

The Social Psychology of Risk Handbook

i-thou

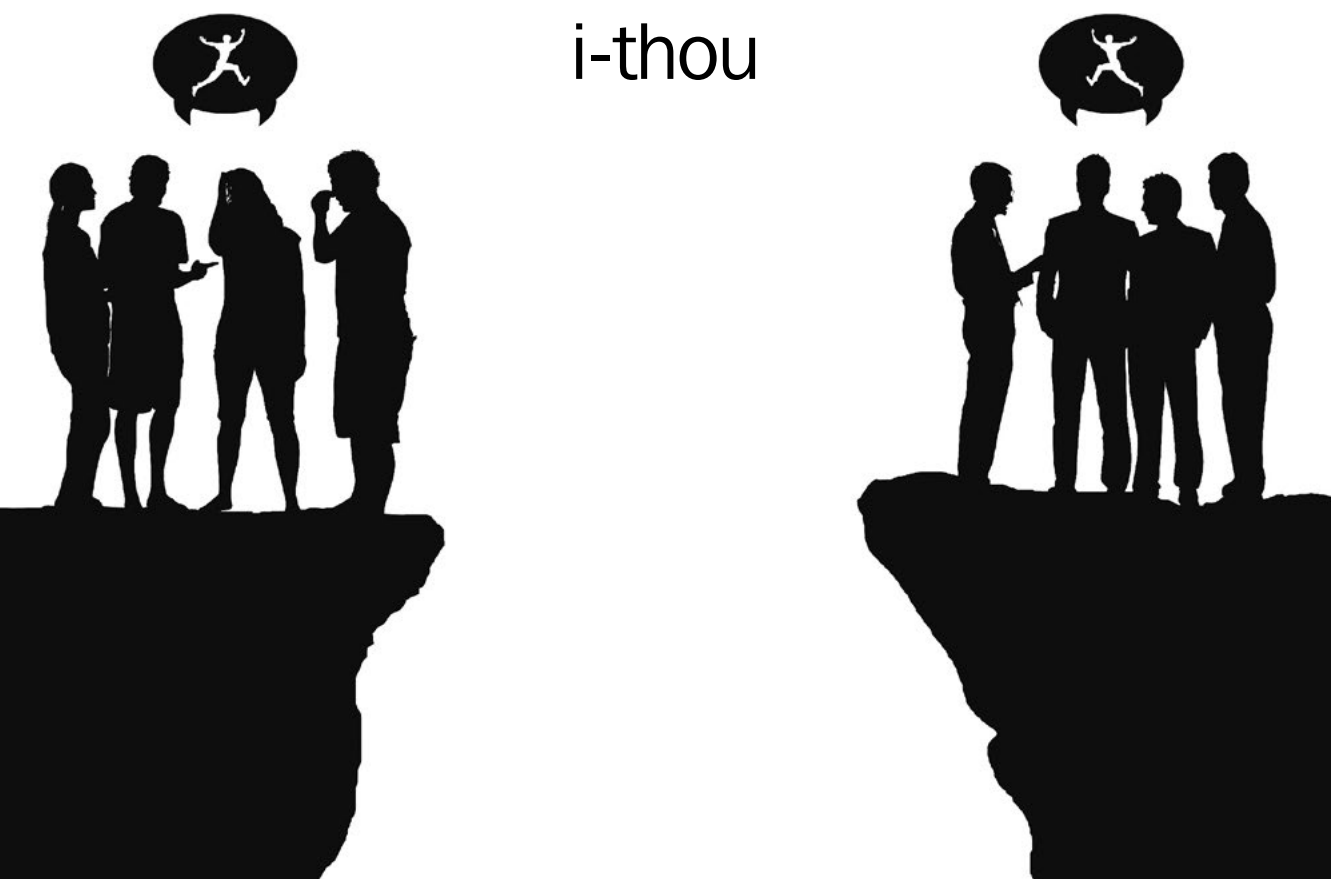


Dr Robert Long



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i-thou



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Forewords

Alan Seymour

I started crafting a foreword to this book with a great sense of privilege in having been asked to comment on this book. It made me reflect on the circa 15 years that I have known Rob and what we have learned together in those years. I set out to write the perfect foreword to reflect my thanks to Rob for his guidance and wisdom.

I asked Rob a question about the foreword 'how long should it be', I also looked around at what other forewords looked like.

I started recalling the many experiences and stories that evidenced the evolution of the influence Rob has had over my professional and personal development, and found I was writing a book!

So, I paused and re-set.

I reflected on my professional training before meeting Rob, and how incongruent (in hindsight) it was with some quotes that have always resonated with me, which are everyday more relevant especially in my role as a father:

'The mind is not a vessel to be filled, but a fire to be kindled' - Plutarch

'Whenever you find yourself on the side of the majority, its time to pause and reflect' - Mark Twain

'Education is not the learning of the facts, it's the training of the mind to think' - Albert Einstein:

'A Ship is always safe at the shore, but that's not what it's built for' - Albert Einstein.

For some reason I then googled 'Conventional Wisdom and was offered numerous definitions and quotes to consider.

I then searched for the definition of 'Conventional' and was presented with 'based on or in accordance with what is generally done or believed'.

Followed by googling the definition of Wisdom and found 'Wisdom is associated with attributes such as unbiased judgement, compassion, experimental self knowledge'.

The conundrum for me is that in my 7 year old business, we are surrounded by contemporary conventional wisdom that appears incongruent with the above quotes. The definition of an oxymoron 'a figure of speech in which apparently contradictory terms appear in conjunction' comes to mind.

