting, and writing part of my autobiography to show why, the *why* of this work.

Not Invented Here

I ought not to have had the problems that I did over these last 30 or so years, so this work shows to others how they may change their careers and still prosper, but it will be a hard slog for some. It seems to me that the waste of human resources in a country such as Australia is something that it cannot afford to do, yet it seems to proceed with these actions irrespective of the real costs. Yet as with so many Western countries, these costs remain expressed at a personal level and hidden within other social statistics. In Western Australia, I have met similar people with similar advanced qualifications who ignored by the local business community, have left, never to return, to live in more supportive communities overseas. The not invented, trained, or known here disease is widely known, but as my experience shows, only to those who are ignorant of the outside world, and suffered by those on the outside looking in, trying to deal with these overly protective determiners of an isolated and incestuous, almost tribal civilisation.

CHAPTER 5

FOUNDATION OF THE RESEARCH SPACE

The First Subject: The General Environment of Information Systems and Information Systems Professionals.

What are the problems and are they new?

In my experience, information systems seems to attract people who are quite conservative and not radical, as generally perceived. It seems that it is because of givens of the industry, the business concerned and the type of person interested in devoting their working lives to the service of machines. They inherit responsibility over a highly complex system, both electronic and administrative, and must keep the system working, usually on a 7 day, 24-hour basis. This workload shows confidence in the person concerned, their training, and their motivation for doing a job well. The scheme usually means that a high salary (sometimes) is paid, but the extra money earned by excessive work hours may lead to early burnout or the disillusionment of the Information systems Professional. More discussion of this situation occurs within this work and the foreshadowed conclusion is that information systems professionals are no different from any other professional, in that pride of workmanship and professional responsibility are great personal and professional traits, which sometimes leads towards detrimental exploitation of the professional, whatever the calling.

Explanatory Insert

An Expert is defined by Dreyfus as a level above Proficient which is one level above competent. In this work an Expert is called Condor. This is to remove the pejorative sense of the term expert.

The Four Stages of Information Systems Work

Information systems professionals, as do other professionals, have four stages of work. They are mainly concerned with the project they are starting, the project they are currently working on, and the project they have just completed. In addition to the necessary, and time consuming, training due to constant technological change in order to keep abreast of current techniques and trends. They are in reality, trapped in a

technological merry-go-round called information Systems that for them, is too interesting to get off and when they reach a certain age, cannot do so without serious career and financial consequences. They have been seduced of their most valuable asset, their time as young servants within their chosen industry and of their youthful optimism, all of this and more by the high rewards of being a competent player in this most rapidly changing and skills gobbling industry.

The Paradox of Information Systems Professionals

The paradox of all of this is that for the most part, none of these youthful players are Experts, they are, even at the highest levels, merely highly competent with some having delusions of expertise. They may only make decisions covering their information systems responsibilities that resolve a given and stated problem. It is apparent that higher management considers that they are neither trusted nor involved enough to be interested in decisions outside their primary competencies, so they are immediately isolated from the mainstream management processes. All of this is to fill the necessities of the installed and working installation in the manner expected by the purchaser of the equipment for the nominated result. Hegel's Slave-Master story seems to apply for every person in every information system's installation, not in a psychological sense, but socially, politically, and economically.

Apparent Symbiotic – Supplier and User

Information systems from the supplier side indicate that the supplier lives in hope that there is a binding of the user to the supplier forevermore. This is because of the high investment necessary for the equipment to perform to client expectations would be written off if a major change of supplier were to take place. Therefore, not only would the scrapping of serious hardware and site investment occur, but also the scrapping of the skills learned to install and maintain that previous system, and that involves human capital as well. All suppliers seem to do this without any consideration of where the Information systems installation within an organisation is heading technologically, socially, or any other consideration other than getting another sale. The supplier and the user live in the hope that the divergences of the user and supplier is not so great as to fundamentally change the processes that determine the apparent optimal use and function of the new system and the aims and organisational policies of the user. However, even this is at risk. Certain large Enterprise Resource Planning packages are so complex that to modify them to suit an actual organisation is so expensive that it is

cheaper to change the organisation to suit the packaged software. What was management's main prerogative - that of building and maintaining an efficient organisational structure, that prerogative is now also abandoned to outsiders simply because the computer system will not allow these historically necessary managerial processes. From senior management's point of view, board management may consider that many management functions are now redundant and that whole management structures change to supplying information to a computer system that has replaced many human managers. In addition, the applying of management exception prerogatives cannot compromise the organisation's information sources and the accompanying managerial responsibility for any exception has now become obsolete. It also seems that little consideration of what directions the supplier is apparently taking for the next generation of equipment and techniques. The customer is not only a price taker but also a technology taker. In other words, Expert/Condor/Critical-Thinker level skills (as will be explained later), apparently useful in these situations, are in general, non-existent. This is the norm and is satisfactory if the customer remains passive. However, during such times, mere competence is not enough and with Expert/Condor/Critical-Thinker advice unavailable, if a serious situation arises as to the veracity of the system, the system tends to be immediately shut down just to protect what is left during and after a skilful information attack and then await solutions from afar. This situation may be tolerable for some businesses, but for banks for example, this situation is expensive and intolerable.

What is the measure of 'Too Expensive?'

The estimated expense of keeping apparent Experts seems to be too high, as solutions to information systems attack are readily available from the quick reactions of super-competent government agencies and Operating Systems suppliers, as well as the suppliers of protective software. Here lays another information systems paradox, the necessity of higher levels of skill (Expert/Condor/Critical-Thinker), in my opinion is proven, but their expense and source for the necessary few times they are truly needed in damaging emergencies may not apparently warrant their inclusion on the payroll. During an attack and afterwards, the

Educational Insert.

This limits the learning available to the student to possibly a higher level of competence, as the student can only increase their level of competence, irrespective of the methods used. The student is not exposed to the emancipatory methods needed to expand their depth of understanding Information Systems, nor to their horizons as a human being, that is to increase their self worth as well as their value to the marketplace. More on this topic later.

super-competent can only await the next attack. This is if the value of the business computer time that is lost is less or marginal to the inclusion costs of Experts/Condors/Critical-Thinkers on the Information systems staff. As well, the needed skills seem to be currently nebulous and a moving target to information systems educators, professionals, the information systems industry and to information systems users.

Dreyfus Competency Level

The definitions of an Expert and above come later, but now take for granted that there are three levels of what Dreyfus calls competency (Dreyfus, 2002m). All start as Novices, then one advances to become an Advanced Beginner and then one becomes Competent. To become an Expert requires a different set of skills and training, as I will later show.

From this, we can see why information systems employees are reluctant to become other than competent, today, there seems to be no market for possessing the currently vague Expert skill levels, and so only competency is of immediate and continuing marketable value. The sea change needed to transform this situation seems to be complex for the following reasons. Firstly, to change the attitudes of those deemed competent and remaining within the technological trap to seek a higher calling in their current industry; in a Marxian sense (Wolff, 2003), this has to come from the person involved. If they are complacent or non-cooperative, then benign but positive indoctrination may lead them into seeking higher responsibility for their own and the organisation's best interests. Personally, even if they are burned-out computer-types they must be desirous of meaningful career advancement. In either case, currently, industry offers little direction to such people. They can remain in the industry as a Competency skill-level consultant in information systems or get out altogether and buy a paint and hardware shop, as I did, or some other small business. There seems to be no other options and the industry wastes yet another ten or so person-years of experience, a lose-lose situation for all.

Yet there is a basic need of Information systems Experts/Critical-Thinkers, Experts-Plus and their hard-earned expertise, if for no other reason than to minimise the errors that are constantly appearing in the local media concerning fundamental systems errors – both design and implementation. Virus attacks, unsuitable hardware, software, incomplete security, the list goes on and on and occurs daily somewhere, some more

newsworthy than others. The NIST considers that less than 3% of all information systems problems are Information Attack, the greatest volume of error is data entry mistakes, roughly 65%. (NIST, 2000b) The important difference being, that one is under management control and the other is not and an Information Attack can be far more dangerous because of its unknown short term and possibly long term effects. To correct a keyboard error requires another keyboard action, to rebuild an attacked system may take weeks.

Secondly, where and how is the Information systems industry to gain universal skills above competence? It seems that there are three possible options:

- Hire experienced hackers/phreakers while in prison, just coming out of prison or recently released from serving their time inside prison.
- Mentoring suitable candidates
- Further training, mainly in the use of skills outside of their structuralist anthill and begin critical-thinking as a post structuralist, and introduce the artist-writer in a post-modernist.

This assumes that the industry, the firm concerned, and the individual are aware that there are definite needs and there are information systems people who will say this to be true and want to participate in advancing their personal and industrial value to those that employ them.

Skills Upgrading

In the case of Information Warfare, some consider that the criminal element be hired and used as instructors as part penance for their past illegal activities. Included within this option are known hazards concerning the use of these people. They may see and learn things that will allow them to improve their criminal skills when their penance is over. Generally, criminals are so untamed that they may be next to useless, unless they have recently acquired, while in prison a higher standard of morality and have developed a well-organised approach to their work. However, putting criminals into a now (for him or her) civilised situation only creates serious problems with the need of directed and disciplined actions to achieve a desired result. In addition, in the final analysis, the criminal as teacher and the non-criminal student pits one level of competence, and the moral uses of that competence, against another.

Or?

The other two options are of a more rational training nature. They may stand alone or merged into a more formal and informal scheme.

Option Two - Mentoring

Option two is a mentoring scheme using Professional and Participative Reflective Practices, that is a mentor and student or group of students, who are top level competent and desire higher standards of training, competency, and employment. This is a Master Class and used by competent musicians and other artists, professionals and skilled artisans to gain qualification via an apprenticeship of sorts. This is the foundations of Schön's reflective practices (Schön, 1983, 1987).

For this to work in information systems suitable mentors would have to be found with competencies, experience, and knowledge of effects based decision making learned from their experience, training, and from other managers. They would also enjoy being a mentor, while maintaining and constantly building their skills as practicing information systems artisans. They would have great affection for the industry and know about its successes and failures from an intimate and well-sourced anonymous network, as these sources could be the foundation of an Expert's value and attitudes towards information systems.

Option Three - Back to School with the Brother and Sisterhoods

Option three is a formal training course, where the teaching about the unification of the leading and bleeding edge of technology and highly competent people is accomplished. The problem is that this is bookish and demonstrated in real time by instructors who are also at least skilled at the Expert level. This would be an open-course and returning for updates ought to be as natural as getting the updates to software and hardware today. It seems that it would be similar to a specialist physician's collegiate and would carry as much weight in dealing with information systems users.

Current Problems of Information Systems Professionals

We now have to consider the general problems of information systems professionals. Their current systems problems are common problems for everyone using the same equipment, that is, the range from Hardware to Software. This means that the equipment is under constant developments and that any problem is probably short term. This has created the situation that any problem is someone else's problem as

well, and the resolution of the problem by the suppliers of the equipment is paramount. From this, one may not fix the problem locally without consultation with the suppliers as greater problems may arise by even competent fixers.

Advantages

However, this does have certain advantages, mainly for the supplier and the software purchaser. The skills concentration does not lie with the users, the user organisation's information systems professionals need not need to have exceptional and competent skill levels, as they need only maintain the current situation and any further training or advanced education is self-funded and on their own time, and to satisfy their own *reading* of what is forthcoming within the near future.

Is this just a People Problem?

Another question arises as well. Are the right sort of people involved at all levels of this industry, and can they shift from being a rule follower to an Expert and then to a type of Pathfinder, or are each grouping or series of the Dreyfus skill levels mutually exclusive? That remains to be seen, because in industry in general, probably only a few could make that total shift, aided or not, but it is arguable that information systems has yet to see a single one. *Why?*

To answer that question, perhaps we ought to see how an industry hires in general and how an industry hires Information systems personnel.

Generally, when a raw recruit enters a modern service or industrial environment, they are not there because they can perform the job as stated on a job specification sheet, but also they enter as raw management material. They are hired at the start of their careers, as it is usually better to promote internally than to hire from outside for a number of reasons. Among these is that others can see that rewards for ability and work are present and put into effect and that if they wish the rewards, then they must accept the responsibilities of the higher positions as well. They can see where older managers that are more experienced have climbed the ladder, knowing how and when they started their career with the firm. Contrast this with a raw recruit within an organisation's information systems department or section. They "hit the ground running" and they work immediately with people roughly their own age. There are, apparently, few old-timers in Information systems. They can, if they look, see themselves in two to five years, not twenty years, or so as in the previous case. They are by nature short term

employees. They are expensive to get, keep and train and re-train, and have little apparent loyalty to their employer, who returns the favour in so many little ways, particularly resentment to the high salaries and privileges they gain if their skills are in short supply. It is little wonder that Information Systems types are not promoted to non-Information systems jobs, as they are not specifically experienced by being moved from function to function as a trainee manager would be, they are installed as is the equipment and software they use to produce the required results.

Art as an Information Systems Paradox

The final paradox considered here is the one of operational efficiency and effectiveness. The stagnation of the art and science of organising a group of people has, in my opinion, remained unnoticed while the methods of extracting information from machine based storage systems have not. The idea that a productive facility looks like a factory and treated as such is possibly the greatest hindrance to the information systems professional. If information systems were similar to a factory floor, then each time a major problem occurred, the production line ceases to function, the alteration or patch to the production systems would take place, and afterwards the production line managers await the next problem. There seems to be less room to manoeuvre on a production line to fix the systems as there is on a software system. To shut down a production line is a decision that is rarely made unless an unforeseen disaster occurs, while to shut down a computer network to install improvements is almost an everyday event.

From this and by its very nature, Information Systems cannot be treated as a production line each time a program or a suite of programs is used, modified, and then used in its modified form. Modifications are a once only and if it works, the system does the repetitive action exactly as specified by the modification. Cost is another consideration, usually a modification to information systems are less disturbing and less costly than the cost of modifying a production line.

An Idea from a Russian Architect

In a interesting article found on the Internet (Kasputin, 1998) dealing with architecture and the idea of a 'thought range' limiting the production of new ideas coupled with older prototypes falling into disrepair and no longer being able to perform their designed functions, seems to be the case with information systems careers as well. This again raised the case of competent skill shifting. While the problems of the

information systems Professional are technical, his place within the organisation ought to be with the real and potential line management, and it seems that the managerial prototypes currently used are not applicable to them. Perhaps there has to be a development of new prototypes of careers for the post-competent skill level professional, not only in Information Systems but in other hack professional levels as well.

How to Destroy a Trap

These limitations of the workplace, this Information systems technology trap, ought not to exist and these limitations ought to be removed if the industry is to meet its new challenges of human resources, security, reliability, and value. These challenges are no longer just technological, but come under the guidance of management and organisational leadership. The interesting thing is that both of these topics as explicit knowledge can be learned, taught, and practiced (in order to build a personal store of implicit knowledge) by those willing to teach the holders of technology skills and as well as those who possess process skills such as engineering, accounting, human resources and general management.

First Conclusion

The first conclusion is that the typical information systems worker is usually intelligent, but short sighted; highly paid, but not considered a valuable human asset; who has unused analytic ability beyond those of Information Systems, and is dismissed as being an outsider when they are away from the information systems department. In general, some even consider information systems, as a career, to be akin to a water drainage system, necessary for good public health, but no reasonable person wants to work there unless the rewards are exceptional.

A Plumber in Snit

The approaches that it seems are the same as those used to convince a plumber to give up his rubber boots for dress shoes and a business snit.

These approaches, I believe, kindle the desire for responsibility and the power to make that responsibility work profitably for all concerned.

My Initial Expectations of This Research.

I expect that most of the interviewees for this project will be very conservative and jealous of their current levels of skills, but ignorant of the needed skills to advance into the more senior ranks of management both within and outside of Information Systems. They know how to obtain new technological skills and how to maintain their current skills. The reality is for them to learn new skills in management and leadership and this method of skill acquisition is not the same as learning how to program a new, highly technical piece of information systems equipment. With one, there are strict procedures and available rules to make the equipment perform to specification. There are no such rules in leadership or management, only broad principles controlled by an organisation's policies. The real world of uncertainty and vagueness, the very antithesis of his or her work information systems history now confront the information systems professional acquiring management and leadership skills. They have to synthesise their new roles, or as I later put, to undergo a metamorphosis into a new creative and thinking Being, with a relationship to the past and future. Hegel's thesis, anti-thesis, and synthesis are very apt here (Hegel, 1971, 1977, 2004). The rewards may be equivalent or even better, but the fear of failing to grasp the necessary skills, may be too great to want to achieve improved status and prospects. The time taken to acquire only part of these necessary and new management skills may render their current information systems skills obsolete and make the risk taker beginning a new career outside of information systems, unemployable without a serious level of retraining; such is the rapid scale of change in this industry. A further disadvantage in the eyes of Competence skill level information systems professionals is that if they fail their new courses or reverse their way of thinking and return to information systems, in effect to become a retreaded information systems competent. If a successful metamorphosis takes place, their more insular colleagues may yet consider them as an information systems defector, not to be trusted, as they will have newfound Condor and other non-structuralist or non-competency friends who may not have information systems as their main interest to the potential detriment of the current information systems organisation and social structure.

There are however, situations that show that if information systems is part of the overall training processes, that a person in information systems may specialise, but later, also has the ability to escape the information systems trap with little or no career penalty. By emancipating themselves from Information Systems, they then expose

themselves to the uncertain wonders of the real world that are vague, inconsistent, sometimes unfathomable, and all the other similar pejorative adjectives, mainly sourced from fellow Information systems professionals, who willingly ignore the challenges and rewards of a management career. There is a necessity to inform Information systems personnel that these challenges are a better and more real contesting of their abilities, than making a machine or group of machines work properly for about a year or so, before a later technology arrives. In other words, they are currently only half-useful to the world, and more importantly, only half-useful to their employer and only partially useful to themselves as they crave the only security that they acknowledge – change.

My Initial Research Methodology

This research project requires a range of methods to yield a successful project, it cannot be put into a simple box and described as one thing or perhaps another, it is a swamp at the base of the Ivory Tower as Dreyfus likes to say.

If we look at what this project is meant to accomplish we can understand the reasons for crossing various boundaries and picking from the various, and apparently mutually exclusive paradigm boxes, the needed approaches to meld a project that is worthy of the effort put into it.

Seven Problems to be resolved

- Firstly, we have the problems of Information Warfare and its vulnerability to various skills level attack and the overall lack of skill levels of the defender above the competent level as described by Dreyfus (Dreyfus, 2002f, 2002g).
- Secondly, we have the Phenomenology of Skills Acquisition using the Dreyfus model (Ibid.) and its application to the participants within the information systems Industry.
- Thirdly, we have the lack of emancipating thoughts and ideals, from the people who make information systems work everywhere, and who rely more and more upon some forms of enslaving and incestuous software creations to ease the work drudgery with which they must constantly deal.
- Fourthly, we also have the administrative and employment outlook constraints and the current and specified de-skilling and lack of management

training that business imposes upon these generally intelligent people, so that they may rarely gain higher non-information systems organisational offices.