The question I have is: Is Conventional Wisdom an Oxymoron? I guess only an individual can answer this question as it depends on what they believe.

I first met Rob about half way through my 20 year career at a Tier two construction company. There were around 10 employees when I first joined, no systems (written ones that is), and strong leadership. I participated in an organisation that grew rapidly on its success, resulting in the inevitable systems/accreditations/certifications required to obtain larger projects, that were ultimately written and implemented by systems managers who were empowered by the leadership. For a long time I was part of this evolution, believing completely in the conventional wisdom that 'if you can measure it, you can improve it'.

Then a convergence of events occurred:

- I became a father. I thought my role was to teach my children, whereas I now realise they have taught me far more than I them.
- I was tasked with 'fixing' the company systems because they were passing all the audits, but not producing outcomes. This task served to identify the consistently denied incongruence between the leadership desires and the written processes, in fact the common message was 'the system is required for compliance'. The business leaders would often reinforce to me the importance of the system, but when challenged on its content, could not even find where it was located.



- And then I was introduced to Dr Rob Long. I attended one of Rob's workshops on Safety, and walked out questioning everything that I had been professionally taught about Leadership, which quickly evolved to the connection that Rob was not just talking about safety, nor even just leadership, he was inspiring my thought processes on every aspect of my life.

I now realise, as most with any experience in our industry, that 'if you can measure it, then the metrics can be manipulated to prove preconceived beliefs of what is important'.

Seven years ago I embarked on my own business with a colleague, where we agreed to always challenge the accepted industry ways of doing things, across every aspect of our business. Those who ask 'has it worked' will want to see evidence in the form of metrics, profits, turnover, even LTI records. Of course there is a basic need to satisfy these elements of our business to sustain us, the real question is, what number represents success? Rob asked me one day 'how much do you love your wife, and how much does she love you, can you put a number on it?' Of course he knew it was a silly question, as did I.

We apply the learnings from Rob to all aspects of our business. The previous company I worked for had a rigid business planning process that established specific turnover targets each year, then set out to achieve the target turnover in some cases it seemed above and beyond all other success measures. The belief appeared to be that if the turnover target was achieved then all other's measures would follow. I observed this pursuit of turnover detrimentally influence critical risk decisions around client selection, construction risk and contract selection.

In my business we do not set turnover targets, we have found that if, we focus on intangible success measures such as: client selection, relationship management, and our product quality, a consistent a sustainable turnover growth has resulted.

I made it to this point then reviewed my writing, wanting to again and again edit it until it was perfect, and my message would be understood by all. I then realised that from start to finish, this evidences the story to date of the influence of Rob over who I am, so of course this foreword can't be perfect, as I still have more coffees to come with Rob and no doubt, more books to read.

I see people ask Rob questions then wait for an 'answer', and when the answer doesn't meet their view of conventional wisdom they quickly continue their search elsewhere. If you are looking for an alternative way to think, which ironically is embedded in quotes from some very wise people from the history, then, read on.

Business Director

Kynetic

Construction and Management Services

Dave Collins

'i-it' is a word that succinctly described my outward approach to Safety and Risk when my career unexpectedly turned down that path some 30 years ago. Who could blame me for that approach? I was a young Graduate Engineer and any additional training I received, to take on my new Safety role, was all STEM (Science, Technology, Engineering, Maths) focussed. That's how my boss wanted it, that's how the regulator wanted it, that's the Lawyers wanted it, even the Unions demanded it. Inwardly however, it never "felt" right, something (lots really) was missing and I have to thank Rob for crystallising my uncomfortable thoughts and for the courage to think critically about and question the STEM methodology and other unethical traits of the traditional Safety archetype.

One of the most rewarding moments in my career happened at the launch of one of Rob's earlier books (*Following-Leading in Risk*) in Sydney. I turned up not knowing many people there. After the presentation I was almost mobbed by people who wanted to thank me for introducing them, via my blog, to SPoR and Dr Long. Funny, nobody expressed such gratitude when I developed a comprehensive Safety Systems Manual or did a thorough Hazard Inspection for them. Should be a no brainer then that 'i-thou' trumps 'i-it'. 'i-thou' is at the core of successful relationships, is the guiding philosophy of SPoR and the core message in this book.

When Rob asked to write the foreword for a book subtitled 'i-thou' and speak of my own journey in SPoR, my immediate thoughts and feelings were for two people, George Robotham and Max Geyer. Both of whom were on that journey alongside me but whom sadly passed away just as we had really only taken the first steps. Both truly optimised what 'i-thou' is, and I will use some of their actions and words to help explain the concept of 'i-thou' in Risk and Safety better than I ever could.

George had a background in the military and a safety career in mining. He had no time for what he called 'displacement activities' and was proud of his very finely tuned BS detector. George's own words in an interview with Dr Long just before his death, sum up perfectly, the distinction between 'i-it' and 'i-thou':

I have seen the waste of a person, the destruction of a beautiful life, with so much potential and future, and that loss is unbelievably distressing. You wouldn't be human if you didn't find such experiences distressing. That is why I get so upset about bullshit and snake oil paraded as safety effectiveness. I see so much rubbish that people do in the name of safety, that is only there for cosmetics, it doesn't save lives. Half the time, it's about making money or covering someone's arse, but it's not about safety.

When Rob asked what his mates would say at his Eulogy, George replied:

I would like them to say I was a good husband, a good father and a leader in my work. Yes, I questioned the status quo but for the ethic of others and their well-being. I would want them to say I was a lifelong learner and cared about other people. The smartest thing I ever did was marrying my wife, Lorraine.

Max "discovered" SPoR quite late in his career but took to it with more enthusiasm or passion than anyone else I knew. He was a loving family man, highly emotionally intelligent and this led to a lot of inner conflict during his Safety career in some very hard industries – he described his need to be 'bipolar' to stay employed in that industry – 'i-it' vs 'i-thou'. In a tribute to Max, Rob wrote: 'The first thing you learned about Max through his scallywag smile was his insatiable thirst for learning and sharp mind in critical thinking.'

Max had written an article '*Corks on the quills of an Echidna = Safe; Really*' after noting that new NSCA (National Safety Council of Australia) marketing material included images of an echidna with corks on its spines, a koala in fall protection apparatus and a Kookaburra in ear muffs. Max wrote:

I know it is a metaphor, but the discourse (the language and the message) used does nothing to help people in their daily lives manage risk; it tells us that only total protection can make us safe.....
Accepting risk and developing methods to work with and/or around risk leads to learning, development and progression



Of course, this immediately resonated with me and I begged him to write some more articles for our (not ‘mine’ anymore) blog (www.safetyrisk.net – I would love to share the story of how that has evolved if anyone would like to ask). Max went on to write an number of extremely popular articles on his favourite topics of semiotics, Karl Weick

Max taught me that it’s OK to openly express love for mates and colleagues and that a ‘man hug’ is just about the most helpful thing you can do to help a mate when they are down.

Max was the perpetrator of one of the most touching things I’ve ever witnessed in my career but I’ll let Rob tell this story as well:

The following story tells you as much about Max and it does about his selfless focus and support of others. During our studies Max learned of my work and relationship with Pro. Karl. E. Weick after doing a complete unit on Weick’s work. Max had read all of Karl’s works and when it came to our first conference on the Social Psychology of Risk in 2015 (at which Max was a presenter) Max did something very special. Max purchased a first edition of Karl’s first book *The Social Psychology of Organising* posted it over to Karl for him to sign and insert a greeting and then presented it to me at the conference dinner as a surprise. Well, what I could I say, I was so thrilled by such effort and gratitude, if Karl has a bigger fan I don’t know who it is. This is who Max was and what Max did, he was so delighted to see my face beaming and appreciative, this is what gave Max joy, bringing happiness and delight to others.

Anyway, that’s my take on ‘i-thou’ framed as a couple of legends who got it. This book brings together much of what Rob has presented in his preceding best sellers and I know you will find this handbook as handy as Rob intended, even those critics who claim this ‘Fluffy stuff’ doesn’t work in the real world. Enjoy.....

Dave Collins

Editor

<https://safetyrisk.net/>

Contact Websites

www.humandymensions.com

www.cllr.com.au

www.spor.com.au

Contact Phone and email

Rob - +61 (0) 424547115;

email:

rob@humandymensions.com

rob@cldr.com.au

rob@spor.com.au



Is This Book for You?

If you want to understand, study, know and practice the Social Psychology of Risk, this book is for you. If you are sick and tired of the mythology of rule compliance and punitive discourse, this book is for you. If you've had enough of fundamentalist simplistic approaches to tackling risk, this book is for you.

The purposes of this book are numerous. One purpose of this book is to make the work of the Social Psychology of Risk (SPoR) more accessible and available to people. The previous book on *Fallibility and Risk, Living With Uncertainty* has been downloaded over 10,000 times and is a clear demonstration that the work of SPoR connects with people in what they do in their work, being and living.

A second purpose of this book is to bring together the foundations of the Social Psychology of Risk into one book. So at times, some aspects of the book may seem a bit repetitive, particularly in retelling foundational concepts and semiotics but this is because this book brings all critical concepts and ideas of SPoR into one place.

A third purpose of the book is to anchor identity and belonging to SPoR methodology. Whilst other books in the series on risk have included stories and a themed focus, this book is intended to be more general, descriptive and provide an overview of the discipline of SPoR including a full curriculum for learning, teaching and understanding.

This book has a focus on the foundations of SPoR and so may serve as a good introduction to those who are new to this area of study and research. This is why the book is called a 'handbook'.

The Social Psychology of Risk stands in stark contrast to the common focus on risk that is fixated on regulation, legislation, governance and framed in the discourse of Positivism. Positivism is the philosophy that only recognises knowledge that can be verified through empirical evidence. Positivism rejects intuitive knowledge, faith and knowledge through the unconscious. Positivism is commanded by logic and reason alone and the Social Psychology of Risk proposes that there are many other ways of knowing that are shut out by this ideology/methodology. It is not that Positivism is irrelevant but rather that it is not the whole picture nor source of knowing. There is much more to life than the confines of Scientism.

Unfortunately, the risk industry has now become so bogged down in an overburdening bureaucracy of its own creation that a new approach is needed. This new approach seeks to 'humanise' the way people tackle risk and has a focus on relational rather than numeric/mechanistic approaches to risk that typically plague industry and are immersed in Positivism.

A fourth purpose of the book is to provide an overview and map of new way to tackle risk.

Why a Handbook?

This book answers the question: What is the Social Psychology of Risk?