- Fifthly, we have the problem of how and where do we find and train people to become the leaders of the information systems industry in general, and within all industry. These who ought to be in abundance, are nowhere to be seen other than as advantage-taking information systems entrepreneurs whose self and corporate interests may not match the interests of this vital industry.
- Sixthly, how do we in Information Systems, define the transition from rule follower, to rule ignorer (with an effect orientation) through to a guiding light, as other industries rarely seem to possess, but information systems seems not to possess at all.
- Lastly, how do we describe the tacit and explicit skill levels of the people concerned, and how may we establish a set of measures and methods that establish the minimal knowledge levels of the industry's participants to create an industry driven by users and not by the sellers of technology?

Methodology

By using the Burrell and Morgan (Burrell & Morgan, 1979) sociological paradigms of scientific thought, we are immediately confronted by an enormous problem. This according to Guba (Guba & Lincoln, 1989), the four Burrell and Morgan models are mutually exclusive and not interconnected as investigations require them to be. Paraphrasing Guba-

Current Organisational Theory is under the Functionalist Paradigm, Phenomenology and Social Reality comes under the Interpretive Paradigm, Critical Theory and subsequent social and organisational changes under the Radical Humanist Paradigm, and the inherited and in-built social contradictions of information systems are within the scope of the Radical Structuralist Paradigm. The sum of all this is a model of perceived reality that violates the mutually exclusive four paradigms of Burrell and Morgan by creating an imprecisely outlined, but Interpretive based, nth paradigm superimposed over these four paradigms. This model would change in two ways over time as certain goals were met, such as social changes, which would shift the nth paradigm more towards the Interpretive. However, all environments change, which may cause other social and political changes to drive the now modified nth paradigm away from the Interpretive to another, superimposed nth position. This may better explain the necessary flexibility needed for the present and future of Information Systems, something it seems that no one has attempted to describe in this manner.

Proposed Interview Methods

To build this model, semi-structured interviews will ask, in the first instance, no more than ten questions. From this source of individual realities, I can build either a model that appropriates a uniqueness that will support or not, the nth paradigm or support yet another form of such a model. The second instance of interview will be to ascertain any 'changes' or additions to the first interview. This allows both the interviewer and the respondent to take a point that arose in the first interview to a logical end, and to cement in place for the term of this project at least, a unique model, as seen from the mind of the interviewed participant.

Pre-Model Building - Conclusions

The model has to encompass the following points to be logically complete. It must include Information Warfare as a topic and how best to defend an information systems site or sites, without it self falling foul of the laws of perhaps several countries on as many continents, or generating a cyber-gang response by other skilled attackers against any system.

Model to Link with Dreyfus Skill Acquisition

This new model must then show a link to the model of Phenomenology of Skill Acquisition and how each level of the Dreyfus model is applicable. Where Dreyfus' model is incomplete, this new model must be able to supply the needed additions to complete the representation in this aspect of upward movement in the employment cycle of the participants in the information systems industry and not only just within Information Systems, but outside it as well.

Professional and Participative Action Research

The model also has to address Professional and Participative action research using Reflective Practices. This is where the information systems participant seeks to improve their explicit and tacit knowledge. To accomplish this, they act by reflecting on the skills that they currently possess, their experiences, and combining this sum with others with their skills and experiences, to have the apprentice learn by a form of real and vicarious experience.

Link to the Revolution in Military Affairs

The use of Military procedures in 'Information Warfare' seems natural. As warfare is now undergoing a 'Revolution in Military Affairs', so it is with business. Both require masses of information that has not been attacked or altered by trespassers, it must be as it was sent, and guaranteed to be such.

CHAPTER 6

THE RICH MODEL

Overview of the Chapter

This chapter is to examine in detail the layers of this, the end model for this book. Here is shown are the multi-layered and multi-dimensional aspects of these models and their workings in both theoretical and real world dimensions.

The final or end model components are in fact two related models, figures 6.1 and 6.2 in a relationship that allows the research problems and research questions to be addressed and responded to and to allow further research as well by others at a future date, which is discussed within the Conclusion.

The use of art in research to explain complex and interactive situations is not new, and is sourced from Checkland's rich picture methodology and Williams' rich model extensions to Checkland's initial work (Checkland, 1981; Williams, 2004).

The actual designing processes that created this end model used here as a reflective process, is commonly used by artists when explaining their works in what are called master classes and this Schön reflection-in-action is the basis of this chapter.

The model is on the following page.

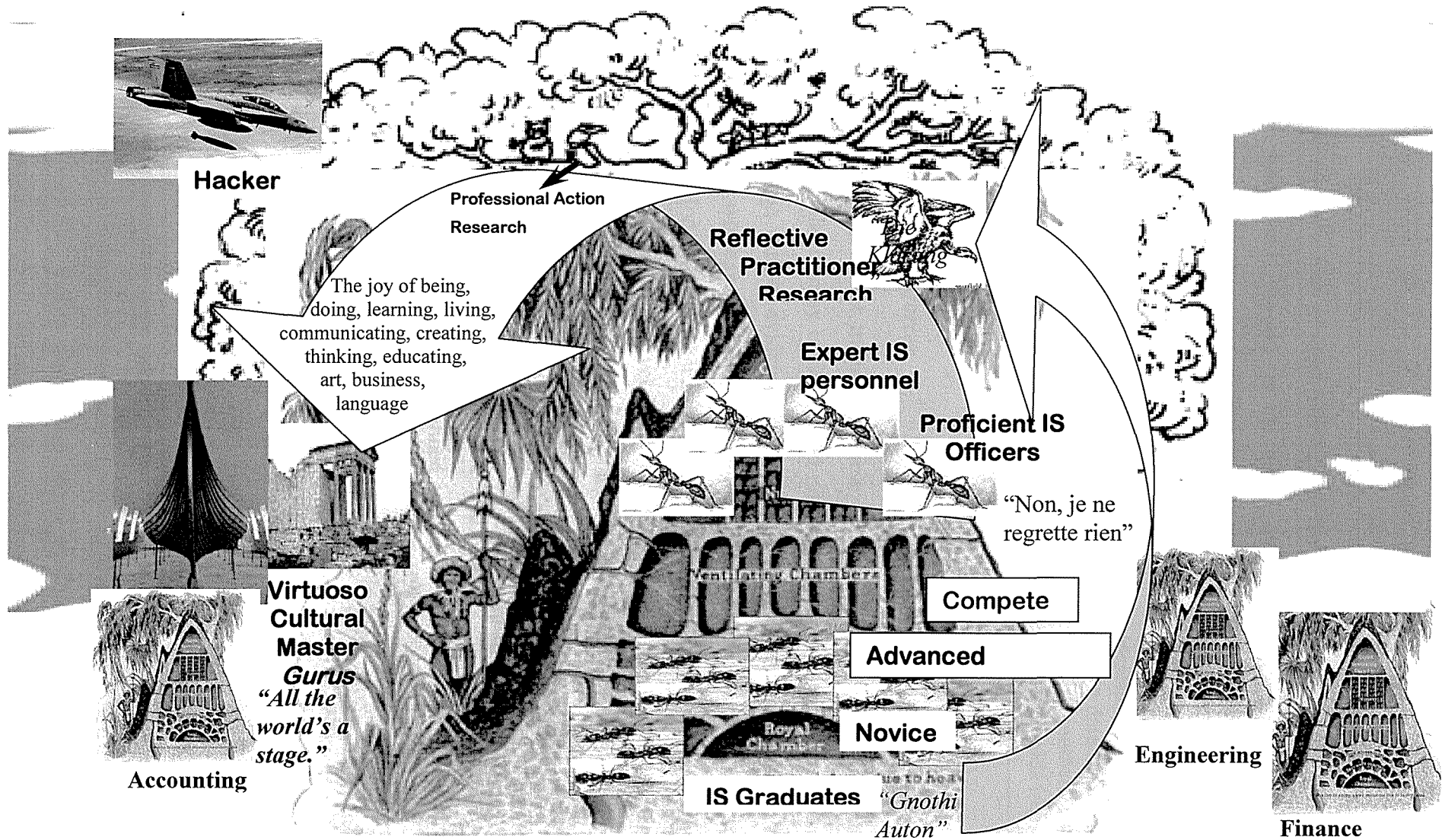


Fig 6.1 Final rich model as an assertion warranted by this thesis. Not the from experience comes the nourishment of insight resulting from professional action research

Upper Layers of the Model

The first layer is a tree with birds in the branches and the sky as a background.

Using the metaphors of ideal freedom, 'as free as a bird,' and 'the sky is the limit,' our exuberance for these metaphors are not self-extinguished, it seems they are extinguished by external forces, those we have voluntarily or reluctantly accepted, either conditionally or unconditionally, allowing these forces to control our destiny, and some of these forces are described below the branches of the tree.

<p>When I was a code cutter, we discussed the minimum number of instructions to write a program. I put forward three instructions. Input/output (one being the inverse of the other), add (subtraction being inverse add) and move data from one part of memory to another. I still think this holds true.</p>
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Society as Truth Enforcer

This does not mean that these societal forces are true or that a truism is controlling the destiny of others and ourselves, it only means that we have accepted them as true without evidence that they are true. We, as a group could be victims of trickery or worse, as trickery or propaganda can be the basis of abuses of societal power as oppression (Adorno & Horkheimer, 1993). The emancipation of those who are intelligent, well informed, yet deluded into believing that their society seeks the best for all concerned, or that society can only remove the obstacles to emancipation, leaving the rest to the individual, does not utter once the ideals of freedom as I have shown above. Society after all is composed of humans, all with desirable and undesirable characteristics that if unfettered will seek advantage with and by using the noun power (Dreyfus & Rabinow, 1982), defined later in this work, for their own personal and organisational ends.

The Slavery of Exchanging Time, Knowledge, and Skills for Money

In so many ways, the modern industrial state has caused the acceptance or trade-off of time and freedom for money. This does not mean that the employee in a modern industrial state is inescapably exposed to unhealthy, demeaning, and under-employment, it only means that there are fellow advanced and civilised human beings that begin, maintain, and support this situation without due consideration of a beginning of a *Banality of Evil*, that is where good people evade risk taking (Jewish Virtual Library, 2005; Kohn, 2005). This modern form of banal enslavement is far more subtle than a simple form of an amply rewarded harmless enslavement; it is the binding of modern,

industrialised humanity to an apparent culturally acceptable form of control. It is, it seems, also an abuse of societal power, to demand support for a nebulous something called the common good (Chomsky, 1998; Velasquez, Andre, Shanks, Meyer, & Meyer, 2005). However, no matter how the common good is defined, it is accompanied by the enforcement of a set of incompatible goals from among the goals of an organisational structure within a given culture or sub-culture that cannot be logically supported by an individual, as these rules work against the individual's ability to critically think about their freedoms, such as they are. This was a major social and industrial problem when I was completing my Master of Business Administration, and is with us yet when dealing with the now concluding industrial age and this emerging post-industrial age as well. This work will also reinforce this statement using the models discussed and explicated within the boundaries of this work.

The Overlays Smothering Desirable Freedoms – the Foundations of the Model

In the first model, I overlay the tree and the sky with other images to describe reality, a reality that almost smothers the sky and the tree, and what they represent. This smothering of the freedoms has a positive explanatory side as well. Consider for instance the song lyrics "*Freedom's just another word for nothin' left to lose*" (Kristofferson, 2005). These words describe the Western ethic of exchanging time, skills, and knowledge for money that has arguably led to the most productive civilisation ever, not through slavery in a dictionary sense, but by allowing considered choices, but only within the self-expressed boundaries of a benign enslavement. Others do not extinguish these freedoms; they undergo a process of self-extinguishment by our own actions, or better explained – ignorant inactions or ignorant acquiescence. This results in a banal, seemingly involuntary, yet passably voluntary, individual servitude, but this forms mighty industries as a sum; the single human cell as compared with the human entity and this remains, perhaps the conundrum of the last 150 or so years.

What Time has Industrialised Man Gained?

The high living standard that has removed the need to search for food and shelter has exchanged one's time constrained style of life for that of another. The free life of a nomadic hunter-gatherer was not free as they spent most time in the hunt for food; the remaining leisure, or non-hunting time was a form of training time to become better at the skills of food gathering.

The free life of a modern industrial employee is also not very free in the same manner. This is because the time spent at the workplace, getting to and from the workplace, means that the quantity of time spent for leisure and freedom is controlled by forces other than those under the direct control of the human employee. These forces are similar to those forces limiting the actions of the hunter-gatherer.

The only manner that both situations have in common is that the workload determines, in the case of the hunter-gatherer, a full belly for all concerned, and in the modern case, job security that indirectly means a full belly overall perhaps, plus the accoutrements of modern society. There is also another topic to be considered as well, the language and communication methods of all of a society and the levels within society, realising that most people belong to many societies contemporaneously, while maintaining the self as a capable person (Dauenhauer, 2002).

The First Metaphor – The Anthill

From the forgoing discussion, a metaphor arises - an Anthill. The Anthill is pictured on the model is a tropical anthill, where the ideally pictured paradise on earth is a warm and fruitful place where one can laze in the sun and watch the ants build nests and we would call them foolish insects as they toil till exhaustion and death for the good of the Anthill. Yet boredom does not attack the Anthill, there is too much to do and so little time to complete the processes necessary to enlarge and protect the Anthill as it protects the participating but captive ant as well. The rules of the Anthill are simple, yet productive in the creation and maintenance of the Anthill and its current inhabitants.

The Rules for Ants and Information systems professionals

The rules of information systems are also simple, but they lead to exceptional levels of complexity to achieve the same end, the creation, and maintenance of a form of a closed, appointed apparently by natural forces of nature, protected society -- an Anthill. There has been some recent research concerning Anthills and complexity from simple rules and Eric Bonabeau (Story, 2003) and others have applied the processes of the Anthill to describe the ability of ants and other swarming insects to build complex structures and to find the most efficient paths to accomplish a task, again an analogy to Information Systems.

The Anthill as a Social Contract

If I consider an Anthill to be a social construct (Bonabeau, 1997; Wikipedia, 2005), it seems that the differences between an Anthill and information systems are not great. Both act as carceral, real and social. The Anthill being the freer for the individual ant, the work is simple, and the Anthill is without managers. In contrast, the information systems Department is subject to exceptional levels of self-imposed discipline within a technology-based structure as was the nature of the proposed Panopticon prison system, as described by Foucault (Foucault, 1995a). The information systems Department also deals with simple instructions to yield a complexity of demanded, followed, and used actions, and this includes the actions of managers who may or may not possess higher levels of productive competency than the competency levels of their most, and perhaps least, competent subordinates.

Rewards to the Gillie

As with the Panopticon prison, the rewards to prisoners who would submit to the control of these powers within the prison system were better conditions and perhaps shorter sentences. The information systems profession within the Carceral-like environment of their department also has reward systems, advanced training priority leading to actual and self-perceived higher value as an employee coupled with other rewards so valued by the employee, instead of it being a natural condition of employment.

These systems of rewards tend to establish a compliant set of humans who will respond correctly to a presented information systems problem. In the case of the Anthill, the ant has no choice, as a rogue ant has no chance of survival. Therefore, the choice for the ant is death by natural biological exhaustion within several weeks, or almost immediate death by fellow worker ants, defending the Anthill from aggressors for non-compliance with the understood, perceived, and unwritten and anthropomorphically interpreted, apparent natural laws of nature. The source of all of these actions is within the application of apparently the simplest of tasks. Tasks that are keeping the Anthill viable and in the case of Information Systems, the recording of information, its final saving or logical filing, and then its retrieval for use by the controlling human authority, all to keep the organisation's human information requirements available whether it is fundamental to the current operation of the organisation or not.

Examining these two examples, I find it reasonable now to assume that the differences between both examples are that the Anthill has no management function as does the information systems organisation and that the Anthill has very few simple instinct based rules. Contrasting the Anthill with the information systems organisation that is awash with management rules of all types, we find that only a few of the organisation's rules are productive for Information Systems, as most are having to deal with the management controlled resolution of a given problem beyond the necessary rules for an Information System solution.

The Roles of the Anthill and the information systems Department

The roles of the two organisations, the Anthill and the information systems department, it seems, are to define a purpose for both.

The Anthill defines itself as the cleaning mechanism for the local area and uses this purpose to ensure the survival of the Anthill. It removes edible items, both living and dead from its territory, as a sanitation service for this local area.

The information systems department defines its purpose in its ability to feed the external human based organisation with its lifeblood: data converted into information, information made clean and accessible by the information systems processes. However, by its very nature, information systems can neither guarantee the value of the data or the information, as processing bad or incomplete and poor data is a daily or worse reality.

Another edge of the puzzle is that of survival. If the ants find no food or a serious event takes place, they will all die. On the information systems side, if bad data is collected, the system becomes corrupted, and the network compromised or all of these events, as in most cases, this is an administrative inconvenience. Rarely does any organisation suffer a fatal situation from a single minor or even single major information event, as Disaster Recovery Planning is part of the Information System's normal operations.

The Final Analogy

However, the analogy remains - information systems seems to be a form of Anthill, and Anthills hold no avenues of escape for the individual ant, unless they are a drone and then eventually driven out by the workers to find a flying queen to start a new nest, somewhere yonder. Then all of the drones die. The information systems department, however, allows few opportunities to escape, that is, fewer than for the

human owner of the information systems department, the major human controlled employing organisation. Perhaps the analogy and consideration of the drone is far too close to the information systems Professional's actual reality and applicability for their current situation as to actively prevent a sensible and desirable employment move away from the Anthill. For the later described metamorphosis to occur there must be purpose and use of the new form of the professional employee - the proficient and expert, and the positions above these. However, currently there does not seem to be a positive professional reason or any form of support, from the human part of the organisation or from, either individually or as a group, the information systems Professional, for this change (Introna, 2005). Perhaps, the humans comprising the organisation have imposed a ceiling, or even an encapsulation of arguably the most intelligent part of its workforce. This is where this book, it seems, now ventures into current uncharted territory.

CHAPTER 7

EVOLUTION OF THE RICH MODEL

Once more. Say, you are in the country; in some high land of lakes. Take almost any path you please, and ten to one it carries you down in a dale, and leaves you there by a pool in the stream. There is magic in it. Let the most absent-minded of men be plunged in his deepest reveries—stand that man on his legs, set his feet a-going, and he will infallibly lead you to water, if water there be in all that region. Should you ever be athirst in the great American desert, try this experiment, if your caravan happen to be supplied with a metaphysical professor. Yes, as every one knows, meditation and water are wedded forever. (Melville, 1851)

What of it, if some old hunk of a sea-captain orders me to get a broom and sweep down the decks? What does that indignity amount to, weighed, I mean, in the scales of the New Testament? Do you think the archangel Gabriel thinks anything the less of me, because I promptly and respectfully obey that old hunk in that particular instance? Who a'int a slave? Tell me that. Well, then, however the old sea-captains may order me about—however they may thump and punch me about, I have the satisfaction of knowing that it is all right; that everybody else is one way or other served in much the same way—either in a physical or metaphysical point of view, that is; and so the universal thump is passed round, and all hands should rub each other's shoulder-blades, and be content. (Melville, 1851)

Introduction.