The notion of a handbook is that this book becomes a point of reference and that it is 'handy'. The idea of something being 'handy' conjurs up something that is useful and useable. This is certainly a facet of this book. For this reason the book is more informational than narrative as has been the case in past books in the series on risk. We also think of things being 'hand' made or of a 'handmaid', one who serves and this book certainly seeks to serve those with an interest in risk. Not to be confused with the dystopian series *Handmaid's Tale*, the Social Psychology of Risk seeks to challenge totalitarian and authoritarian views of tackling risk as is common in orthodox models of risk, safety and security management. The dystopian view of risk is profoundly captured in the discourse of zero ideology so common in the risk and safety worldview.

Being a handbook begs questions about the human hand.

The human hand is the most unique instrument of utility and communication. It is robust and also sensitive for many activities. Some even describe the human hand as 'the triumph of evolutionary engineering'. The hand is also a metaphor for co-operation and collaboration, the fingers all work in

relationship to do so much, particularly the thumb which is used in 40% of all hand actions. Most of the muscles that move the hand are not in the hand but rather in the forearm. In some respects the hand is the bony puppet of the muscles of the forearm. The skin and nails on each finger are so specialised in function that without them we couldn't 'sense' much of what we do. When I hear and see a pianist or guitarist play, I am astounded at the way in which the mind and hand are inter-connected. In this regard we even speak of 'hand memory', that the hands themselves have their own mind. When we clasp our own hands or make a fist, they are hard to pull apart. In some communities people are welcomed in by ceremonies undertaken by the hand.

We also talk about having matters 'in hand' or using 'what is at hand'. Having things at hand is an idiom for being prepared and ready. In this sense this book is a book about readiness. This readiness is a readiness to relate rather than a readiness to use.

In relationships the hand features in social connection by shaking, in touching, throwing or in holding. My mind wanders back to the Beatles hit 'I wanna hold your hand' a symbol for a generation in 1962 and for a radical change in music - <https://www.youtube.com/watch?v=jenWdyITts>. In many ways we take our hands for granted simply because they are the tool at the end of our arms and as a tool it holds other tools that our mind embodies in use to shape and create, discover and feel. How amazing that we feel things through objects as if the object has nerves in it, as if it is our hand.

Of course one can be left handed, right handed or ambidextrous. The saying about left not knowing right handedness comes from Matthew 6:3-4 and infers that working for others, helping others and serving others is all about intent, of having things 'in hand'. It is the intent of this book to serve and help those who are looking for a handy way of humanising others in tackling risk.

In hindsight, this book should have come first in the series on risk not eighth. However, we can always be wise after the event but foresight is not a strong capability of fallible humans. Of course, in the face of vulnerability, fallibility and mortality some things for us have gotten 'out of hand'. We now have to live with the absurd level of bureaucracy that has been created to manage risk that does very little to help us manage risk. We see the 'handy-work' of the archetype of *Technique* create its own meaningless necessities that have now become so burdensome and normalised in the risk industry that we don't know how to tackle risk without them.

Finally, the human hand is a metaphor for wisdom. Bronowski stated that 'the hand is the cutting edge for the mind' meaning, the hand cuts and assembles what the mind makes. The human mind always means much more than the brain, in SPoR the idea and use of the word 'mind' means the whole person.

As a metaphor for the Social Psychology of Risk the hand is a perfect symbol for wisdom because we use our hands unconsciously. Pallasmaa writes about 'The Thinking Hand' and the mystery of the hand as it 'speaks' the mind and becomes the means for learning (<https://www.archdaily.com/895039/juhani-pallasmaa-architecture-is-a-mediation-between-the-world-and-our-minds>).

The Social Psychology of Risk approaches the realities of fallibility, randomness, entropy and evolution from a foundation of social reality and dialectic. It is through an honesty with social reality that we can best tackle risk. It is hoped that this book will be used by many as an introduction to this discipline - The Social Psychology of Risk. In this sense the book should be 'handy'.

A Special Comment on Framing, Why i-thou?

The sub-title of this book is i-thou, a very important single word for the Social Psychology of Risk. In each book in the series on risk the sub-title has been used to frame the book. The word 'i-thou' comes from the book by Martin Buber of the same title and can be downloaded here: <http://www.maximusveritas.com/wp-content/uploads/2016/04/iandthou.pdf>. Buber (1878-1965) was a Jewish philosopher and mystic who set out an existential philosophy of dialogue. i-thou is central to the the Social Psychology of Risk Body of Knowledge.



I was first introduced to the work of Buber in 1982 in Master's studies and was captivated by his philosophy. In particular Buber's social understanding of education and learning.

i-thou is hyphenated and this is critical for understanding how two can become one. The hyphen symbolises the social connection between us all and is held in contrast to the word i-it. i-it is the word that captures the joining of oneself to objects. The objectification of other humans is anathema to the Social Psychology of Risk. When we speak of 'thou' the speaker addresses no 'thing'. As Buber states:

When thou is spoken, the speaker has no thing; he has indeed nothing. But he takes his stand in relation.

The hyphen is a critical tool in the discourse of the Social Psychology of Risk. The hyphen modifies two words/things into one idea thus embodying the social joining of language and symbol. All books in this series on risk graphically represent the hyphen in the chasm between cliffs joined by the intent of a human either in jumping or thinking about risk.

What makes us real to each other is not our utility but rather our 'being'. The purpose of living is not to 'use' others but to be 'present' and 'meet' others. The practice of 'presence' and 'meeting' are critical to the Social Psychology of Risk. So everything about the Social Psychology of Risk is relational and therefore semiotic that is, it can only be truly presented symbolically/graphically. Relationships are best represented poetically and semiotically, this is why the Social Psychology of Risk Body of Knowledge (SPoR BoK) is presented as a map. An SPoR BoK cannot be satisfactorily explained by text.

i-it is the language of science and engineering, it speaks of the objects it seeks to 'control'. Whereas, i-thou is the language of community, relationship and wisdom that speaks of the 'thou' as no 'thing'. In thou we 'meet' persons, in 'it' we organise and control things. It is in the i-thou that humans learn to transcend themselves and become persons in being with others. In i-it everything other than i becomes a 'means' and in the disposition of means there can be no 'meeting' with an 'other'. As Buber states:

The primary word i-thou can only be spoken with the whole being. The primary word i-it can never be spoken with the whole being.

The Social Psychology of Risk is more interested in the hyphen between the i-thou than the 'i' or the 'thou'.

Giving attention to the 'thou' rather than the 'it', makes for real meeting. This attention is the purest form of generosity and presupposes faith in the other and movement away from certainty. The movement away from certainty is the movement of trust, faith and learning. When we enter into any social relationship we enter into uncertainty and turbulence, we don't know 'the other' but rather trust and have faith in the other. When a relationship breaks we learn painfully that our faith and trust was misplaced. Any social relationship must generate uncertainty therefore, 'i-thou' is a disposition of risk. 'i-it' is an orientation for certainty, control and empire.

The Social Psychology of Risk stands in contrast to the i-it of science, engineering and Positivism that commands the ideology of zero, absolutism and fundamentalism in the quest for certainty common to all the risk industries (safety, risk and security).

The best way to avoid uncertainty and the call for faith is to avoid social relations and frame living to objects. The objectification of living is framed through the quest for certainty.

The quest for certainty and the reality of fallibility don't mix. The fear of uncertainty is the fear of learning and the fear of living fallibly. It is in movement in the hyphen between the i-thou that we learn so, therefore - all living is meeting and all meeting is real living. Real 'meeting' must therefore be an act of faith in paying attention to 'the other'. The purpose of i-it is not to meet but to control and command. In this static state of certainty there can be no movement, no risk and therefore no learning.

i-thou is the language of hope and 'primes' a discourse of relationships. In i-thou we move and have our being. i-thou symbolises the existentialist dialectic that comprises the foundation of SPoR.

A Special Comment on Semiotics

Semiotics is the discipline devoted to understanding signs, symbols and communication and their significance (semiosis). Every cultural act is relational and therefore semiotic and every semiotic comprises its part in the 'semiosphere' (Lotman). SPoR understands the world through the discourse and dialogue of signs and symbols.

Yelle (2013, p. 4) states that rational discourses of science and law were: 'established in opposition to poetry, rhetoric and myth'. Similarly, the purpose of Positivism was to oppose the sensibilities of metaphysics and poetics. Such oppositions of themselves limit the capability of the risk industry to understand culture. This is what Yelle calls 'hermeneutic narcissism'. This infers a way of interpreting the world through the lens of power and control. That is, the world exists to be used and controlled in i-it not for the world to speak to us in i-thou.

It is an assumption of the Social Psychology of Risk that all semiotics are critical for an understanding of culture and risk. All enactment in risk and learning is ritual performance and therefore semiotic. Ritual is culturally constructed symbolic communication in social context. All ritual is socially and culturally understood.

It is impossible to understand SPoR without a sophisticated understanding of semiotics. It is impossible to understand culture without understanding the semiosphere as the 'collective unconscious'. Dialectical exchange between i-thou is comprised of semiosis (construction of meaning) and semiotics (the grammar of signs, symbols and semantics).

In SPoR, the semiosphere can only be understood through a semiotic theory of culture. As Lotman states:

Metaphor is the universal principle of the human and of the divine consciousness ... thinking that brings together the dissimilar and unites what is unifiable. (2000. p. 43)

It is because risk is both a 'wicked problem' and a paradox that one can only bring such paradox together in semiotic understanding. It is through semiotics and metaphor that all disciplines, ideas, worldviews and philosophies speak. Therefore it is the one thing they all hold in common. It is through semiotics and metaphor that philosophies and ideas seek to speak to each other.

If there is no learning without risk, then the quest for risk aversion is also the quest of anti-learning. One can only juggle such contradictions in semiotic form. Lotman calls this 'the semiotic mystery'. (2000.p. 48)

For this reason all books in this series on risk use extensive symbols and models to convey the 'semiotic mystery' of risk. All of the book covers in the series on risk convey a message that is triarchic and dialectic, representing the movement of learning and the uncertainty of risk.

The Philosophical Bits

When people first encounter SPoR they don't see any of the sophisticated philosophical language that is part of this book and the previous book *Fallibility and Risk, Living With Uncertainty*. The first engagement with SPoR is infused with graphic models, questioning and interactions about: language, symbols, One Brain Three Minds, Workspace, Headspace and Groupspace. All of that is easy to understand.

However, it is hard to write a handbook and avoid the highly complex philosophy that underpins the discipline of Social Psychology of Risk. A handbook by its nature must engage in such an apologetic. There are good reasons why SPoR is what it is. If philosophical complexity is of little interest then skip over such discussion and just stick to the stories, models and the details of the curriculum.

If you are looking to understand the philosophical difference between the orthodoxy of the risk industry and SPoR look no further than the reference list at the back of the book. These are not the books one sees in any risk industry course.

I had thought of including a lexicon in the back of the book but decided not to, leaving the reader to do their own chasing of language and meaning using Dr Google. This has help keep the text of the book to a manageable size.