The above quotes from *Moby Dick* are to emphasize that on our journey we will need water to both sustain ourselves and to use as a means of transport, and in the first instance, to show that even philosophers have a utility other than those that others would despise. It is in the despising of those who demand clarity of thought, logical evaluation of conclusions reached or not, and the use of methodologies that stretch the imposed ontological and epistemological limitations, that take for granted that the necessities of life are always with us wherever we are and whenever we have need of them.

The second implies that the idea of drudgery as a worthwhile goal in life is not necessarily new nor is it often considered a major part of one's work, when in reality it is probably a major part of one's working day. As a bumper sticker once said *Life's a bitch, and then you die!*

What is important from these two quotes is that the model presented here concerns itself in the finding of the pool, which leads to a stream, then to a river and then to the sea. The allegories are the description of the discovery and evaluation of knowledge from the mundane and noisy reality that surrounds us, and I conclude that there is little truth in the real world that cannot be so described.

The Sources and Development of the Model

'...I would like to distinguish between the "history of ideas" and the "history of thought." Most of the time a historian of ideas tries to determine when a specific concept appears, and this moment is often identified by the appearance of a new word. But what I am attempting to do as a historian of thought is something different. I am trying to analyse the way institutions, practices, habits, and behaviour become a problem for people who behave in specific sorts of ways, who have certain types of habits, who engage in certain kinds of practices, and who put to work specific kinds of institutions. The history of ideas involves the analysis of a notion from its birth, through its development, and in the setting of other ideas which constitute its context. The history of thought is the analysis of the way an unproblematic field of experience, or a set of practices which were accepted without question, which were familiar and out of discussion, becomes a problem, raises discussion and debate, incites new reactions, and induces a crises in the previously silent behaviour, habits, practices, and institutions. The history of thought, understood in this way, is the history of the way people begin to take care of something, of the way they became anxious about this or that for example, about madness, about crime, about sex, about themselves, or about truth.' (Foucault, 1983)

This quote from Foucault probably describes best what I am doing with the research data that I have obtained. It is the unquestioned employment and organisational practices within the information systems profession that is the crux of this particular work. There is no joy for me to expose what I consider the long-term domination of what information systems is offering to the wide-eyed youth of today that

is the smoke and mirrors that industry accepts as axiomatic within the information systems industry, when other sectors of the same organisation are not so constrained.

We are I believe, on a cusp of a new dimension for this profession, one in which the education of information systems professional will radically change. When I studied as an undergraduate, some of my courses included accounting, and apparently, at that time, that would allow me to enter an organisation as a trainee manager, however, I probably would not directly use my formal accounting knowledge. I challenge the idea that this is different from a person trained in Information Technology, also wishing to join as a trainee manager within their current organisation doing the same type of job or possibly a higher position. Why is it that if a person so trained and spends two years or so in gaining in-depth knowledge about an organisation's Information System is any different than the trainee manager with little knowledge of Information Systems, is gladly assigned mentors from the management of an organisation to help them on their way to become senior managers?

This is the source of the derivation of the models and how I came to create and try to explain the situation so common for information systems professionals almost everywhere, this by using rich pictures (Checkland, 1981) and then including additions to become rich modelling (Williams, 2004).

Here I show the evolution of the models with accompanying descriptions.

Discovery of the Basic Model

The three-stage model as presented here as a rich picture went through at least twenty evaluations to reach its final stage as presented in this thesis. The origins of this model are from Hubert and Stuart Dreyfus of Stanford University, sourced in a series of articles found on the Internet (Dreyfus, 1998, 1999, 2002a, 2002b, 2002c, 2002d, 2002e, 2002f, 2002g, 2002h, 2002i, 2002j, 2002k, 2002l, 2002m; Dreyfus & Spinoza, 2002).

Serendipity

The serendipitous discovery of this model was caused by the research into another topic, namely that of disaster recovery within not only a given business but within the information systems facility in particular. I raised the question concerning

the pre-disaster training of the survivors of a physical disaster, fire, flood, terrorist bombing, and so on, so that the organisation could at least survive in the short term. This led me to research the training of personnel. Most of the available research resources concerning Disaster Recovery Procedures seemed not to deal with anything other than actions and plans that in fact had worked in the past. These were in manufacturing, warehousing, and other direct cost areas, and apparently not in the indirect cost areas such as Information Systems. Perhaps the assumption is that information systems professionals will *backup* their systems to prevent serious problems. It was here, in my opinion, that a major problem would have the greatest effect, and that was going to be the thesis I was, at that time, to present.

I then read all of the Internet articles presented by the Dreyfus' and one could see the evolution of their model over time via their web site. The more that I read of their model the more I considered it to be applicable to Information Systems. Other Internet articles, at that time, did not have as much an effect up my research, but in my ignorance; I downloaded and printed them, not all was wasted effort, as within these articles lay further 'gold,' as the reference lists in some articles were exceptionally valuable.

The Application of the Dreyfus Skill Acquisition Model

I was at one time, at my wit's end on how to explain the acquisition of skill for an information systems Professional. I had seen other models, but none had the necessary modern and sound philosophical backing. The Dreyfus model indirectly includes a link to Michel Foucault's investigations into the use and abuse of power in a Foucaultian archaeological and genealogical sense.

First Model Stages

The Dreyfus' model for learning a foreign language has three stages, up to Competency, up to Expert, and up to, and ending with the title of Cultural Master. I applied the first stage as it describes information systems training accurately, that is, after formal training the inductee is a Novice, then with some experience and in-house training one becomes an Advanced Beginner and then after some more experience and perhaps training one acquires Competency. This series of descriptions, though accurate, led nowhere else for information systems professionals, as technology changed; they again retrained and began the experiential and training loop once again. The next stage

of Proficient and Expert does not arise, at least for information systems professionals, as it seems to do so for generalists in the management of an organisation.

The model has three phases as shown in the adaptation of this model as shown below. Dreyfus puts the model into three sections – firstly the Novice; then an Advanced Beginner; then the Competent; then a jump is made to Proficient; and then a final advance to expert (critical-thinker in de Beauvoir's description) and then another jump is made to what I call the "Guru" classifications, Virtuoso and Cultural Master (artist-writer in de Beauvoir's description). Originally meant for the acquisition of language skills, the model immediately captured my imagination as a career description of information systems professionals.

This model intrigued me, as it seems to match the advancement of the typical information systems Professional... but only up to The Competent skill level. There were and are, I will assert, no advancement above Competent for any information systems Professional. Their only hope - to be 'promoted' to information systems management but even there they are manacled. There, they stay, while others, who joined as trainee accountants, lawyers, engineers, and managers, advance to higher and greater levels of seniority, responsibility, and rewards. The irony in this injustice is that these mobile managers must rely more and more upon their 'juniors' in information systems to provide them with the refined information necessary for their personal empowerment in order to effectively and efficiently carry out their jobs. These mobile managers are also limited by the competence of their information systems personnel, their Engineering, and other professional people, all within a Structuralist Model, which they must serve and justify, to the others within the organisation, and do this without cynicism.

Initially, I believed it was the speed of technological change, but that was the apparent reason, the most at hand reason for this seemingly inescapable loop. I discussed this loop with several fellow students, information systems employees from various organisations, and my Supervisor and the general opinion was that all hack, that is mundane professional services such as engineering, finance, human resources, and others must also be included in this model. However, the thrust of this work is Information Systems, even though it may be applicable to other areas, those areas are for further study. Yet the question remains, particularly with information systems professionals, why, in such changing and challenging environments, as information

systems is there no progression to Proficient or Expert? Does the answer lie totally within the inclusions of the term *Technological Change*, or are their other factors common to these other hack professionals as well?

The Structuralist Model or sub-model in this case, places unreasonable restraints upon the people who are literally *enslaved* to keeping this model functioning. This Structuralist model seems to be constantly giving the lesson of Socrates, Know thy Self, even though the students are very aware of themselves in the manner of this statement. This is particularly so for information systems and other *hack* personnel because they typically have no real promotional opportunities outside their professional activities. The following modification to the Dreyfus Model seems to rectify this anomaly by offering those who wish to do so a method of getting off the *merry-go-round* they see as their professional lives.

This model shows that the jump or break from a Structuralist Competent Professional to a Post-Structuralist Proficient Professional is a major step in a professional's skill rating, whether or not they are a Reflective Professional Practitioner. However, I doubt that the move to a post-structural attitude can occur without the attitude and practices of a Reflective Practitioner in Professional Practice, as the requirements of the *Expert* disqualify a structuralist attitude and their narrow practices.

After the jump is made to accept post-structuralism, one need only recite the musical poem *Non, Je ne Regrette Rien* as sung by Édith Piaf, seen and later discussed as the new post-structuralist regrets nothing in the past and can look forward to a rule free, but responsible, and adventurous professional future as an *Expert* in the Dreyfus sense and not in the usual sense of a person who is merely highly competent in their chosen fields.

There are however, several extensions of this model, which reinforce its potential to apply in other, quite interesting areas, some beyond the scope of this work.

The First Model.

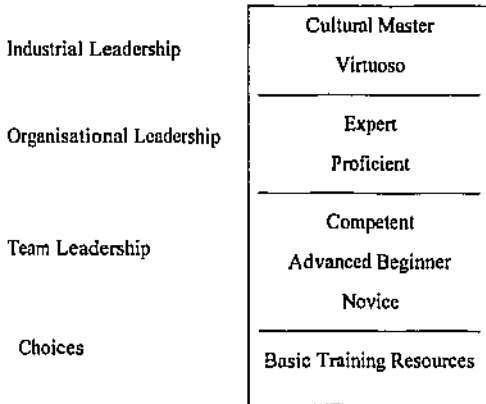
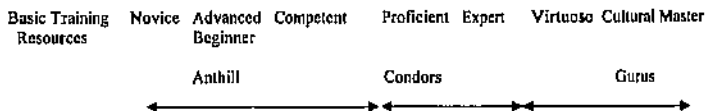


Figure 7.1: A diagram conceptualising the first model for this thesis

This first model is a modified copy of the Dreyfus' model. The modifications are the annotations on the left to explain to me what each level represented. From this, a further investigation into the generalities of what some call the human condition began. This led to other modifications to the model and an examination of what each level of the model represented, and could represent to the information systems professionals. This had to lead to philosophy, in the most general terms, and self-generated comments attached as below. These added comments are a self-composed map to possible investigations that would yield insights into the Research Problems and the Research questions.

Evaluation of Initial Dreyfus Model



Evaluation Points Considered from a Free Flowing Approach to the Model

- Exegesis
- Time scale
- Phenomenon sources - Reality
- Phenomenon Responsibilities (Pseudo Phenomenon?)
- Noumenon sources - Extra Reality
- Noumenon Responsibilities (Pseudo Noumenon?)
- Emancipation
- Employment Advancement - Torbert's Power of Balance
- Justice denied, done, seen to be done, and accepted
- Cyber-Semiotics and Cyber-Hermeneutics
- Disaster Recovery Planning Responsibility
- Antinomy
- Rules
- A Priori, Synthetic A Priori
- A Posteriori
- Power
- Encapsulating Logic
- Foucault's Serious Speech
- Propositions, Theorems, Postulates and Axioms (creating new axioms and perhaps 'bending' the old ones)
- Attack Responsibilities-fixed and reactive, proactive and conceptual

Figure 7.2 Comparing the above Dreyfus learning model with Torbert's Power development stages with Foucault results in a triangulation of discussion. Using Kant and Schopenhauer to establish the philosophical foundation of the thesis.

Developing the model.

The model needed filling in from the philosophical and the reality view, it had to mean something to my audience, the information systems Professional.

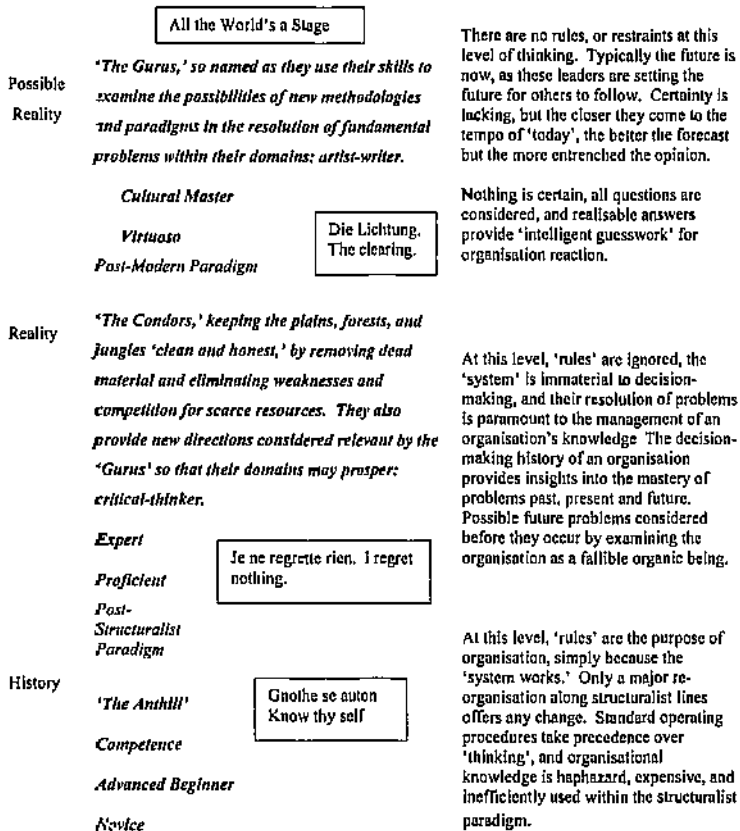


Figure 7.3 The Modified Dreyfus Model of Skill Acquisition.

First Model Stages

I applied the first stage of the Dreyfus' model as it describes information systems training accurately, that is, after formal training the inductee is a Novice, then

with some experience and in-house training one becomes an Advanced Beginner and then after some more experience and perhaps training one acquires Competency. This series of descriptions, though accurate, led nowhere else for information systems professionals, as technology changed; they again retrained and began the experiential and training loop once again. The next stage of Proficient and Expert does not arise, at least for information systems professionals, as it seems to do so for generalists in the management of an organisation.

Determined Isolation of information systems

Information systems has been over the last forty years, a rapidly changing workplace. From mainframes to the Personal Computer (PC) to networks of similar machines, the average length of time of Competency is probably a maximum of 18-24 months, sometimes referred to as Moore's Law and it seems little has changed as of today. The typical information systems Professional desires the skills marketability that using the latest hardware and software generates, while the organisation that employs them is constantly trying to control information systems costs. In the history of Information Systems, this conundrum has remained unlamented in the sense that without the latest and best within the information systems Section or Division, the expensively trained and highly paid professionals may not remain in the employ of a given organisation. These highly trained professionals would begin to fear their own technological obsolescence irrespective of the other working conditions that the organisation provides, so they are constantly seeking the best personal advantages in a volatile marketplace for their now paid-for-by-others skills.

This however, is a rather strange two-way street. On the one hand, competitive forces may require the organisation to be at the leading edge within its operating capability and therefore if this is the case, it is willing to procure whatever is necessary to ensure that it remains dedicated to the market dominance strategy as it deems it to be. On the other hand, the information systems Professional in order to maintain their marketability and skill levels, demand and mostly get whatever they perceive to be incremental improvements in productivity both within information systems and in the major profit making activities of their employer.

No Loop Exit Point

There is no escape for the organisation in this loop, but currently there is none for the information systems Professional as well. This has a link with the Marxian idea

that *'forms of society exist only for as long as they advance productive power, and are replaced by revolution when they fail'* (Wolff, 2003). For an intelligent human being, this skills and employment lock-in means near enslavement to the metaphor of a Merry-Go-Round or Carousel that never stops. It seems that for the information systems Professional, whether they remain in their current employ or go elsewhere to hop onto another Carousel, they are still condemned to ride Carousels for their entire working lives irrespective of their potential in other areas of the organisation that requires a combination of utility of considered new processes and imaginative uses for them.

Anthill Defined

This is why I named the first level of the Dreyfus' model 'The Anthill.' The Anthill idea has changed little through out the evolution of my modification of the Dreyfus' model, as it is almost self-explanatory in describing the novice to competent to novice loop. What this part of the model does not explain is the political and management influences upon this model.

Above Competency

At the level above Competency, there is a wall, a metaphor for the necessary metamorphosis to the beginning skill level of Proficient, which leads to Expert. The term Expert has been so misused that it seems to be need of an upgrade, perhaps to 'systems authority', but I will leave it for now as Expert. However, I shall call this grouping 'Condor' for reasons that will be made clear shortly. There is also another metaphoric wall after Expert as well. Thus, if the Expert wishes to join the highest level within this model, then they are motivated to join the group of Virtuosos and Cultural Masters, and I call this group 'Guru.'

Above Expert or Conitor

The walls indicate a serious change in training and professional outlooks. This is because the utility of Condor/Critical-Thinker Skills and Guru/Writer-Artist Skills to an organisation and the information systems industry respectively, is so different among all the groups. It appears that a major rethink and retraining of the person concerned must take place before any consideration to make a serious upward change in their employment. These successful breaching of these metaphoric transformational walls by breaking down the wall, tunnelling, or by going over or around these barriers needs a formidable tool and the major tool for this activity is the flexibility and open-

mindfulness of the character of the person involved. This person must be willing to see things in a new light and accept such training as needed to do this to enable a form of mental reprogramming, and the term metamorphosis is, I believe, justly apt.

Competency, Gurus, but no Experts or Condors

I posit that there are no Condor qualified people in information systems today, that is, no Experts. It seems however, that there are Gurus, but it seems they and industry are not aware of their actual and influential position and I also suggest that this level is quite haphazard in its operation. This does not mean that these groups deal only with advanced orthodoxy, but it seems that new advances are not evolving as quickly as they could if consideration were seriously given to other, perhaps more daring, and bolder approaches.

My discovered Need for more Research on this Topic

With this as a research quest for a resolution of these questions as I saw them to be, I felt that further reading might yield wider source for answers. I incidentally read about ants and found that their leading expert had also formulated a philosophy of interest as well (Anonymous, 1998; Arquilla & Ronfeldt, 2000; Neimark, 1998; Orr, 2000; Wilson, 1998a, 1998b, 1998c, 1998d, 1998e, 2000). I also read about strange mathematical research into piles of sand and how they would continue to grow until the pile would collapse to broaden the base for a greater, larger, pile of sand, and I also read of other seemingly mysterious research pursuits at the Santa Fe Institute by Per Bak (Gordon, 2002). I still read widely, but at that time, I came up with an ecological model of skills acquisition based upon the Dreyfus model.

My Experience Tells Me to be Holistic.