The Cover and Icons

The cover of this book captures once again an event in the context of the chasm between cliffs and the enactment of people. What stands between relationships is often a chasm or obstacle/object/idea. We can focus on the object or focus on the risk required to join in relationship with others. Each community group is in dialogue about risk. They are 'meeting' in conversation about risk, including who might like to take a 'leap of faith'. There is no paper in hands or instructions/regulations to be seen just people thinking and conversing critically about risk.

The symbolism of the chasm and risk has been a metaphor for each book cover and the chasm itself serves as an icon for the hyphen that can join two into one. This symbolism was discussed in book six Chapter 2, *Tackling Risk, A Field Guide to Risk and Learning*.

There are three footer icons for this book as for all previous books: <https://www.humandimensions.com/shop/>.

The first icon represents the dance. Dance is a poetic that symbolises: form, change, uncertainty, improvisation, faith and collaboration. It is in the dance that we experience the freedom of flow and existential experience. We can connect with others in plan, form and structured exchange and also break free into a jazz-like improvisation where the one mirrors the other. The dance between people is an excellent metaphor for the i-thou and for being 'handy'. In the dance we exchange holding, touching, caressing, movement and learning. There is no learning without dance.

The second icon has been introduced previously and represents Groupspace and culture. The notion of Groupspace is foundational to the SPoR and symbolises the 'collective unconscious'.

The third icon represents conversation, dialogue and discourse. It is in dialogue and listening that we 'meet' and experience the giving and receiving of others.

Capitalisation, Bold and Italics

Critical points in the text are highlighted in a number of ways, these are:

- Some statements are italicised for emphasis and isolated as a quote to draw attention to note.
- Some concepts are placed in bold for emphasis to indicate key aspects in part of a discussion.
- Sometimes words like Safety, Risk, Security, Capital, Technique and Ideology are capitalised to denote the use of that word as an archetype that is, as a power or force that has a life of its own.

Acknowledgements and Dedication

I would like to acknowledge and dedicate this book to the work of Dave Collins. Without his insight to establish the riskex blog: <https://safetyrisk.net/> there would be little voice for anything different that stands against the dehumanising forces so common in risk discourse that objectifies 'the other'. Dave Collins, an engineer, saw the need to start an alternative voice and jumped off the cliff of the orthodox risk world and took that leap of faith into the unknown.

To you Dave, I cannot give enough thanks for your courage and creativity.

Intellectual Property

Please note: All tools in books by Dr Long are copyright and cannot be on-sold or used in a commercial setting without permission. Dr Long doesn't give permission for his tools to be used commercially without prior training in SPoR. Training in SPoR gives context to the tool and allows its proper use.

Accreditation in SPoR

The only way one can become accredited in the Social Psychology of Risk (<https://spor.com.au/>) is to study with the Centre for Leadership and Learning in Risk (<https://cllr.com.au/>). Once one has studied in the curriculum of SPoR (face-to-face or online) one can then become accredited to teach, train and coach others in this discipline, as in any other discipline.

One can only become entitled to use the Intellectual Property of SPoR after studying a minimum of 8 modules in the CLLR curriculum. One is only deemed a 'Master-Maven' in SPoR on completion of a minimum of 12 modules in the CLLR curriculum.

Structure

The book is structured in three parts.

The first section looks at the foundations of the Social Psychology of Risk (SPoR) in particular, understanding human 'being' and learning.

The second section looks at critical concepts in understanding SPoR. This section has a focus on mapping the SPoR Body of Knowledge, explaining semiotics and core principles associated with SPoR thinking.

The third section sets out the curriculum for SPoR including discussion of socio-ethical boundaries and challenges in tackling risk.

SECTION ONE

Foundations - i-thou





CHAPTER 1

Foundations - i-thou



Outside of the semiosphere, there can be neither communication nor language. Yuri Lotman - Universe of the Mind, A Semiotic Theory of Culture.

We cannot articulate experiences or rules-of-practice except via words and symbols. Letiche and Lissack. Coherence in the Midst of Complexity.

The primary word 'I-it' can never be spoken with the whole person. Buber - I-Thou.

Being Born Social-Psychological

There is nothing quite like the birth of your first child. Nothing can be said or done to prepare you for this experience. Indeed, it is in this moment that your life changes forever, there is no 'putting the genie back in the bottle'. It is in the cycle of life-birth-death that fallible humans acknowledge their vulnerability and the fullness of life. I'm sure this is why all ancient civilizations have fertility cults and symbols as the foundation for their cultures.

The birth of my first child brought not only a realisation about the cycle of life but also the mystery of the triarchic self. *Figure 1. Birth of Our First Child* depicts the transitions of generations with my mother (right) and my wife and i on the first day of becoming parents.

Birthing and new life bring the social nature of living into profound focus. There is no i or solitary self in human identity, there can only ever be i-thou. Mother-Father-Child is the basic social unit of humanity or egg-sperm-fertilization.

Yet, it is at birth that one can only see the past, no one can ever know how that small person will develop or who that new person will be. One can only remember life backwards but can only enact life forwards. Everything in between is a dialectic between the past and future, which is the present. Even then, the present is only a temporary moment in existence, such is the nature of risk.

Of course, when one considers (or doesn't consider) conception, one takes a 'leap of faith' into the unknown. It is often in the uncontrolled unconscious passions that conception itself takes place. One knows so little about the future and even so little about one's partner that even models of parenting are not known until the child begins to grow up. All the grand theorising and projected assumptions of parenting strategy are meaningless until the social context creates reality and tests theories of being.