My training and experience in information systems as a Systems Analyst had taught me to approach a resolution to a problem, in today's terms, in a holistic manner. That is look at the whole problem and resolve it a single piece at a time so at the end, it is a complete whole when the system is tested and then accepted. This means that everything is to be considered and nothing is left out as unimportant, useless, or time wasting. However, in my model, I had two important and independent levels that made little sense as a primary, yet simple, model that would lead to a form of Emancipation of information systems professionals.

The Ecological Model.

The Discovery of Rich Modelling – What are Ants? What are Condors? and What are Gurus?

I must have been watching or reading something on Ecology as well as ants, and the idea came to me that there must be an ecological loop in the model as well. It seemed a good idea at the time so I put it together and it seemed to work quite well. The model worked in this manner.

The Ecological information systems Anthill

The Information System's Anthill uses the current level of technological skills to produce workable systems for governments, industry, and personal computer use. These skills were, it seems, originally sourced from Gurus who used outside influences, Anthills, Condors (such as they are), and industry, and these now functioning ideas were then further developed by these Gurus to become part of the Anthill's new quasi-instinct-base for the Anthill in general, used productively in the processes of improving the survivability and utility of the Information System's Anthill. However, the Guru's product has only a short life span, so the product of the Guru soon becomes the impetus for improvement of the processes of the Anthill, and as a source of food for the Condor as relatively quickly, better Guru sourced processes replace these Anthill now current skills. Whether or not this leads to the consideration that a Condor is a form of cannibal remains interesting, as it was from the Condor Group, as well, that new ways of approaching information systems problems originated and then were implemented.

The Ecological Condor

The Condor or Condor group keeps the site clean and aids in the functioning as a living system; this is the purpose of the Condor. The main roles of the Condor in information systems are to remain near to, but out of the mainstream management of the information systems facilities of an organisation, and to provide recommendations to the Anthill through its management, and ideas to the Gurus that improve the organisational influence of the Anthill. Whether the ideas that come from the Anthill are directly passed on to the Guru Group or are then considered by the Condor group beforehand, is part of their role. The purpose of the Condor Group is to keep their installations and facilities free of the dead matter that can clog up valuable resources: such things as obsolete hardware and software, and the maintenance and the improvement to the

current competency levels of the professionals working within the Anthill. In addition, a more important matter begins at the Condor level.

Mass Deception and the Art of Information Systems

There is a most serious responsibility that is not hinted within the industry currently, and that is the prevention of '*Mass Deception posing as Enlightenment.*' (Adorno & Horkheimer, 1993) This raises the question 'Is the information systems Industry similar to the Cultural Industry as described by Adorno and Horkheimer?' At first glance, this seems improbable, but after reading extracts from *The Dialectic of Enlightenment*, the similarities require very little imagination. The conclusion I reach here is that the true skills of the information systems Professional do not lie in the obvious areas of information systems efficiency; they lay in the art forms arising from these skills (Orland, 1998). This art is an art form that lay within the structure of the systems designed, written, and installed for the culture of the human based organisation and the employees working there. Currently, one does not find much recognised art in Information Systems, as most critiques of art and art forms seem to consider such art as inferior to other more familiar forms, such as sculpture, oil painting, watercolours, and so on. Who is it, after all, who appreciates the art rather than the craft of Information Systems, other than other information systems professionals? It seems that this is a major failing of most information systems facilities, the people employed there, and the management and organisation for whom they work.

Art and the Responsibilities of the Condor and those of the Current and Typical Management Structure

However, I include in the Condor's responsibility, the entire information systems facility, including its art. This does not replace the Chief Information Officer's role; it is a new role - of internal information systems Planner in a similar origin as a city or town planner, and that person or group deals with only the highest levels of management within the organisation. The Condor is there to ensure that organisational policy is enforced and that the Condor considered, and top management recommended directions within the information systems facility are the actual directions of that facility. The Condor would have to be at the leading edge of experience based tacit knowledge of an information systems Professional and would have a very high level of training based explicit knowledge so as not to be misled by suppliers of hardware or software or by internal staff as well. Obsolete Anthill products are its food source in

this ecological model, but it also supplies food to the Guru level by making recommendations about the current leading edge products and their problems, as supplied to the Anthill and their organisation as a whole, the Guru food is ideas, while the Guru output is artful innovations.

On Becoming a Guru

A wall also separates the Guru level, and similarly that wall must be breached in a similar manner as the move from Anthill to Condor, using the metaphor of metamorphosis. A different and new training method must evolve to train these people to think as artists-writers at this level as well as using their experience as critical-thinkers when they were at the Condor level. Gurus will take the information systems into the near future, but Gurus also must be able to change directions quickly when the needs for rapid directional change caused by technological breakthroughs occur. The Guru level is secretive about specifics, but open to generalisations.

This was how I perceived the second rich picture group of models, Figure 7.3, but something also was missing and I could not point to what the missing part happened to be. I read more philosophy to aid in other areas of my thesis and then another serendipitous event occurred.

Structuralism, Post-structuralism, and Post-modernism

Apparently (Floridi, 2000), The Anthill seemed to be Structuralist, Saussure (Sanders, 2004), Levi-Strauss (Levi-Strauss, 1995), Marx (Marx et al., 1978), Freudian (Kellner, 2005; Leiter, 2004; Wicks, 2004), and anti-humanistic, The Condor seemed to be Post-Structuralist, Foucault (Dreyfus & Rabinow, 1982; Foucault, 1982, 1983, 1994, 1995b), Derrida (Derrida, 1998), Barthes (Barthes, 1972), Deleuze (Deleuze, 1995), Guattari (Guattari, 1996), and The Guru similarly was Post-Modernist, Lyotard (Woodward, 2002) Baudrillard (Kellner, 2005). In addition, about this time I changed the name of Vulture to Condor, as it softened the image of what I was trying to express, not just a carrion eater, but also a natural part of the ecology of Information Systems.

Structuralist Anthill

The picture of an Anthill, both actual and metaphorically, is one of a structure, something that makes something for itself so that it can survive, the very picture of an information systems facility. Though I cannot equate exactly an actual Anthill to an information systems facility populated by workers, drones and the queen ant, the same

does not apply to the resulting actions of the information systems Anthill, as the simile or metaphor remains intact, that of a self-perpetuating social structure.

Post-Structuralist Condor

The Condor, on the other hand, really needs no structure to do its job; its job is to look after its area of influence and to maintain its responsibility over that area, using the tools of critical-thinking. It has a relationship to the organisation, a structure, but its allegiances go beyond the organisation itself to include a colloquium of Condors outside its immediate organisation. The Condor gains its power in a Foucaultian manner (Dreyfus & Rabinow, 1982), it just grabs power and calls power its natural inheritance. It is halfway between those that perform (the supporting actor function) within the Anthill, and those that are the industry's writer-artists, the Guru. The Condor is the positive and active thinker of this tripartite model, as they provide immediate *patches* to the information systems that keep them functioning until the Guru sourced modifications arrive. Condors are a form of internal Information System's consultant with broad contact with other Condor groups as well.

The Post-Modern Guru

I perceive the Guru as a passionate information systems person who knows the failings and problem confronting the industry as a whole and confronts the industry as a writer-artist. The suppliers to the information systems industry employ them or they may be freelance advisors or part of an advisory group. They are the setters of trends and the future of this industry and they exist today, however, I believe, not as an organised group of industry writer-artists. Unfortunately, the information systems industry is in an almost constant stage of disarray as parts of it rise to a particular and peculiar cusp. This while other potential cusps within information systems are forming, or at their peak, or in decline as parts of the information systems industry then attempts to create another rise to another cusp without knowing where it is going or what it is to do with the new developments in technology. It remains in the chaotic stages of creating a product then attempting to market to sufficient numbers of people in order to make a profit, before another improved version appears while researching the next version until product exhaustion takes place. While this is raw capitalism, these methods are according to some, considered wasteful, yet this method supplies food for the Condor, and allows further research for the major changes that requires a Guru's consideration and the necessary funding sources for such research. The Guru influence

is to create better grounding of the elements that make the industry effective and efficient as a continuous process, not to vet or to attempt to control what products are produced and by whom. There must be room for the potential successful products of tomorrow, with or without initial Guru influences.

The Open Ended Cycle

The Guru element is the completion of most of the cycle, and indicates the peak of the possible career path of an information system professional. Yet to be studied here or elsewhere, there is a further stage, the post-Guru stage of an industrial philosopher. That, I leave for others to contemplate seriously.

The cycle started with the information system graduate, through to Anthill competency, then a metamorphosis stage into a Condor critical-thinking expert, and then another metamorphosis into an artist-writer Guru that teaches and advises the industry as to new directions and possibilities, and that leads perhaps, to another metamorphosis into an industrial philosopher, who would consider all aspects of the 'why' of this industry, and even less emphasis on the 'how.'

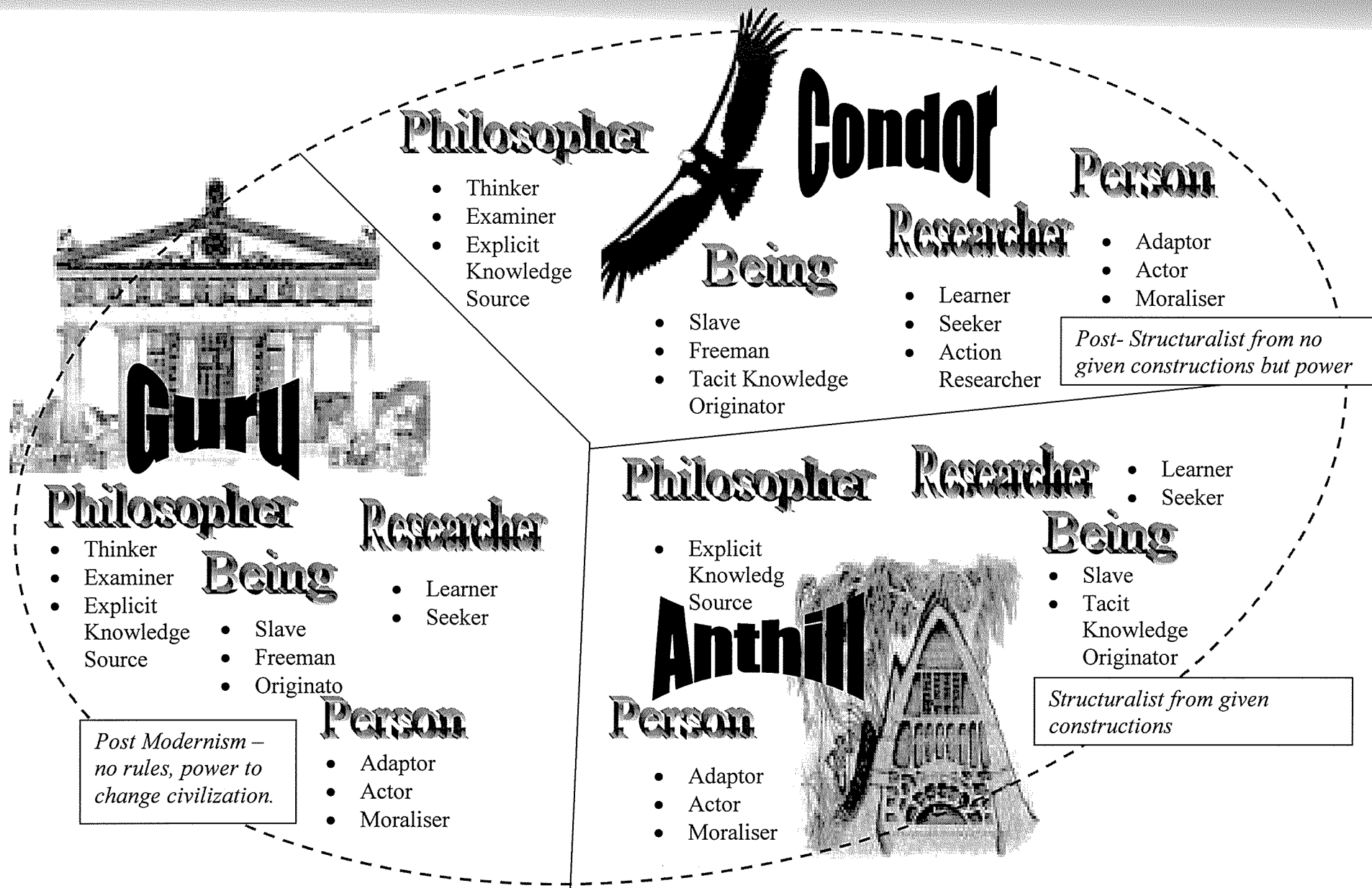


Figure 7.4. Soft Systems rich picture of the interrelationship of voices and skill acquisition in information systems

CHAPTER 8

VOICES OF EACH STAGE OF THE RICH MODEL

Voice Characteristics from Figure 7.4

The Condor has all of the characteristics, 12 voices in all, the Anthill the least, with 8 voices and the Guru with 11 voices, a total of 31 voices. This matrix explanation is to make real the four basic voices – Person, Being, Researcher, and Philosopher as an explanation of their roles within each voice.

The Voices Model: The Inner Foundations of the Model

I came to a conclusion that the original model did not cover all my questions and research, so I then generated another Rich Picture, Figure 7.4, that detailed the actions of each level. This time I have put a more philosophical emphasis than the original model, though the pictures are similar. This model is voice intensive, in that it uses various voices to explain the action and responsibilities at various time the three levels of skilled professional. I discuss the mating of the voices to the three levels of the Dreyfus' model, but the voices are fundamentally a matrix of four by three by three with certain elements not applicable to certain skill levels.

The Forming of the Model

The Dreyfus sourced model is now beginning to form as some explanation of reality, and potential desirable reality. Much of it can be explicitly explained, but then as an Action Research project, it needed still more. In particular, concerning the method of employment advancement among the groups and the implicit knowledge that must accompany each individual sourced from their own experiences and the related experiences of others who have passed on their pertinent experience gained knowledge from time to time to our co-researchers. We must note here that employment advancement is one-step at a time and not, say, from Anthill to Guru, but from Anthill to Condor and Condor to Guru.

Figure 7.4 discloses the relationship of the three levels of skills acquisition, as well as the three levels of intimate and separable influences upon information system professionals. I created this imaginary picture, as this is not how the career paths are actually mapped of information system professionals, but rather how they could or even ought to be mapped.

Assertions and Questions from Figure 7.4

Firstly, I assert that currently an information systems career cannot flow upwards, as it a circular relationship from internship to competency and back again to internship and then again to competency, and this cycle is intended to never to end for the individual.

Secondly, if a metamorphosis-like step were to be available, how could the metamorphosis process take place and what characteristics and skills must the now tyro expert possess?

Thirdly, if there is an information system Guru stage, how does an expert change into a Guru, and what characteristics and skills must the now tyro Guru possess, and what really is a Guru?

Fourthly, are there any levels beyond Guru?

Fifthly, what is the best stage to consider leaving information systems for line management?

Lastly, what do the current forms of *scientific* organisational structures hold for the future? (F. W. Taylor, 1911)

Will the software installed determine the structure of the organisation and not be solely a strategic source of organisational information, as is the historical case or a new exposition of technologically available information within information systems determining possible intra- and ex-organisational options leading to a series of strategic choices through new forms of organisation? Does this mean that the term *Middle Management* is now obsolete? Does this also mean that the shift to management of information systems personnel is already taking place, but power is shifting only by the whim of middle management as they protect their *turf*? If this is the case, what training

is necessary for information systems professionals to shift into middle management and what training is available for middle management to become competent information systems professionals?

Will the information systems determined organisation have multiple self contained and controlled productive cells each performing a given information systems task in which the only 'boss' is oneself and the all seeing and controlling program act as a panopticon prison system to control the human resources within an organisation?

Explanation

I have three levels of skill acquisition and four leading human characters, each controlling 2 to 3 'energising facilities' as I would call them.

In a post-modern sense, I will give them all a human voice to explain their function and relationships within each skill acquisition level and grant them the ability to discuss with each of the other skill acquisition levels any matter pertaining to any of them. The participants will guide a discussion among these three groups to give direction to the situation in relation to the group and to the external groups that surround the corporate information systems facility and function.

Voices from the Voices

The Anthill: 'I have, as does all skill levels within this book, four human characters: they are philosopher, researcher, person, and being.'

The Condor and Gnru: 'Agreed.'

The Anthill: 'At my level, I deal with newly trained human resource material and eventually turn it into competent information system professionals. Those who think too much about what they are doing, will not make it to competent nor will those who think they are being intimidated, dominated, or have sold their souls for a Faustus-like knowledge. The ones, who will succeed, accept the tools they are given, and think only about the most efficient way of performing their given task using the given tools. We are structuralist in every sense of the word, the centre being the given task within the central organisational structure. There is no room in the Anthill for those who will not accept this reasoning within the Anthill or the group interactions that saturate the Anthill. I expect structuralism to reign, with its centre to be effective and efficient in

design, production, support, and availability of the information system that meets the requirements of the organisation.

'I must have strict rules of conduct within the Anthill. Everyone is a student, the study is ceaseless, and only the "best" will survive, as the best serve the organisation best.'

Anthill Sub-voices

Anthill Philosopher: 'My role is to ensure that all explicit knowledge is available to everyone. The need to know predominates, as everyone needs to know everything about the information systems installed at one time or another. However, the right to know has a place as well. If someone is to become competent, that someone must have complete explicit knowledge available to him or her, when someone makes an enquiry. As you can see from Figure 7.4, the philosopher in the Anthill has only one other voice, that of an *explicit knowledge source*. This makes known the weakest philosophy faculty of the Anthill: we are not thinkers, artists, or examiners, and we are just an explicit knowledge source and user. That in itself does not make us weak, it only makes us different, as we do not seem to need or use the other two facilities to any extent at all.'

Anthill Researcher: 'Hold on a moment. Explicit knowledge, by itself is not enough to become competent. One must be able to find and learn new methods, new approaches, in order to use the available explicit knowledge, firstly as a learner, and then as a seeker of new ways that work. This is the case of information system experience – seek to know, seek to learn, seek to find new ways. After all, the axioms of mathematics are just as simple as the fundamentals of any computer system. It is people who make things complicated, not the equipment. The researcher in the Anthill has only two of the three facilities, that of *learner and seeker*. This again, does not make us weak, only different as a learner and seeker in an Anthill is different from a learner and seeker in the other two senior voices.'

Anthill Being: 'What you are saying is that one's tacit knowledge is founded from one's experience with hard and fast rules based upon heavy and disciplined use of the available tools, and the only tools that are available are the explicit knowledge resources supplied. This sounds like the work of an enslaved group, not a group of curious, productive, intelligent, generally youthful human beings, trying to be better and smarter than a mere machine or group of machines. I hate to admit it, but we are also

slaves and tacit knowledge originators as are the other two senior groups, but our tacit knowledge developments, in particular, require certainty and are results oriented. We are strictly limited to our explicit knowledge resources. We like to think that given soft clay, we can make a most beautiful work of art, given time and money, which most times we are not so well endowed as the other major voices. We are therefore quite working-class in our output, we produce what specifically requested and paid for, nothing more and nothing less. We may be in control of our own selves when we have the time, but cannot fully use all our skills due to various technical and management constraints. Our art is expressed in the ability to the job requested, whether efficiently or not, we are only interested in the acceptance of the solution, not the problem.'

Anthill Person: 'What you have forgotten is the necessity to adapt to the information system environment – hardware, software and the organisational environment and requirements determined by a distant management tending to be outside of information systems. We all have or are willing to adapt to newer equipment and methods, we characterize the changeability of the person, we have become, because we must as it is an integral part of the job, and as an individual, experts at change and evolution, not over decades, centuries, or eons, but over a few months. Some of us are better at it than others, while management seems too incapable of such almost daily changes. We have to act our roles in such a way that we have become part of the evolution of information systems. As a person, we have three sub-voices, adaptor, actor, and moraliser. We adapt to our surroundings, we act out our roles to the satisfaction of the Anthill, and we have a specific reaction to the actions of moralising. Yet, to us professional morality is black and white, its functions are specified and it is fulfilled as specified, or it does not do so. Our jobs are aptly described as the *Banality of information systems* when and where we work. We work towards the goal of adapting our actions towards the result of few or no errors in what we do, thus we have a high moral level of goal setting for the greatest good from our work. That is why we are so different from the others; we have specifics while the others only have dreams. We do the work asked of us and we ensure that it is done well, those are our moral constraints. Perhaps these apparently contradictory conundrums keep us here in Information Systems, as elsewhere, by implications is boring.

'There are however, exceptions to this, and I sometimes think that I am on a merry-go-round, going nowhere with great panache, noise coupled with gaudy music, and lots and lots of glitter and lights. There must be a way away from this never-ending

loop of change, sometimes just for the sake of change. However my mind considers an upward move, where am I to go? It seems that to move up in information systems, one must be the best of the best in a given area, and then one becomes the resident expert over not very much. Information systems is a vast area today, and no one is an expert in everything, or even merely competent. I have no time to become a true multi-faceted competent player, I do not think anyone has, but for this installation we know where we are and not too much about where we are going. We do not know how much obsolete software is here, even though some years ago we underwent the Y2K program that made for a large cleanout of our systems.

'The main element is that there is no one who really knows what is available for us to do our jobs effectively and efficiently, this is because the Chief-Information - Whatever is too busy keeping the bosses happy with the tools we have. We need a group of specialists beyond the day-to-day innovation and maintenance of systems. This group has to think and work differently, but I think they should come from where we are now to be able to talk with us.'

Condor

'As a Condor, I will state the obvious, we are the most complete of all the three levels of skill acquisition, and we are the most mobile, by having the choice to move into management or to move yet one more level in the information system skill acquisition model that we are discussing here. We have undergone the metamorphosis from Structuralist to Post-Structuralist critical-thinker leading into becoming a Proficient and then with more experience and new found skills, Expert as artist-writer. Most importantly, we are Post-Structuralists. This means that a centrality of purpose and a central existence is not part of our reality. We are also reflective practitioners with a participative and professional action research outlook this to change the politics of our situation and to gain organisational credibility as well. Nevertheless, we must accept a direct link to structuralism, as without the Structuralist Anthill, we cannot pretend to exist, nor can the Guru level. A person never knowing slavery cannot really appreciate freedom, so the evolution of a Condor begins in the Anthill. The real and personal question concerning the metamorphosis is how long does it take for a member of the Anthill to undergo this process?

'The major voices philosopher, being, researcher, and person each have three sub-voices, and all of these voices speak in a relationship with the post-structuralist

approach. There is a warning away from the strict structuralism and the positivistic attitude to a qualitative approach that seems to be a gentler but no less strict in its search for workable and valid results. It is a question of attitude to the given problem and the manner of discovering a result, through a variety of 'eureka,' sourced from heuristics. The voices will introduce themselves and explain their sub-voices.'

Condor Sub-Voices

Condor philosopher: 'I have three sub-voices under me and they are thinker, examiner, and explicit knowledge source. Though we have three sub-voices to the Anthill's one and the same titles of our voices, as does the Guru level, we are all different because of the paradigm we use in describing our function. We are post-structuralist and the Gurus are post-modern. The thinker voice is one who has the time to consider the overall responsibility of the information system process within and without an organisation, independent of any organisation. This thinker must manage the current situation and the possible future of an organisation's information systems processes. This role is to take the current level of technology and to use whatever procedures available to make short-term predictions concerning their organisation as well as complementary and similar competitor organisations. The examiner is there to examine as best they can the likely outcomes of the thinker, who is in fact a critical-thinker, and how best they may be treated by any organisation. The explicit knowledge source is there to ensure that what the thinker and examiner propose is a form of reality that can be in written form and not the imaginative processes either of salespersons or of the organisation's management. We are still dealing with reality as much as we can, as we report directly to the very top of the management tree in our organisation.'

Condor Researcher: 'My job is to use reflective practices to learn and seek new sources and better procedures for information systems in an evaluation process within action research, these are included in the processes of in-house writing, buying in, in producing the required information systems output. I use the sub-voices of learner, seeker, and action researcher. At this level we have all have proved our information systems capabilities, and we know the problems of this section of an organisation. We have to put a human face upon the information systems processes so that there is an opportunity for the Anthill to become the nursery of the manager of tomorrow and not just the super-competent information systems employee. This is the role of these three sub-voices. The learner is a clear indicator of the action of learning about the necessary processes, and the seeker is the motivated person seeking to learn. This personal

motivation sourced in the Anthill, is when a person decides to undergo the trial of a metamorphosis. The action researcher is the person gaining the necessary tools to achieve the desired results from the 'seeking to learn' course of action. One of the more interesting outside influences to these positions is the requirements of bought-in systems. We are now seeing that the software used, as it is too expensive to alter the software to suit a given organisation, is now determining information systems dependent organisational structure. So, what organisation is desired and how do we treat the displaced skills of the real strength of any organisation, its people? It seems that the Condor Researcher may be the only serious investigator of this type of situation.'

Condor Being: 'My three sub voices are slave, freeman, and tacit knowledge originator. We are, however, one stage away from being a formation of information systems slaves, and are not as free as a Guru is, as we must minister to the organisation that pays our salary, as we are still employees. This also brings into view our personal relationship with the human-based organisation. Though we work for our employer, we are involved as a colloquium as we endeavour to gather a force of Condors to influence the Gurus and the information systems suppliers as to what we believe we need and want from these sources. By being a non-slave and having emancipated ourselves from enslavement as well, the assumption is that we are organisational freemen; however, this is only partly true, as senior management still demands a certain direction and utilisation of the policies, strategies, and goals of the organisation. This allows, us, however, to be able to more free and critical thinking than any member of the Anthill, and that is our strength.

'We also have to be a *tacit knowledge processor* and accumulator, mainly to use that knowledge to improve our work, as how else will the software suppliers and our organisations be able to resolve the indigenous problems of a given organisation, irrespective of the software used? We have a store of tacit knowledge sourced from our time in the Anthill, and we seek additional tacit knowledge from the Anthill, and the Ar:thill is usually generous in this respect, but it is the returning of this knowledge in other forms to others within the Anthill that can create another series of problems. We are caught between two levels of tacit knowledge, that of the Anthill which is found on a daily basis and quite interpretative using the explicit knowledge available, mainly from software or hardware manuals, which are always imperfect, and that tacit

knowledge sourced from organisational explicit knowledge of a style or standards manual which indicates what seems to work in our particular Anthill to management.'

Condor Person: 'My three sub voices are adaptor, actor, and moraliser. Again, we are post-structuralist as we adapt to whatever confronts us, and we can act out our post-structuralist roles and establish an ethic or moral to our efforts. Our strengths lie in the ability to adapt quickly to the rapid changes that are always with us in information systems technology. This can create unknown and unforeseen pressures within our organisation, and it is up to us to resolve these pressures so that they cause minimal effects as they are transferred back to the Anthill. Where the Anthill demands certainty and structure, we have to deal with uncertainty and a lack of structure with our best tool – critical-thinking. We then offer options to the Anthill so that it may maintain a structure under a new set of altered rules or even another new set of rules under a new paradigm.'

Guru

'A Guru is everything a Condor is with the exception of a researcher-action researcher, as we receive such research for our work, but all of this is under the post-modernist tag. We only accept a few things as true. Firstly, we are founded in structuralism, and in this case, this is the Anthill. Secondly, we are a natural progression from post-structuralism. Not only do we not recognise a central power or any structure at all, but we are searching not for answers for today's problems, but attempting to foresee the problems of the future, near and far, and then to seek an answer or a path to an answer to these future problems. We see the future as a range of extremes, with conservatism at one extreme and radicalism at the other. Not long ago who would have thought that the Internet would become so powerful? Only we could, and what of the future of the Internet? We openly discuss this among our post-modern selves, as we have no rules to guide us, as we tend to make our own and if they work and they are accepted by our local colloquium, they are then passed on to the other colloquia, particularly the Condor, to consider. Then these considered ideas are returned to us and then we pass them onwards to industry for them to consider using their investment and profitability criteria. In the meantime, we try to find new problems and to create new solutions for others to investigate. We are a loose organisation and the categories we now present are there only to give a title to the operatives or sub-voices that are always a moving target. We will not allow a fixed position to limit our discussions, as what is post-modernism today, will be the methods of the Anthill

tomorrow, and so we may not accept a fixed definition of any position. This is because each position must have a resolvable solution, otherwise the position is not allowed outside the control of the Guru. This prevents a problem evolving at say the Anthill that does not have at least a studied list of possible and actual solutions. Metaphorically, you can supply a hammer without nails and all the furniture is straight and the joints tight by using the hammer and glue. If you also supply nails, then the furniture is roughly and negatively repaired with the danger of proud nails. Rogue suppliers may circumvent the Gurus, but knowledgeable users will protect their installation because of the real dangers of a lack of a Guru evaluation.

'We are not action researchers simply because we have neither the reason nor the resources to refine our ideas down to a narrowing of options to find the very best of a group of options. We provide options; we do not need to overly evaluate them, that is for the Condors to do as they are closer to the Anthill, and can provide the necessary patches to keep systems afloat as the tell us of the problems. It all comes down to the fact that we are artist-writers as de Beauvoir would state.'

Guru Sub-Voices

Guru philosopher: 'Unless I am corrected, I think I can speak for all of the other voices and sub-voices in saying that we play all roles when a role is called for. We have no lines of demarcation or any other structures or quasi-structures, as we may be only one person or we may be many hundreds or several thousand, and we may speak from one view, or with a combination of many views, or have no view at all. Of all the levels of skills acquisition, we are the most indefinable, and this is of great advantage to all Gurus, as we are paid to think as artists and then use writing to communicate our considered conclusions, and not to think only about a particular topic, in a particular manner. This may to some, equate as a 'jack-of-all-trades and master of none,' but the topics that we deal with are the future products that many will spend years developing and years to learn how to use efficiently and effectively. This is why we ignore no voice or sub-voice, as all are valuable before a Guru opinion is given. This cacophony of opinion means that we design camels instead of horses for the deserts of the world.

'As Gurus, we seem to be aflutter with the future and its possibilities, but without our serious consideration of the developments in information systems, in all aspects of this industry, the industry would be in a far deeper morass than it is today. The soothsayers, both amateur and the Guru-professionals, have a vital role to play in

any industry, even the vexatious have a role. The major problem facing the Guru is one of direction finding, as all directions in a three or more dimensional model, are serious possibilities. However, only those seriously considered as profitable by others that will ever see the light of day as a final product, and there lay another set of problems, those great ideas that could transform any industry but have no commercial value will fall by the wayside, perhaps to be raised at a future time using more advanced technology.

'In a few more words, we are chaotic within a set of rules that are flexible enough to allow us to function not as a line or plane, but as a three-dimensional plus "space or volume." Let me explain. The Anthill is a direction towards a given endpoint, namely the end of a project, or some milestone of a project, in other words a line. The Condor is an area as it has length and breadth to indicate intent and the control that a Condor has over an organisation. The Guru is a space or volume that may be static or in motion, but it is also a display of all the "lower" descriptions, that is the Anthill and the Condor. The Anthill being a line, the Condor a plane, within both the volume and space that is the Guru. While the space and volume lies within the perceived needs of organisations, it is also the boundary of the suppliers of all information system products.

'So you see, as ubiquitous, ever-present, or omnipresent as information systems may be, it all had to start with an idea, and where that idea came from is what Gurus do for a living. Which came first, "the idea or the product?", or "the chicken or the egg?" What really came first was the opportunity within a given or potential market, because without that market, information systems or any other industry would be non-existent today.'

CHAPTER 9

THE DESIRE TO ADVANCE

I spoke of 'if they so desire' in all levels of the model, from the Anthill, the Condor and the Guru level of information systems professionals. I do this because there is a major waste of human resources within all industries that use Information System Professionals as an encapsulated resource; there is currently the attitude 'once in Information Systems, always in Information Systems.' This ignores the possibility of them become far more valuable in line and staff management.

Emancipation

To emancipate oneself from the Anthill, one must desire to become an Action Researcher, as there are 'real' walls to traverse and Action Research, it seems to me, is the fastest way to resolve this task. This is not easy, as using one's experiences alone, cannot successfully resolve this undertaking. A willing student who recognises from their experiences the limitations and perhaps the failures of the Anthill, but can use the Anthill's resources to the advantage of themselves and their organisation must learn action Research in the quest for an emancipative mindset. Thus equipped, this person will find many of the hurdles that others speak, of little import.

On becoming an Anthill Action Researcher

To become an Action Researcher is to utilise one's experiences to advance that part of the organisation over which they have taken responsibility. They will use both tacit and explicit knowledge to resolve the Anthill's dilemmas and problems by also using Reflective Practices to become better at what they do. They are learning *about* critical-thinking. If they carry on the process, and are over the Anthill's wall, by the time they become Expert, they will have become thinkers and reflection agents that are two steps away from the Anthill. The structures of the Anthill are now part of their experiences, and not what they were subject to on a daily basis. This Reflective Action Research advantage is the vanguard of the ability to become Guru or information systems artists if they so desire. Again it is a personal attribute that determines the level at which one arrives. For support of this, I used an article concerning Karl Marx's

description in '...both the Thesis and the Critique, is that the proletariat can break free only by their self-transforming action.' (Wolff, 2003)

Anthill Emancipation via Education

The emancipation of an Anthill dweller that is, from a group systems performer to a systems and critical thinker will probably require the person to gain further business education, either within or outside of Information Systems. I would prefer an MBA outside Information Systems, as it takes the now student deeper into the real world of business and at least one-step away from the information systems facility. They must learn that the rules of their previous world of networks, MIPS, and the other paraphernalia of information systems are no longer primarily applicable at their new function. This is because they will see themselves and will be seen by others in a new light, that is, as a profit oriented function of the business and not as a form of human-system link. As they advance away from the Anthill, they still must be aware of the continuing evolution of Information Systems. However, they will no longer be in a hands-on situation, they are seen as promoted from the Anthill environment, and as a person whom willingly did that job, until a desire to escape the Anthill arose within their basket of desirable outcomes.

Advancing Away from the Anthill

The now Proficient level professional is working towards the position of Expert, by *learning* critical-thinking but what they are really doing is becoming a more complete human being, away from the structured environment to one where they are becoming a tacit knowledge originator while utilising the explicit knowledge as supplied by the Anthill. The previous slave is now earning the right to emancipation, to be free, mainly by their own efforts and aid from other Expert level professionals, if available, and from their own set of assessments. I refer you to Hegel's Master-Slave Dialectic (Adorno & Horkheimer, 1993). The paradox arising is that by being free, the former slave is of greater value to the organisation, as the power the ex-slaves have gained is one of dependence, as the organisation is totally dependent on the information systems professionals as a group, not of encapsulate intelligent people, but people who contribute to the effectiveness of Information Systems.

Advancing to Guru

The step to Guru is even more dramatic. From a Post-Structuralist Expert to a Post-Modern Guru, if desired, is a step toward become a writer-artist within the information systems Profession. The Guru is a true forward-thinking professional in that by using Reflective Action Research they have mastered the reality of the information systems Profession. They now direct what is to become explicit knowledge as they originate the new directions for the industry as they are allowed time to develop new perceptions and new approaches to their profession. They are at the peak of their Information Systems

A Possible Source of Illegal hackers

I have used this story, one that others support, that if twin brothers with exactly the same qualifications join the same organisation, at the same time, and one chooses information systems because they believe that information is power, and the other joins as a junior accountant because they believe that he who control the funds controls everything, I ask the question *which of the brothers will not have a chance to become the Chief Executive Officer?* The answer is always the one choosing Information Systems. This isolation of highly intelligent professionals is actually a danger to the existence of the organisation. If these professionals were to become seriously disgruntled, they could destroy the heart of the organisation, the organisation's information systems by becoming internal saboteurs, if they are smart enough, and they usually are, they will never be found out and prosecuted for their actions.

The advancement from a competent information systems Anthill Group Performer through to whatever levels inside or outside the model, to a hacker/phreaker is a real problem sourced at the feet of management incompetence and their defence of their management turf. This is because of the prodigal waste of humanity by the apparent demand by management that its information systems people's advancement into non-information systems positions, is be denied. It seems that there are capable information systems professionals who are or can be trained as others have been in the organisation, to be its forthcoming productive leaders. However, these ex-information systems professionals as leaders will be leaders who are intimately knowledgeable of how their organisation works through its information systems resources, but because of their current and past encapsulation, they are weak in *people skills*. However, because of their superior computer skills, they are quite capable of generating at least the same

or more likely, better information through the computer based reporting system and from these reports be able to make fundamentally better decisions for their new responsibilities than any other manager is of similar ranking.

Revenge for Being Denied Organisational Association

However, information systems professionals denied the social and business associations that would make junior managers want to spend their careers with a given organisation or to advance as high and as fast as they dare to try, can become difficult to keep happy because of this denial. It does not necessarily mean that a disgruntled past information systems Professional will be tempted to cripple a past employer within its business world, but it can and does happen. It seems that it would not take much to open the ranks of management to information systems professionals, it only takes the will of two sides: that of the organisation and the person concerned.

Marx and Escaping the Foucaultian Power Description.

If we accept the idea from Marx (Wolff, 2003) that it is up to the people concerned to educate themselves in order to better their lives, then this also applies to the information systems professional. The question is in what area or topics does a competent level information systems professional train?

Move or Master of Business Administration?

Viewing the professional side of training, the competent level professional is probably looking for marginal improvements or the odd breakthrough from time to time. They may want to consider the problems of larger installations that their colleagues may be involved or even smaller installations, as they all may provide a pathway to a more skilled occupational level on particular Information Systems. However, fundamentally they are still competent level professionals without the opportunities to advance to higher levels either of information systems expertise or to any form of non-information systems management position.

Other Training leading to Improved Career Outlook

If they wish to improve their management skills, if they consider it necessary, then the choice is wider ranging. If they choose to do day or part week training courses from various information systems professional and semi-professional bodies or even information systems suppliers, this will expose them to particular methods to handle specific or perhaps even a more general set of problems. However, they remain

competent level information systems professionals with certain types of newfound airs that may lead to a desire to leave the Anthill.