To suggest a sense of prediction or projection based on the past (or hereditary genes etc) is foolishness. Any sense of 'being in control' stands as nonsense when one becomes a parent and realises how little is in control. This is the nature of fallibility and the 'leap of faith'.

Figure 1. Birth of Our First Child



The i-thou

Humans are social-relational beings. There is nothing holistic or human in this world that is not social-relational. Humans exist as persons in relation to the world, the earth, each other and to themselves. Isolation from the social is death to humans. There is no such thing as an individual - who is not in relation to the world, the environment, others and themselves. This is the foundation of the Social Psychology of Risk.

Similarly, a world where humans are dehumanised as 'objects' is the death of relationship and all that is associated with fallible personhood - love, care, trust, learning, maturation, growth, development and being. The i-it world is a world that shrivels upon the person and turns the person into an object. When we use others as objects or others use us as objects there is no i-thou. We don't live in the world to be used or become a user but rather to be 'met'. One is humanised in true 'meeting' and dehumanised in 'using'. This is the foundation of the Social Psychology of Risk (SPoR).

When we turn relationships into numerics, metrics and objects, there is no 'meeting'. This is the relation of 'i-it'. There is no meaning and purpose in a life that consumes rather than 'meets'. When we are 'met' rather than 'used' then we experience personhood through i-thou. The hyphen between the i and thou makes the i-thou one word. It is in the hyphen that the dialectical (interpenetration) meaning of 'being' human is discovered. In the i-it one simply exists, in the i-thou one truly lives in being, in fallibility, learning and 'meeting'.

Social Identity

When we speak to others we cannot speak without declaring social identity. I am a husband, a father, a son, a partner, a brother, a friend, an enemy, a relative, an outsider and an 'other' Even when we use the pronoun 'i' we do so in relation to other pronouns such as 'they', 'we', 'us' and 'them'. I only know I am an 'i' in relation to others.

Two Become One

I remember when I was getting married in 1974 and repeating the words in the ceremony that ‘two shall become as one’, an extract from the Gospel of Mark (10:8). The Hebrew word ‘yada’ designates this way of ‘knowing’. Yada is about one being penetrating the ‘other’, not like a duet where two harmonise as one but as one-in-one. The creation narrative (Genesis 2:24) says that ‘two become one flesh’, this is the meaning of the hyphen in ‘i-thou’. This one-ness is the purpose of ‘meeting’, when we ‘see’ the other as we ‘see’ ourselves.

When I had my first child in 1978 and became a father, I realised that ‘one-ness’ and ‘being’ was material, biological and spiritual. There is nothing quite so mysterious as the gestation to birth experience. Now with a 40 year old son, the word ‘father’ means something anew each year.

So, as humans and persons we are social and psychological. Psychology is about understanding humans in: behaviour, body, mind and spirit. Psychology acknowledges that being ‘human’ and human ‘being’ is about conscious-unconscious ‘being’. The hyphen here is important too. When we understand humans as whole beings one cannot break down being human into parts as if reduction into parts helps in understanding. As is stated by Lotman (p.xii):

If we put together a lot of veal cutlets, we do not obtain a calf. But if we cut up a calf, we obtain lots of veal cutlets’.

This is why the nature of Social-Psychology is often joined by hyphenation as one word. One cannot separate the notion of human being by looking at its parts. Even then, how does one ‘look’ at the unconscious? The conscious and unconscious are an integrated dialectical (integrated) whole. By ‘dialectic’ I mean mutual interpenetration and ‘meeting’, what Moltmann (1969) calls ‘perichoresis’.

This interpenetration helps us understand why humans within themselves and socially can flip in and out of consciousness to unconsciousness in a millisecond. The human relationship in personhood is symbiotic.