The Results from Advanced University Training-From Positivist to Relativist

If they decide to re-enter the university systems for an advanced degree in management, such as a Master of Business Administration, or even a Doctor of Business Administration, or say a PhD, the person concerned has great personal changes thrust upon them. Firstly, if they do a technical or information systems based post-graduate course, what is the effect upon their technical skills after say a year or two out of the main stream? Do they stay competent level professionals or are they further along the path to proficient by being aware, through educational experiences, that there is a life outside the rigid positivist structuralism they had necessarily endured and supported as an information systems professional for a very long time? Are there courses that promote the idea that Information System's structuralism is limiting their careers? This problem is one of choice of courses and it is problem of what the student wishes to do with the rest of their now considered career. If they wish to pursue a career in Anthill level Information Systems, then a management degree will probably be of little use as they are probably at the top level of competency and additional investigative skills may be of little use when confronted with a serious meltdown of the organisation's computer systems. A doctorate whether in Business Administration or in the more research based PhD, would probably lead to a teaching position, as the organisation that currently employs him or her will probably have no other use for a professional or research doctorate other than in their old employment.

Rewards, Re-entry, or Scrap Heap?

It is quite possible that such efforts will bring no rewards at all to the seeker of advanced knowledge in the employment market or in any market where the prerequisite is a competency level in Information Systems. This is the challenge the information systems Professional must face at one time or another in their career, and by expanding their skills horizontally, to broaden the range of information systems skills might be the better move, than a vertical move to expand their formal management skills. The management of the organisation may push the horizontal move, while the astute information systems Professional will push the vertical decision, either full time or part-time.

An example taken from my experience of others.

When discussing this in my doctoral colloquium, a newly arrived French student, aged about 25 years, disagreed, as he stated 'All I want to be and most of my friends in information systems want to do, is to use and be expert (his term) in the systems that our organisation uses. I do not want anything to do with management.'

I agreed with him, as this is his attitude today, but what about his attitude 10 years from now?

Advanced Degrees for information systems professionals

As discussed above the question of advanced degree for information systems professionals is an awkward question. If the information systems professional wishes to leave their profession of information systems then a Master of Business Administration (MBA) may be the way out of this time, skill, and human-greedy profession. In other parts of almost any organisation, we may find senior management striving for advanced degrees for their managers of all levels, but what of those in information systems? What of the information systems professional who seeks a generalist Masters degree, and then decides to specialise in finance and international trade? Where would they fit in the general management charts of the Information System's home organisation? Would they bother working for their old organisation or seek greener fields elsewhere, a cost to their last employer? Why is the information systems Professional automatically denied entry into higher management as a competent MBA only to be offered a position back within the Anthill of information systems is also an important question, as happened to me, and others? These are some of the questions, and I will offer some solutions.

The Isolation of the information systems Professional as a Student

What I have discussed above represents the cutting off the links to information systems by an information systems competency level employee. The probable situation is that this person is so valuable to the organisation where he or she is currently located, that to allow them to take a place in the general management of the organisation may well upset the planning of careers of management trainees destined for greater positions, whether or not they have any competency in Information Systems. On the other side of the coin, the information systems facility will also be one competent person short until

that position is filled. This is a possible lose-lose situation for the organisation and a no-win situation for the now MBA qualified information systems professional.

I will now look at this from following perspectives. Firstly, the information systems employee knows how the system works. In other words, the gathering of data, its transformation into information and its extraction into reports is something the information systems professional can do exceptionally well. In a few words, the information systems professional can get things done cheaper and faster than his collegiate of similar level junior or even senior managers. He or she is therefore a perceived and real threat to the junior hierarchy of the organisation, particularly if they have a general MBA and not a technical one. Secondly, armed with an advanced degree in management and with the aid of their information systems experience, their ability to perceive problems and their solutions allows them to tread into areas reserved for Board level management. Finally, this may lead the information systems Professional to leave for other organisations more receptive to the aim, whether achievable or not, of excellence evolved from the previous frustration of perceived isolation from the actual line management of the organisation, or worse engage in active or passive sabotage as an internal hacker. I would, in reality suggest that the person so described will allow his current organisation full opportunity to allow their involvement in the real management of the organisation prior to leaving, yet opportunities for such internal promotions after such educational effort remain few, particularly, it seems in Australia, and Western Australia in particular.

The Costs of Seeking Freedom and Emancipation

The only thing an advanced degree can do for the information systems professional, currently, it seems to me, is to be able to escape the information systems career and cast off the bejewelled Carcanet of the certain and sheltered life in information systems and join the real world of uncertainty. However, the risks are substantial, as I personally, and other similarly educated, have found.

Metamorphosis into Proficient and Expert

I have found through researching for this model that there is a way that the information systems professional can shift into a higher position and remain in the information systems business, if they so desire. I believe that the way, if the information systems professional desires to move up the organisation, is to become a critical-thinking participative and professional reflective practitioner, again we meet

these terms. This means that they will undertake advanced management studies, such as a Master of Business Administration, but do so using as a research model, reflective practices. This methodology would allow them to discover, refine, and refine again their research data that allows them to remain in information systems, but with a different attitude than the hard positivism information systems requires moment by moment. By moving away from the day-to-day operations of information systems, they are now reporting not to local management but to the highest levels of management in the organisation, namely the board of directors. This separation allows these reflective practitioners to explore the knowledge bases of the information systems department and its relationship to the rest of the organisation without local management interference. This is a new position to serve better the organisation by having free access to management in reporting possibilities, problems, and apparent solutions. It also allows the organisation to establish and maintain a collegiate of similar information systems experts across industry. With a similar purpose, these experts now have greater underlying principles to their professional standing as they utilise their professional action research to series of policy driven actions. These policies developed by their colloquium in a similar way as the medical profession with, here in Australia, their various colleges of practitioners, without the restrictions of these medical colleges.

A Colloquium Solution

This does not mean however that they are effectively isolated from the rest of the management structure; it means that their role is to ensure that the role of information systems is satisfied according to the policies laid down by the board and their Information System's colloquium. This means that they are not Chief Information Officers (CIOs) or any other Chief or manager, they are more than that. They are giving guidance to their organisation, industry, suppliers of information systems, and to their community as a whole. I call them Condors, after the largest flying bird, also a forager, as are ants.

Condor as Overseer

The analogy of the Condor to that of an expert is apt in several ways. Firstly, as a vulture, it keeps the information systems facility clean. Establishing and enforcing best practices and constantly improving these practices in conjunction with others in his or her colloquium, and outside that colloquium. By being the main filter for

establishing procedures, and establishing best practices that are enforceable and are enforced.

However, it is not within the organisation that the power of this position is apparent; it is outside and away from the people that manage people and things, and not for the overall functioning of the firm, which is the main strength of this position it is neither line nor staff. By allowing trade relationships to develop under the guidance of say Business-to-Business links and other similar constructs, the common developments among disparate businesses can allow the newly emergent virtual organisations to have a feasible and legal foundation. Until that happens, I do not believe that virtual organisations can exist.

The Second Last Metamorphosis

The second last metamorphosis is that of Condor to Guru State is perhaps the most interesting change that an information systems Professional may undertake within their chosen profession. The term Guru means teacher, and is an apt term for this change.

The change from information systems graduate, to novice, to advanced beginner, to competent, is really the first shift in the work of an information systems Professional. This shift is not really a metamorphosis in a true business sense; rather it is a natural progression. When the information systems professional realises that their career is more of the same forever more, they have at least matured enough to sense that there must be more to life than creating, installing, and maintaining a mountain of electronic machinery. There is nothing wrong with staying in information systems; however, it seems to me to be such a waste of intelligent humanity.

The Desire to Shift Upwards

The desire to shift is the crux, without that desire to become something more than an information systems Professional, the result can only lead to entrapment into a profession from which there is no escape. This procession may be the desire of a 15 year old, but not of a mature adult who wishes more than the re-cycling of their learning abilities as the improvement to hardware and software occur. The model shows that it is only through reflective practitioner research that a smooth progress can be achieved leading to a choice of a shift to the management career path or to that of an information systems expert. This is the strength of such a career move, but first the person must

desire change so that the options may open to them. For them to learn the complexities and practices of reflection, they must enrol in such courses that will allow them to be able to shift to reflective practice research. This is what allows the competent to see what information systems deny them as productive and intelligent human beings.

From Expert to Virtuoso

The next metamorphosis is from expert to Virtuoso, the lowest of the Guru class. This level's achievement is by learning and using professional action research that leads them, as the chart states 'The joy of being, doing, learning, creating, being, thinking, educating, art, business, language', in other words to become the artist-writer in de Beauvoir's terms. Leading away from the expert into the art end of the profession is not for everyone, as you are as far away from the Anthill as you can be and yet be an information system professional. Here we have people who are years ahead of the Anthill, these who have no boundaries to their thinking and are the more artistic than most, as they will probably choose beauty over the efficient but ugly.

The Viking Adventurer or the Conservative Temple Dwelling Sage

I was reading Kenneth Clark's 'Civilisation,' (Clark, 1969) a book version of his television series, when he mentioned the 'conservatism of the temple,' and the 'adventurousness of the Viking.' Here we see two images, one a temple and the other a Viking long boat. This imagery seems to encapsulate the range of attitudes of the Guru, from ultra conservative to ultra adventurousness. These people will determine the future of information systems, and they need not be right most of the time. From virtuoso to cultural master is the ending of the Dreyfus model, but I would add another level, that of free thinking person, whose income source is that of a cultural master, but whose time is employed as a unique human being greatly influencing humanity. This last stage is the last major metamorphosis, and perhaps very few will even consider such a step, or have such a step imposed upon them.

CHAPTER 10

A METAPHOR OF INFORMATION WARFARE.

Introduction

I am considering the aspects of Michel Foucault's ideas on power, and the image of the motion picture about WWII entitled 12 O'clock High is immediately conjured up in my mind. This movie discussed and used in my MBA classes as an example of a disaster turning to success and then turning to disaster to the person who did the necessary fixing of the initial problems. This story is about, I believe the fictional 918th Bomber Wing of the USAAF based in Britain in 1942.

The opening scene is a well-dressed man wandering the streets of London, say in the early 1950's, and his attention is taken by a broken Toby ring in the window of second hand, perhaps antique shop in London, which he purchases.

The next scene is at a, now disused, air base somewhere in England. The man stands before what is left of the control tower, and we immediately return to the time of the war.

The man we will soon discover was the Chaplain of the 918th American Army Air Force Wing. The mug seems to be the one that functioned as a good luck charm or even a curiosity by a group of American aviators. It sat on the mantle piece of the Officer's mess, where the Pilots, Bombardiers, and other Officers drank themselves into a form of oblivion, knowing that tomorrow they would probably die. We hear the music, see the drinking and the stunned, but raucous celebrations necessary to maintain the sanity of those who may be about to die, a simile of a Gladiators possible final night.

We then see these very same men landing their aircraft at the airfield, shot full of holes, but still marginally fly-able, the ambulances taking away the wounded, and then the dead. We then see ground crew searching the sky for other late incoming aircraft, too damaged to keep up with the formation or fleet and by some miracle have kept themselves in the air, under some form of control in order to fight again tomorrow.

We see in the distance, and up close by an aerial shot an American B-17, heavily damaged, one engine feathered, another engine is leaving a heavy smoke trail as it is on the verge of destroying itself. It is a fact that a B-17 cannot fly on three engines, as it can only slowly descend towards the hard earth or the enveloping sea surrounding the island it calls home. This aircraft apparently has only 2 ½ engines and it seems that this aircraft is solely and only held up by a rapidly tiring guardian angel as it raggedly turns towards the runway to land. It has no landing gear, it has little left of its control surfaces, now too low for the crew to bail out, the aircraft has no alternative, to survive is everything, and that means to land: now.

The aircraft lands roughly, it is not under any control except by the laws of Newton, it slides everywhere, propellers are bent, engines seize, and eventually the B-17 stops. Ambulances and fire trucks sirens scream as they race out to the aircraft before it becomes an inferno. The crash crew jumps into the aircraft looking first for wounded, while the fire fighters spray the engines to prevent fire from perhaps split fuel lines. Then we see the wounded carried out, and shortly afterwards, what is left of the dead.

It has been a bad day at the office for the 918th Bomber Wing - again.

This is apparently the Foucaultian method of historical description. Of the history that leads up to this incident: we are told nothing more than what has happened at this critical point in time. At this critical point, there is a description of a particular change that affects the rest of the story, in this case, the story of the 918th, and this seems to be the way Michel Foucault describes the history of institutional change such as within prisons and other power wielding organisations.

The similarities are quite striking with the techniques of telling a story by stage or motion picture, and Foucault has been criticised for this approach, as it does not overly prepare the groundwork of historical explanation.

Consider the motion picture. What is the power, its form, its source and its use that make generally sane men go back to a situation that in normal times would be considered insane? What is the power used to promote these, in normal times, suicidal tendencies? Are they the very same powers in non-war, typically peaceful business situations? Is the sense of belonging, within the dynamics of a group, so strong that the group ignores the rules of normal and civilised behaviour so that the participants

become a group of rule ignoring Experts or better, or have they become something else?
Is this the ultimate corporate culture – death before dishonour?

When does power change humans into a creature whose only form of satisfaction is survival, or beating the system, or joining a team that is able to win from its current disastrous position or all of these?

Power

If we consider the above metaphor as a form of reality, not reality itself but as a Jean Baudrillard Simulacrum (Baudrillard, 1995), a case of the use of power, then the power expressed in the simulation can become a reality if the audience believes that the theatrical treatment of the use and abuse of power in an artificial and presented form of entertainment is an acceptable use of power. This also raises the prospect not of the abuse of power within a theatrical entertainment, but its transmutation into a real situation where there is no guarantee of success, by its use as shown in the media. It is the media that presents this situation as a successful method to use in real life situations, which may mislead us it artificially presents a 'slice of life' as a scripted sequence. As there is no script to life in a reality, I can be arguing that no script allows art to imitate any reality. This expressed in an extract of Adorno and Horkheimer's book at www.marxist.org (Adorno . Horkheimer, 1993). Perhaps it is better to use indoctrination as the operator here.

By indoctrinating the corporate cultural ideals and ideas of 'Loyalty and Duty' into the minds of receptive people deeply desirous of a given aim, abuses of power can be made acceptable as otherwise the term 'Disloyal Traitor' or 'Lack of Moral Fibre' can and will be used against the unconvinced individual. As a member of a large social group or nation, such pejorative terms applied to the individual or the threat to use them, and the possible personal consequences that can follow, usually leads to some form of reluctant acceptance by the individual of otherwise intolerable conditions of existence and of their actions within that existence. When this goes beyond the individual and personal cases, and applied to more and more groups until it become a national policy, we have what happened in Germany from 1932 to 1944, in the then Soviet Union and its satellite states, and later in China and its satellites. I therefore consider the individual to be a microcosm of the group and the group of a community and so on.

It is this Simulacrum; it is the pretence and promise of real power given to the information systems Professional that occupies this work, and the surrounding power's limits, power's uses and abuses that yields limited opportunities for these professionals. It is however, not limited just to information systems professionals, but to almost any profession that has similar encapsulating environments.

Let me explain this further.

Dispersal of authority has become a cliché in business science studies, and all students learn that you cannot overly centralise authority, as one person can make not all decisions. This devolution of authority allows minor and major decisions made by those with the ostensible and real authority to do so; the act of the servant is the act of the master so to speak. Authority is assumed to mean a combination of responsibility and the power to use that responsibility to the benefit of the body granting both power and responsibility.

Yet little mention is made of dispersal of power. Responsibility without the power to control that responsibility presents itself as an example of bad management practice, yet responsibility seems to be the first item dispersed and the necessary power to control that responsibility seems to be the last item for dispersal. Power is not willingly shared, yet we acknowledge that real power, not the authority to use it is the greater treasure for an employee to possess. How must we explain power in the case of this work? I looked at Foucault's after-word in Dreyfus and Rabinow's book. (Dreyfus & Rabinow, 1982)

Power is the way in which human beings turn themselves into subjects. (Ibid., p. 208)

Foucault as described in Dreyfus and Rabinow chapter 9 (Dreyfus & Rabinow, 1982) indicates three analytics of power –

- the move to cultural practices and power,
- ritual practices that combine knowledge and power,
- the concept of bio-power that includes political structures within the human sciences to support domination.

I will show the utilisation of all of these analytics in discussing the problems of information systems career paths.

The Hegelian Master-Slave Parable Updated.

The parable of 'The Master and the Slave' is where two antagonists are involved in a fight to the death, the victor instead of claiming the life of the vanquished spares the life of his defeated adversary by making that person promise to be their slave in exchange for their life. The now slave, however, eventually wins by becoming so necessary for the well-being of his master that it is the master who must react to the actions of the slave and not the other way around. The master loses most of what they had in the form of abilities to hunt for food, prepare and cook it, build shelter and so on. The Master has left it to the slave to do this mundane but necessary work and thereby the slave becomes increasingly powerful in the life of the master. This zero-sum power game is the result even as the total power sourced from by the master is shifting from the first instance of enslavement. The power shift from the master to the slave goes on until there is some form of equivalence, and even though the master still has power of life or death over the slave, the slave has a better chance of survival if the master dies than if the situation is reversed.

The following analysis is indebted to Kamal (Kamal, 2004), Steinhart (Steinhart, 1998) and Hegel (Hegel, 2004). The slave goes through the same number of stages as does the master, but the slave through education becomes stronger as the master avoids education for 'mastery.' The process over time is as follows:

<i>Slave Goals</i>	<i>Master Goals</i>
Survival	One to be served
Educated, independent servant	Dependent and ignorant
Free spirit	Captive spirit
Artisan	Customer

The slave at the end of the process now has more power than the master had at the beginning, as the master needs the slave in order to survive both physically and mentally.

That parable is apt for the politico-socio-economic time of Hegel, when slavery was still acceptable in many western cultures; however, in a modern sense it seemed to have only limited and historical educational uses.

If I were to modify the model only slightly to account for the modern industrial and information age, we would now have a situation where there are three partners in this new Hegelian Master-Machine-Slave model for these modern times.

At this time, the Master is now a corporate structure with levels of management and consumers of data within the organisation that is dependent upon an Information System that can modify at its externally sourced whim, the organisation itself, as the organisation serves the Information System, and not the reverse. This to such an extent that for the sake of ease of implementation and installation, but not human costs, that the Information System determines the duties and processes of all employees irrespective of the original intent of their positions within that organisation prior to the installation of that purchased and packaged Information System. This means, in its effect that management and employee are separated from their now unclaimable power, but not the responsibility associated with their work, and also separated from their personal interest in their careers, and their talents and education. The power of the Master and slave evaporates because of a force that both neither can have control, nor influence over; the Information System purchased and installed by the actions of the highest corporate body, the Board of Directors. If the machine or Information System is gaining power at the cost of the human-based management and workers, what has become of the slaves or artisans as we now refer to them, who also serve the computer, but in entirely different ways?

The artisans now serve a different form of master; they are the information systems professionals who serv. the organisation's computer systems, as well as the management as employees. This situation presents the first of the contradictory evidence within this work. If the management of a corporation were losing power to the Information System and its servants, why would an information systems professional wish to enter management? Is the transition from management by professional managers to management by information processes taking too long or is the resistance from the professional managers to allow the dismemberment of whole levels of professional managers currently overwhelming this inevitable process? Which junior and middle manager would welcome and aid a process that causes the evaporation of all

their networking and team building, indeed their entire *power-base*? What and where are the sources of the future top ranking managers of organisations? Will these positions be necessary? Will the Board of Directors now become the senior level of day-to-day management or will managers at a much lower level than today provide that service? These questions apply only to those organisations that accept totally the requirements of Enterprise Resource Planning systems instead of their own established requirements, the most expensive option of all in the installing of such systems.

There is, it seems, currently no limit to the requirements of Enterprise Resource Planning systems. There are businesses who surrender their management processes to external sources established elsewhere, and the real question is when will management as a science and art be noted more as an interpreter of reports, an initiator of reports and studies and a source of actions based upon what a computer system states is actually happening, and then hoping that is the actual case.

More importantly, where will the artisans who will install, maintain, and make the relevant decisions concerning such information systems come from, what value will their training and education have, and how long will it hold its value irrespective of the system used? Vitality, what skills will be required outside of information systems to make the organisation function as the top managers of the organisation require?

New questions arise. Who are the slaves and who are the enslaved, and where is the source of power that controls everything? Can only free people be enslaved, while slaves can never be?

This work, I consider is a forerunner of other works to address this and other problems that it seems will confront us within the foreseeable future. However, I can see that a future magnate of any industry will have to be an information systems Professional first and an entrepreneur second in order to control their organisation.

My conclusion is that the new model is slave-machine-slave or in modern parlance- management-machine-artisan where the machine utterly reliant upon management and artisan to keep its existence, while the management and the artisan cannot survive without the machine for the power, rewards, and employment such positions offer. Perhaps a form of symbiosis now exists, ultimately controlled by a natural God-like Board of Directors.

That industry and humanity, politically, socially, and economically, is ill prepared is one the topics of this work. I have not dealt with the deep psychological insights of Hegel's parable when applied to competing aspects of the human psyche. Indeed some would argue that the parable is an insightful and fruitful way of describing the way the Darwinian natural selection pervades all living processes.

Chapter Conclusion

We have seen the chronological and autobiographical sources of the title of this work, the methods of expressing metaphorical descriptions, the research space from which is sourced the research and its investigation, and a series of initial assertions. What we have seen is probably a lack of willingness by all parties to relinquish power, even though power is a temporary gift or even responsibility.

CHAPTER 11

CONCLUSION

I began this thesis, in the Abstract section, with a picture rather than with words. In this post-modern Figure 1.1, I pictorially tell the evolution of this thesis from the original investigation in disaster recovery procedures, through to information systems training and career paths, right through to the development of a model of the modern industrial situation exemplified by the information systems professional. It is interesting that this Conclusion chapter has been prefigured by Figure 1.1, in the sense that the message of this Conclusion has already been told right at the beginning of the thesis.

In Figure 11.1 below, I prefigure the ending of this conclusion, in that the description and analysis of this figure needs further research, perhaps as another doctoral thesis with an initial title of *Can critical-thinkers-artistic-writers save an industry?*



Figure 11.1 A Modification of De Beauvoir's Artist-Writer and Critical Thinker Model

At this place, I give a summary of this work to allow a thoughtful reader to consider what has been placed before them, even though this conclusion has been placed before them as a rich picture at the very beginning of this work

The plan of the thesis and the table of contents, yields what has been presented in an orderly fashion, yet does not point to the inner workings of the author. I will start with the first and perhaps satisfy the latter.

I started with a quaint travelogue in the Prologue, to describe the tour or journey that was undertaken by me voluntarily, and by the reader less so. The potential for this journey is great: redefinitions of what organisations could provide to its professional employees.

This in my mind is more than an enclosed office, a cubical in an open plan office, or simply a desk somewhere in the appropriate division or department of the organisation. This homogenised office demands homogenised people, something I was told that even the Cultural Revolution in China during the 1960's failed to accomplish. Why then do Western Businesses almost take it as a given that homogenised employees, or the *team* or *teamwork* is the pathway to improved daily, weekly, monthly, and quarterly results? This makes no sense to encapsulate creative human beings into a near strict monastic workplace and then to expect great efficiencies and effectiveness from these people, irrespective of their own considered responsibilities towards their employment.

Then we came to explanations of writing styles, and the search for a title and research questions, in Chapters 1 and 2 respectively. Here I introduce the writing style, the research methodology, action research, and the area of investigation. (Information Systems.) The preliminary journey had many miss-steps until the final direction was found, purely by serendipity or fortunate accident. This was the continuing questions: "What is an employee in the Information Systems area as a human being?"

The simple answer is that they are metaphorically enslaved to their employers through their interest in making a computer do as it is programmed effectively and efficiently, just as these employees do to their employers. According to my thesis Derrida's "simulacrum" reigns supreme without a countervailing force to control its actions, all within a model created by Dreyfus that concerned the learning of a language.

In Chapter 3, the literature review, examines topics concerned with slavery, enslavement, emancipation, freedom, and power, with references to structuralism, post-structuralism, and then on to post-modernism. The use of secondary resources came about because of a reaction to a translation of Husserl's, "*Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*."

Chapter 4 was my autobiographical explanation of myself within the Information Systems industry in Australia. I can conclude little else than to say that it was a mixed bag of results, but it did give to me the necessary experiences to write a doctoral thesis.

Chapters 6, 7, and 8 source and expand the model that was developed from the Dreyfus model into a coherent description of reality using the techniques of imaginative voices in describing their roles within the model. There are no conclusions here, only descriptions.

Chapter 9 describes options for the Information Systems employee wishing to advance themselves into positions that lead to real power, either within their organisation or within their industry, such as it is. The emphasis here is on the human cost of such people who want a serious change, other than a forthcoming disaster by walking away, as so many Information Systems trained and skilled persons do today. This chapter may offer some hope to those seeking serious change to their careers.

Chapter 10 uses a motion picture, one used during my MBA studies and the Hegelian Master-Slave dialectic to show that the previous investigations within this work are not unique or unsupported outside of this work itself. What drives, in my opinion, people to face uncertainty and possible death is little different from utilising the corporate culture found in today's organisations, in particular in the responsibility foisted upon and gratefully accepted, in the short term at least, by new Information Systems professionals. However, the Hegelian Master-Slave dialectic then comes into play, (although it tends to be metaphorical rather than real) for the Information Systems professional, but it can be modified to suit the reality.

Chapter 12 or Epilogue is used to express a form of self-argument, looking for imperfections in this work, by raising the questions the reader will ask directly or indirectly, in a dream sequence. This dream sequence is followed by a self-examination of the dream.

So what does all of this mean?

The new sentence in this work, as Bob Dick describes a thesis, is really a statement concerning a forthcoming redesign of organisations around its information technology department, division, or section. Power over money, the eye of the needle as described in every auditing textbook, remains with general management; all other

power is slowly moving to information technologists. The actual labouring work will still be done by the semi-skilled and unskilled, with the de-skilling of jobs to continue at a great rate, until the skilled worker is also an information technologist.

The problem is that in previous and in current organisations, the promotion ladder in sales, line, and staff sections of an organisation were evolved over nearly a century of Taylorism. In my thesis, I contend that it is time that a serious rethink of organisational structure. This for no other reason than the lines of line and staff are now irreversibly blurred by technology, yet the organisation charts neither reflect such change they also do not reflect the actual power structures within an organisation due to this fundamental change.

CHAPTER 12

EPILOGUE

AN HEURISTIC STORY TO SUPPORT MY THESIS

Introduction

I reflect upon major themes of the thesis by using a dialogue within a dream sequence. Whilst the beginnings of the dialogue actually occurred in a dream I had during the night of 17 May 2003, I edited, changed, and significantly added to what I remember of the dream. Hence, the following dialogue is fictional. That said I am deliberately using this fictional style of writing in this section of the thesis. Why, is because I am enacting the heart and spirit of heuristic inquiry (Moustakas, 1990)? Tesch states that:

"Qualitative researchers ... have found ways of evaluating the outcomes of programs through the description and comparison of cases, the development of typologies, classification and cross classification, the propositions of 'linkages' between processes and outcomes, and even the translation into metaphors." (Tesch, 1990)

The Dream's Questions

To prepare the reader for the dream dialogue to follow, I will give an outline of the major questions presented.

- Why did you begin this level of study?
- What is the title of your thesis and why did you choose this title?
- Explain to us the research method used and the reason you chose it?
- What is the history of this project?
- Why are you using phenomenology as part of your philosophical foundations?
- What are the major sources of your research data?
- What are the major sources of your research methodology?
- What are the major sources of your research philosophical foundation?
- From what you have told us, the conclusions you will reach were apparent at the early stages or perhaps even before you began your research. Is this not a self-fulfilling result? A simple confirmation of your ideas?
- You have not answered the previous question with a yes or no.
- I feel that you are uncomfortable. Did you expect us to rubber-stamp our approval?
- Why didn't you use a positivist approach?
- However, where is the rigour in your research? Just because you have described a problem, its costs to humanity, and the community as a whole, you still need to have rigour and validity, and generalisability!

- I find Rich Modelling a conundrum. Soft Systems introduced the rich picture, and you are introducing the Rich Model, a modification, a good one, but a modification nonetheless. In your case, it seems to express the obvious, so where do you go from here?

I thus relate a dream and the result of the dream is the explanation of the investigation methodology used and the reason why action research of Professionals in Practice is the only logical approach for this investigation.

There are eight characters in this story about a dream-

- -Myself.
- -A doctoral colleague.
- -A major anti-Action Research Professional Practice judge, who is also the chair of the committee.
- -Another supporter of the Chairman.
- -Two remaining members, who are not open supporters of the Chair, but are apparently more open-minded concerning research, particularly in the social sciences.
- -One non-voting committee member who is allowed only to ask questions.

Beginning of the Dream

The story line is this:

I am asleep, when there is a banging on my front door, I get up and answer the door, and it is my doctoral colleague, who grabs me by the hand and drags me into his car. He tells me that there is a demanded repeat of the proposal stage of my doctorate and we must be at the examination lecture theatre in fifteen minutes, even though it is some 40 kilometres/24 miles away. If I am not present on time, my Doctorate is an automatic rejection. I ask how we to get there on time; I am not even dressed! I am naked! My colleague says not to worry; he knows a short cut and his car can go very fast indeed!

We arrive and I am ushered, naked, into a very large room with a well-lit and small circular stage and I directed by a sniggering attendant to get on the stage and wait. Nervously I wish I had some clothes on as I am not all that good looking naked, or in this situation, at all comfortable.

While I am considering my current situation, the room seems to shrink. I also notice that *Danse Macabre* by St. Saens being played through the public address system. I then realise that there are five moving black room partitions moving towards me in the darkened stage, as an apparent cadre of five dancers are moving in time to the music. I now notice that each dancing partition is equipped with a set of lights on each top corner, and each partition is flashing in turn like a set of Christmas lights - red, yellow, and green. As these partitions close upon me and begin to form a pentagon shape, these lights stop flashing as they form the final shape that surrounds me and the podium on which I am standing almost shivering from the apparent cold and nerves of what I am about to undergo.

The Voice and the Lights

One of the partition's red lights comes on, and an amplified voice speaks as if it is coming from this partition. It seems to say—"I am sorry to get you up and here on such short notice, but if you want your Doctorate to proceed, you must be passed by the majority here present. You will notice that there are five partitions. Only four can vote, and the fifth is to ask questions as well as the other four. Four of us are experienced researchers, the fifth is not, and we will all ask questions which may seem facile or even stupid, but you must answer all the questions put to you.

The Rules of the Proposal Examination

"The rules and they are 5 in number are: If a question is to be asked, a red light will appear over a partition. If the answer is satisfactory, a green light will then glow cancelling the red, and then the next red light attended to by you in right-handed sequence, that is the next question is the one to the right of the previous partition. If further clarification is required from you, a yellow light will glow and will remain so until a green light cancels the yellow, and then you will answer the next question in sequence. If a red light goes out because it is the same question posed by another one of us, you are to continue in the same manner to the next red light. Is that understood by you?"

I answer "yes", and repeat that I will proceed to the right to a red light, and keep on going in that clock-wise circular direction.

"At the end of this examination a vote will be taken, if a majority support your work, you will proceed with your research, with the full support of the university, from all facilities and faculties to ensure your success. If you fail here, you fail and you will leave the university as a past student who did not meet the requirements of the Doctorate Program. This process known as the "Perisher" means there is no second chance. Is that understood by you?"

I again answer "yes."

A single red light glows and it is on the partition of where the initial voice seems to radiate.

"You may wonder why you are naked, on a stage, with bright lights concentrated upon you. This idea is not new. I believe that the potential Emperors of the Roman Empire, when it was a Republic had to stand naked in the Forum, to show the wounds to their body gained from service to Rome. The Shakespearian play entitled Coriolanus uses this fact as part of the play, and when Coriolanus refuses to show his war wounds,—and well that was a play wasn't it?

"However, to achieve the status of Doctor at this University is no easy task, we too have a responsibility, not only to the university, but to the world where you will work, teach, or speak authoritatively upon your chosen field. We must know more about you and how you have changed in almost every area and what you will, in our judgement, potentially become. Perhaps the Born Again or Anew term is apt, and we apologise if you find this phrase religiously offensive.

No Care; No Responsibility

"We offer you nothing but our prejudices, our experiences and our judgements over which there is no appeal. We care not if you fail; we also care very little if you pass, as the world is the final judge about your work. If you pass, you will be welcome everywhere where men and women of intelligence and learning congregate to listen and learn from their colleagues, all in the passion for making the world a better place through examining, questioning and reflecting.

“The awarding of degree of Doctor is not an end; it is just the beginning of a new beginning, possibly started by your research.

“My question is...” and the red lights went on all around me as he began.

Questions Posed for Dream Sequence.

Why did you begin this level of study?

The main reason is the same reason why men climb mountains – because it is there. There is no logical reason why a person of my age should want to delve into the highest realms of academic study other than perhaps the egocentric reason because I am able to do so. I am an avid reader and have become more so since I began this project. On its own, this is just not a good enough reason however, to spend so much time and effort, just to satisfy one’s ego with the earned title of Doctor Ed rather than a plain Mister Ed. It goes much deeper than that. The living of the good life as described I believe by Socrates, is part of that reason. You have to live with yourself whatever the situation otherwise madness may follow. This is no idle statement, as I have known or known about intelligent people who literally go mad because of the boredom of the typical banal life style called Western Civilisation, here in Australia.

Look at our lifestyles and an intelligent person will see that there is much lacking, not materially or even spiritually, but in the lack of true mental stimulation that allows you to consider what the value of your life, not to others but to you as an individual. This is not selfishness; it is humanity, not as a vast population, but as a population of one. If I as a human being improve, by education, my outlook on life and humanity, then all humanity must gain by some small amount. This is the same action that arises from a thesis, an addition to available knowledge.

Heuristics, the act of knowledge discovery, to me is a pleasurable exercise, to some others it is drudgery. I find that if you wish to describe me as a person in two or three words it would be by using the terms Heuristic Enquirer.

That raises the question of where do Heuristic Enquirers go when the desire for more knowledge confronts them?

Perhaps, on further contemplation, a better question is “What do Heuristic Enquirers do with the new and important learning and knowledge they now possess?”

If they do not publish then it is like whistling in the wind; only the whistler knows the tune.

What is the title of your thesis and why did you choose this title?

That is a very difficult ask, but the first part is the easiest. The title of my thesis is "Emancipating a Professional's Anthill: Using Professional and Participative Action Reflective Practitioner Analysis with information systems professionals as the Crux. *Gnothi se auton; Non, je ne regrette rien; Die Lichtung; All the World's a stage.*"

In the last 20 years, there has been a monumental shift of intelligent and talented people into information systems and today there is a shift away from this area of employment. The major reason for this, it seems is that there is no clear career path for information systems professionals as there are for other professionals who join medium to large enterprises. Currently, there are no chief executives of non-information systems enterprises who started their careers cutting code, even after almost 60 years of Information Systems. Contrast this with the Accounting Professional who becomes Chief Executive Officer (CEO) after some thirty years of loyal and productive service. Whole generations of highly intelligent people have already left or are about to leave information systems because of the management practices that have isolated information systems professionals from their colleagues in other Professional endeavours. I believe I have a possible solution that is a win-win for everyone. In addition, I have recently discovered that there are many other professions that are also in the same position of being hack professionals. That is, they are professionals who are perhaps too valuable to promote into management or there is no place for them to advance within the scope of the organisation. This means that while the organisation has sufficient quality work for these professionals to perform, the professionals may stay in their employ. However, by denying professionals the opportunity of dreaming of the possibilities of promoting themselves into new positions, the organisation has destroyed ambition, and I would suggest that this is not a positive act. My title describes this as escaping the Anthill. This process has four stages, *Gnothi se Auton* – Know thyself, *Non, Je ne regrette rien* – No, I regret nothing, *Die Lichtung* – the Heideggerian Clearing found when everything not considered important is bracketed out of contention, and *All the World's a Stage* – the enabling the human being and their spirit to become whole and self actualised.

Explain to us the research method used and the reason you chose it?

The method is action research using rich modelling to secure the necessary rigour and validity to make this work an acceptable addition to knowledge. The reason why I chose to use it is a matter of simple deduction. It is apparent to me that one is able to reduce to an absurdity the use of any other methodology. I state this is because of the necessity to use heuristic or discovery methods to support the research questions. The main questions support the actual research work using this method. If I were to use, say positivism, then what of the real world that may not display any positivist relationship even after a period of detailed examination of what appears to be the research question? If the positivist process is carried through and the results though academically 'correct' are ignored by the general population because it does not fit in with the model or models of the real day to day world that management and employees must contend, does this research have any utility at all? Positivism has given humanity enormous benefits, but it has ignored the non-quantitative world, the world of love, hate, fear, satisfaction and so on, things that cannot be valued but are beyond price in their ability to help describe the phenomenal world to an individual and then to another individual as a member of a larger group. This is the major problem of positivism, not that its usefulness is waning in some areas, but that other models are attempting to evaluate the immeasurable and then showing that the results can possibly be universal. The research universe is expanding for positivism, but is exploding for other paradigms and that is one of the main reasons why I have chosen qualitative research.

The other reason is that positivism cannot work in my research. I am asking for opinions of a model that I have created, to modify it when necessary but to use it as an explanation of the real world as people actually see themselves, their employer, and their chosen profession. I have been where most of the people I will interview are today, and it is my estimation from what I have heard from others I know within the information systems industry, that today little has changed from the days of the early so-called second-generation mainframes, IBM 1401, Burroughs 500, and so on. The opinion that I have formed from these ex-research conversations is that organisationally and professionally information systems professionals are still in the early 1960's. I say this without fear of major contradiction as the only thing that has changed is the technology that is used. This is my reason for this research, and positivism cannot explain using quantitative methods, the resolution my research questions.

What is the history of this project?

The history of this project is a series of *eureka-type* discoveries more probably attributable to a history project rather than one concerning Information Warfare. What began as a possible project, and grew into this current project is a time line of discoveries, mostly serendipitous, that caused me to meander towards the final target. Previously, one of the target projects I had proposed either was a moving target or was the result of ever changing technology, which made such a project an indirect moving target. That is the project could not establish a single root to stabilise the investigation, as it seemed that a butterfly in Mexico caused a new technical method to evolve in some information systems process. For example, one of the original pre-proposal projects was to discover and prove that the current dominant supplier of personal computer operating systems sourced its design upon its original IBM contract to provide an operating system to IBM's own Personal Computer products. IBM wanted, it seemed, an operating system based upon its then mainframe operating systems, and Microsoft supplied an operating system to this requirement. However, there was a breakdown between IBM and its Personal Computer operating systems supplier, and each went their own way, with IBM eventually withdrawing from providing operating systems to the Personal Computer market. This apparently, at that time, gave Microsoft the opportunity to consolidate and greatly expand its market. However, it still had the IBM mentality of how an operating system ought to operate. That is, the machine comes first then the user work-related-processes the machine performs in order to justify its purchase, installation, and ongoing costs. This is analogous to the driver of an automobile ordered by his vehicle as to what the intended destination will be irrespective of where the driver wishes to arrive. This IBM-ish attitude did not take into account other operating systems philosophy that I was aware of, particularly the old Burrough's operating system that put the work-to-be-performed processes first and the machine last. This philosophy made the operating system much simpler and more efficient to perform its primary objective - to complete the ordered work. The speed of change within the Microsoft operating system was such that it seemed possible that my intended work would have been obsolete before my project was completed, a risk I was not willing to take. I have proved to myself that the risk could have been worth it, as the Microsoft operating systems still maintain their IBM heritage to this day in 2005. However, today Microsoft may be at the situation of IBM in the 70's, 80's and 90's, where Microsoft has been too successful and has too much invested in its product range to radically change, but that is now for others to investigate.

I had to find a constant, such as the base methodology of writing operating systems that was remaining constant irrespective of the state of technology. This was to allow this work to have a long utility period, a long period when it could be the benchmark for the industry to consider. I reflected upon my own information systems career, and the initial and continuing information systems career of my eldest son and his wife as a starting point. I decided that there was no constant point and that I abandoned this project because of the *moving target* this project would try to resolve. By a serendipitous event of my searching for training options for Disaster Recovery Programs, my next attempted project, I happened upon a series of article authored by Hubert Dreyfus (Dreyfus, 2002f) concerning among other things, skills acquisition, and the eureka occurred. Dreyfus had mapped a general model that also explained skill acquisition in a way that described the current model, that is, up to his skills level of Competent, of information systems training as it still is today.

Investigating this topic further, I found skill levels above competent level are, it seemed, unavailable to current and past information systems professionals. This was the beginning of this project as it now stands.

Why are you using phenomenology as part of your philosophical foundations?

Phenomenology is not part of the foundations; it is the foundation of this project. This project is within the description of Dreyfus' *swamp* at the bottom of the ivory tower, and therefore deals with reality as I and my interviewees wish to describe it. As I stated and implied before, positivism is not the sole acceptable paradigm today, but as you raise the point of phenomenology, phenomenology, as I understand it, does not necessarily require quantitative analysis, as a matter of consideration art, sculpture, painting, and poetry, have had a great effect upon phenomenology. This on the basis that art can describe phenomenology better than any language. Looking at phenomenology from Hegel onwards, we find every major thinker relies upon Hegelian Philosophy, using it either as a foundation of discussion or as providing by-products that allow the basis of new interpretations of humanity. If my memory serves me correctly Spencer and Krauze (Spencer & Krauze, 1996) state "For the last 150 years, almost every major development in philosophy from Marx to Derrida and

Postmodernism can be seen as confronting the challenge of Hegel's system.' I consider that statement alone sufficient to consider phenomenology as applicable to my research.

What are the major sources of your research data?

The major sources used in this work are my own experiences, my interpretations of the experiences of others and the actual experiences of others as described by my interviewees. Outside of my own experiences, I will interview various people and if they allow me to do so, their personal experiences, to report on the effect that these actions and their reactions to these purposeful and random elements in their lives. These semi-structured interviews will provide further insights into the relevance of the research questions, and if these questions are wanting, then I will alter these questions and new interviews initiated.

What are the major sources of your research methodology?

The major sources are Guba, Guba and Lincoln, Argyris (in several books), the University of Bath Centre for Action Research Professional Practice program with works by Whitehead; Reason; and Reason and Bradbury. In addition, Checkland, Williams, and the other various and continuously growing list of respectable academics in the action research area. It has been a hard road for these researchers to pursue and action research is difficult to present well but I have no other real choice than to pursue this evolving paradigm.

What are the major sources of your research philosophical foundation?

Start from Kant, then Hegel and add Marx, add Husserl, add Schopenhauer and Heidegger, add the moderns and understand the evolutions presented by Derrida, Horkheimer, Adorno, Foucault, Sartre, de Beauvoir, and Rorty. These authors explain history from new perspectives, explain power, explain emancipation, explain slavery, explain exploitation, not in terms of the 18th, 19th, and 20th centuries, but in terms of today, the here and now. I discovered meaning from modern and post-modern approaches to these topics in today's terms, discussed topics for the last 300 years, and yet topics for current serious study! I would suggest that one should read Adorno and Horkheimer (Adorno & Horkheimer, 1993) to determine if information systems is part of the entertainment industry; I am unsure that it is not! That should answer your question.

From what you have told us, the conclusions you will reach were apparent at the early stages or perhaps even before you began your research. Is this not a self-fulfilling result? A simple confirmation of your ideas?

My experience in information systems was mostly a hard slog and unpleasant. I spent many a long week working 80 hours or more for little reward. If the project was late, a successful end met with scorn, irrespective of the reasons. If the project was on time and met all specifications, late changes would make the project late and again scorn was the result. If a client was having problems, it was usually the code-cutter's fault, never the design of the system. Today? Nothing has changed according to the people I have contacted initially, only the technology used and its high speed has changed. If you were a good programmer and spent most of your time not billing the true costs of your projects, you were a hero, if you were more honest you were on the poor performer list. What has changed? Nothing in a very long time. My question is why hasn't management science woken up to the facts that the people who are in this industry for even a short time realised that they have made a mistake in career choice. It is apparent to me that information systems professionals are by their employing organisation, resourcefully dominated and exploited by the demands of the clock and expense chart. This while ignoring of the ability of the information systems people to perform almost daily acts of high intelligence tasks without asking themselves is all of this worth my time and when and how can I get out of this messy business. Some just quit and start a small business; others try to promote themselves into other areas of an organisation. The sum of this entire personal quagmire means that a person has wasted years of their life in the pursuit of the failed ideal of being a worthy technocrat, that is worthy in the eyes of firstly themselves, then their family, and lastly their employer. This three-part hierarchy motivates, not the banality of their employment, but a desire to build or rebuild a form of self and group respect for the information systems Professional whatever they decide to do.

You haven't answered the previous question with a yes or no.

The answer is the same as the one for smoking causing Cancer. Do smoking tobacco products cause cancer? Yes, it does. Is this a proven positivist statement? Yes. Is my previous statement a positivist statement? Yes. The answer to your previous question is yes. I knew what the conclusion ought to be, and what it would be before I began this work. The only variable I can use is time, because if things have not changed in 40 years, my question to this situation is why?

I feel that you are uncomfortable. Did you expect us to rubber-stamp our approval?

Rubber stamps are not in my lexicon, nor any of their synonyms. If justice comes from the barrel of a gun, as Chairman Mao Tse Dong once stated, then we are all in for a very rough naissance period ahead of us. We are splitting the world into those who are technologically adept, skill laden, and those who are not so skilled. This birth or naissance of technology into a positive aspect of all life forms on this planet is still in labour and its birth is exceptionally short in historical terms. However, the pain is not yet over, as we have the human life cycle as a metaphor to contend with in the development of a technological world. What if large communities reject technology and expect to live as their fathers and ancestors have done for a thousand years? Do we ignore them, which is my conclusion, or do we try to convert them into technocrats? The rubber stamp is not applicable to me, but to others who in some form or missionary zeal wish to reform large groups into a technologically friendly group who worship one God and hate the other. The greatest problem does not lie outside our own community, but within it; the career path of information systems professionals is limited, deliberately so. Until this situation is resolved, we have no right to demand, ask, or beg the world to supply us with information systems Professional services. Perhaps what society needs is a new Marxian approach to create the necessary enemy to countervail the current situation. If this is asking for a rubber stamp, then you can see the seriousness of the problem to Western Technology and why such questions arise.

Why didn't you use a positivist approach?

As mentioned before, positivism is not applicable here; Action Science as described by Argyris (Argyris, Putnam, & Smith, 1985) is applicable. Even though I have asked for information supporting my conclusion, I am amenable to being wrong. I would wish that I was, frankly, but so far, the preliminary investigation has proved me correct in my thinking. If that is positivist, I am a positivist, a qualitative, Participative Professional action research and Action Science oriented positivist.

However, where is the rigour in your research? Just because you have described a problem, its costs to humanity, and the community as a whole, you still need rigour, validity, and generalisability!

Dicks best describe the rigour as you put it on his AREOL website (Dick, 2003) in dealing with this very question. Firstly, he reviews the purpose of action research:

'...to allow simultaneous achievement of change and understanding'

and then he describes the cyclic nature of action research as the foundation of its rigour. Let me explain this using my research questions and as was mentioned before, my revisable, but intended and self-fulfilling conclusions. I have a describable problem and therefore it can be resolved. The problem is fundamentally one of human actual and perceived relationships, particularly in organisations large enough to support an independent information systems group or section. This eliminates the small installation where there are few information systems professionals and the managerial career path is limited to the owner's relations or children. This leaves us with a starting point of a problem that needs resolution in the opinion of the researcher, me, in this case. At this stage, the methodology I can use, at this point, is not yet determined; I could easily go down the Positivist path or almost any other research path. I then reflect upon the problem, that is, I challenge my *A Priori* (cause to effect) and my *A Posteriori* data (effect back to cause), opinions and interpretations to try to resolve the problem using quantitative and qualitative methods or both to at least to try to describe the problem. Note that I am not looking for a problem in this instance; this seems to be the first stage in using action research, as I already have a problem which seems to be able to be resolved reflectively. I want to be able to describe that problem and then use my data collection to support, or not, my interpretations leading to a conclusion. I would probably call this method Positivist action research. I then reflect upon my reflections: If the problem is probably resolvable as a research project, then I must search for data that will provide a model of the problem and its potential resolution that is acceptable as a worthy doctoral work. Eventually I come to the point that I have a solid research question, I have a possible approach to forming a serious set of conclusions, and now I must choose an acceptable method of establishing the necessary rigour for this research. This method is action research because it is a constant refining of the data looking for disconfirming evidence as well as confirming evidence of my, as you say, self-fulfilling conclusions. I found a model that seemed to fit the basic learning of just about anything, and that is what I call the Dreyfus Model of Skill Acquisition (Dreyfus, 2002f). This began the design and refinement of the model that I will present later. However, this model gave me a starting point that allowed me to develop a three-stage model based upon the three stages of Dreyfus, but with the development of the position in the information systems Profession. By constantly refining and reflecting upon what the model was to achieve in both describing the situation and the possible resolution of

the research questions, I have fulfilled the fundamental requirements of action research. I now have to involve my interviewees to act in the same manner within their own environment. One problem I have found however, is that by constantly challenging the data that I possess from my own experience and interpreting it and then reading more widely, I am constantly finding that what started out as a bounded doctoral work, is open ended and that I must stop somewhere, but just not anywhere. The rich model that has developed from the simple Dreyfus model, has become quite complex and yet explains the problems and the research questions simply and directly.

Validity does not seem to be a problem if we can mutually agree on the definition of what is validity. Pandit of Manchester Business School (Pandit, 1996) explains in clear terms the three validities and the term reliability. He explains Construct Validity as the establishment of clearly specified operational procedures. Internal Validity he describes as the addressing of the credibility of the findings of a study. External Validity he describes as where the findings are applicable or generalisation to an analytic, or separation into different parts, and to a broader theory. Reliability is the repeatability of the study to yield the same results. This is what I believe are the use of the term validity. In this study, construct validity is based upon the action research methodology. Here I source Internal Validity upon my own experiences and the experiences of others in Information Systems. I take External Validity as the generalisability of the model to all information systems professionals, and incidentally many others locked in professional services as well. I was given the example of hack professional engineers, engineers who are necessary not for new engineering processes or procedures, but to verify current production methods of new products. This approach seems applicable to any other professional type in similar mundane positions, and this seems to answer the reliability question.

I find rich modelling a conundrum. Soft Systems introduced the rich picture, and you are introducing the Rich Model, a modification, a good one, but a modification nonetheless. In your case, it seems to express the obvious, so where do you go from here?

The intention is to improve the model or to prove it incorrect or wrong. The rich model allows others to see it for what it is without using the inherent inadequacies of language to describe the problem. The problem with any picture is what I call the temporal dilemma. A balance sheet, picture, piece of sculpture or other three

dimensional art, even literature of all types suffer from the time problem; all of these items are as at an instant, they do not and cannot show development over time, even though it took time to create the item. My model is in the same vein, it is at an instant of time, but it has one important difference. It shows what is possible over time. From the highest levels of competency, a metamorphosis through training can take this person to a point where they are an Expert or Condor; then another metamorphosis through training can occur where they can become Cultural Masters or Gurus in this industry. The dangers of not letting this happen is shown by the aircraft dropping a bomb, extreme information systems Professional disillusionment can lead to Hackers/Phreakers of exceptional quality and skill, the very thing the world does not need. The other stage is where the information systems professional changes direction to become a leader within the organisation itself, away from and beyond Information Systems, where they can roost in the tree and control all that they can see from such heights. It is up to researchers such as me to show the problem, explain a result, and put that result into effect, otherwise we will have the same problem for the next 40 or so years as we have had for the last 40 years.

This is the actual note I wrote to myself concerning this post-structuralist metaphor for a defence of the methodology used.

1. The questioning session is to provide a wide-ranging series of arguments for and against the reasons for choosing a particular research paradigm. This is the source of the reasoning for using action research of Professionals in Practice.
2. I have to present all the main streams of research methodology, and refer them to the research question(s). It must be a *reductio ad absurdum* process for most of the paradigms, but they must all be discussed, at least the major topics. There must be logical arguments for and arguments against. Wins and losses on both sides must be noted clearly and unambiguously.
3. The result must be that action research must be seen as the best, but not the only paradigm for these research questions, but it must be SUPPORTED and arguments closed concerning most other methodologies.
4. I suggest using van Maanen's outline of philosophy (it is found on the Net and show the relationships—briefly--of Philosophy.)
5. At the end of perhaps 1/3 of the Thesis the interview comes to an end, a vote is taken, and the vote is evenly split, two for, and two against. The chair and his associate vote no, while the others vote yes, even if uneasily. What do we do now?

The Chairman speaks:

"We have a tied vote, and the rules stipulate that a majority carries. It also says, and I admit I deliberately did not tell you this, that you, the subject of this committee, can have the deciding vote. This does not mean that you have, in a word won. It is not that simple.

"You are now in control of your destiny, more so now than at any other time. This is the time of taking responsibility for the world in your area of research. You may change the world for the better or for the worse; you may be misunderstood, misquoted, or hailed as the saviour of your speciality through your research. It is not a time for rejoicing but for contemplation about your own abilities, not only in your research area, but also in becoming a citizen of the world in the fullest sense of the word. You will suffer pressure from all sides, friend, and foe alike. Some cannot deal with this pressure, some revel in this pressure cooker of knowledge generation, and others become passive, and teach about dead authors while dying a little each time they do so. You must honestly deal with you, the real you, the solipsist you, the myriad other "you" and answer truthfully, --is this you truly want?

"You must now vote, and decide the outcome of this examination."

I woke up.

A Jungian Mandala?

Is this a Jungian Mandala? These religious and quasi-religious creations are usually four sided, but this one is five. Is this the pentagram of witchcraft? Is this what I think of Doctoral studies? If we delete the non-voting side, then it reverts to four sides, and becomes the typical Mandala, with me the man-God in the centre. However in this case the walls do not protect me but imprison and enslave me into a situation that I cannot escape without cost, and in this case, the cost is rejection of my thesis. What then is the purpose of this dream?

Must I consider myself, in the Jungian lexicon, as suffering from inflation that is a "state of mind characterised by an exaggerated sense of self-importance, often compensated by feelings of inferiority?" Is that why I am naked? Is that why I have planned a particular strategy that devastates any opposition by making their arguments absurd?

Jung states:

"An inflated consciousness is always egocentric and conscious of nothing but its own existence. It is incapable of learning from the past, incapable of understanding contemporary events, and incapable of drawing right conclusions about the future. It is hypnotised by itself and therefore cannot be argued with. It inevitably dooms itself to calamities that must strike it dead. Paradoxically enough, inflation is a regression of consciousness into unconsciousness. This always happens when consciousness takes too many unconscious contents upon itself and loses the faculty of discrimination, the sine qua non of all consciousness." ["Epilogue" Collected Works of Carl Jung vol 12, 'Psychology and Alchemy' par.563- Pp 43 of Lexicon by Sharp] (Sharp, 1991)

[Inflation] should not be interpreted as ... conscious self-aggrandisement.

Such is far from being the rule. In General, we are not directly conscious of this condition at all, but can at best infer its existence indirectly from the symptoms. These include the reactions of our immediate environment. Inflation magnifies the blind spot in the eye." ["The Self,' Collected Works of Carl Jung 9ii, par 44, Pp 43 of Lexicon by Sharp.](Sharp, 1991)

Initially, I find this to be both educational and frightening. Looking at the 'symptoms' however, I find that whatever the definition describes, I really do not fit into this definition, I cannot suffer from inflation because I have learned from history, I didn't like a good deal of my past experiences, but I did learn from them.

As for the future, I have shown myself to be very good at predicting events, events over which I am not at all involved, much to the annoyance of my peers. I have found that keeping quiet and not saying 'I told you so!' is by far the most powerful response when the previous event spoken of, comes true.

I do however, take on much, just to prove to myself alone, that it is possible to accomplish that which others say is improbable, and when I finish the task, again I remain silent as I look for another task that others also see as improbable. Perhaps, as I cannot climb mountains because they are there, I can attempt, and sometimes fail at completing a task to my satisfaction and expectations, but at least when it 'comes together' I find no greater personal satisfaction.

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