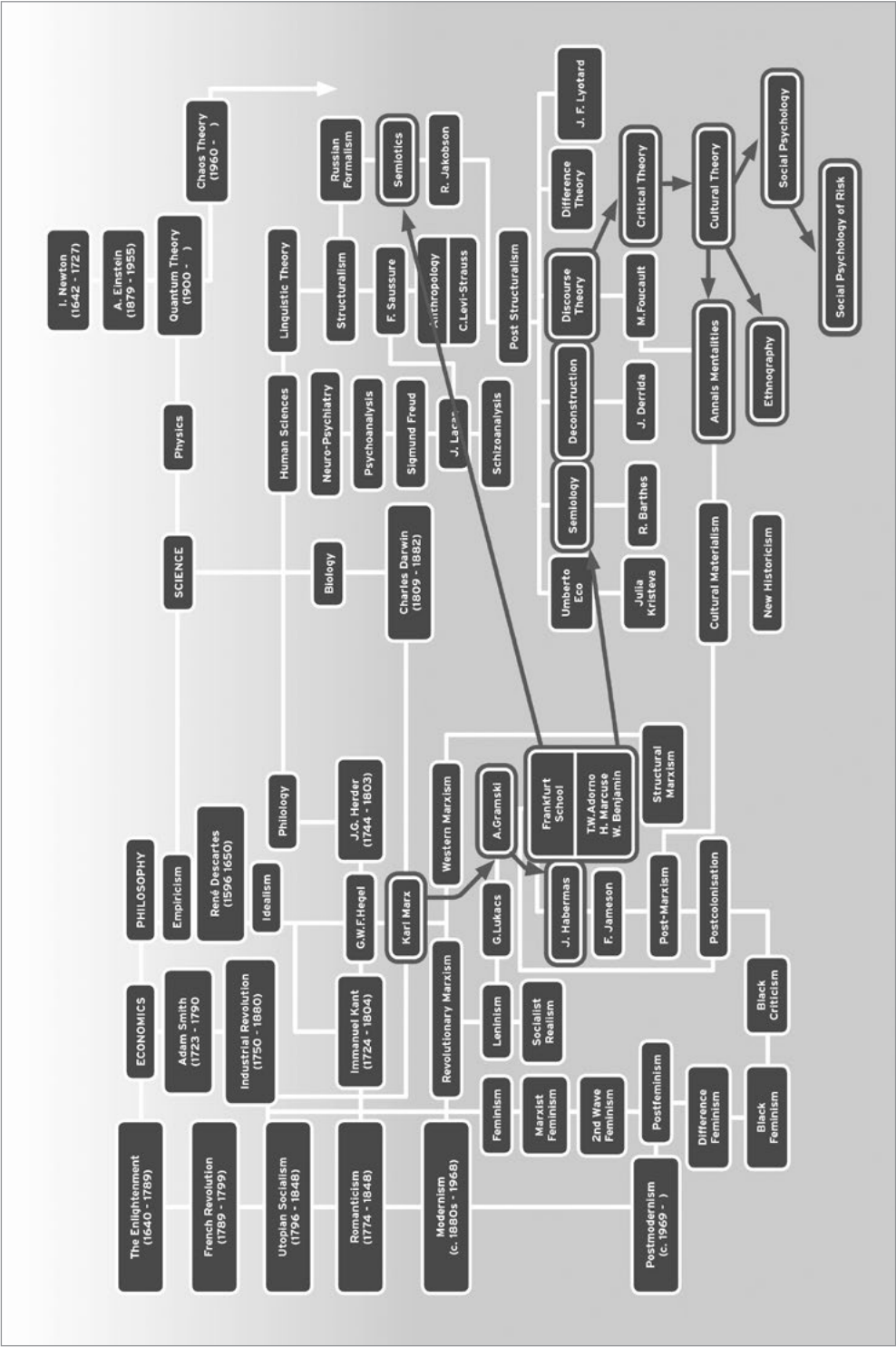
The Foundation and Evolution of a Social Psychology of Risk.

One cannot articulate anything relationally-socially through text-alone. The only way to really convey something that is social and relational is to use semiotics, symbols, signs, graphics and metaphor. Indeed, semiotics is one of the most critical of transitions in the evolution of SPoR.

The evolution of Social Psychology of Risk is represented graphically at *Figure 2. The Emergence of the Social Psychology of Risk*. This graphic maps the territory concerning the development of the Social Psychology of Risk from its roots in The Frankfurt School and the birth of cultural theory. The representative map provides links showing an evolution from post-Marxist thinking through to Semiotics, Critical Theory, Cultural Theory, Ethnography and Social Psychology. In this way the tradition and discipline of Social Psychology can be explained in relation to its roots and in contradistinction to associated human sciences and positivist science. This semiotic map also shows related disciplines and associated theorists such as: Soren Kierkegaard, Erich Fromm, Jacques Ellul and Carl Jung who are not named on the map but have roots through existential thinking, theology, critical theory, cultural theory, sociology and psychology.

The language of ‘evolution’, ‘emergence’ and ‘organics’ are critical for understanding the nature of social psychological discourse and foundations for a Social Psychology of Risk.

Figure 2. The Emergence of The Social Psychology of Risk



Transitions and Emergence of SPoR

The evolutionary map of the emergence of SPoR is situated amongst a range of historical developments that indicate association and contradistinction. Although the boxes on the map start at Marx is could just as easily start at the philosophy of Hegel although connections with Hegelian Philosophy in SPoR are quite remote even on the notion of dialectic. Hegel proposed that truth is found in synthesis between dialectical opposites whereas SPoR does not. Indeed, SPoR argues that there is no synthesis between opposites (binaries and polar) but rather a continual hyphen-conversation that remains in motion. This does not mean that SPoR is incoherent rather, it is consistent within itself.

There are some interesting relationships on the map that indicate what kinds of disciplines emerged from post-Marxist thinking namely: Feminism, Post-Feminism, Post-Modernism, Post-Structuralism. It is no surprise that the Post-Structuralists and Post-Modernists align well with various schools in Semiotics (sign systems) and Semiology (meaning in sign systems). These transitions helped form a new school of History and Historiography emerging out of France, *Annales* History (https://en.wikipedia.org/wiki/Annales_school). Annals History and many French philosophers (Piaget, Ricoeur, Marcel, Merleau-Ponty, Foucault, Derrida, Lyotard, Baudrillard, Lacan, Girard, Bourdieu, Deleuze, Ellul etc) are critical for the emergence of Social Psychology and SPoR. The work of many of these philosophers informed the development of Critical Theory, Cultural Theory and Ethnography - the essentials that lead to the foundation of Social Psychology as a Discipline following World War Two. The influence of these philosophers on the foundations of SPoR is critical.

Many texts in Social Psychology like to trace the roots of Social Psychology back to the work of Triplett as the first experiment in Social Psychology in 1898. Others trace the roots of Social Psychology back to the work of Kurt Lewin in 1933 but much of this early work was more about applied and organisational psychology. This early work bears little resemblance to the modern idea of Social Psychology more identified with the pioneering work of: Milgram (Obedience to Authority), Zimbardo (The Stanford Prison Experiment), Darley and Latne (Genovese Effect), Ashe (Group Think), Adorno, Frenkel-Brunswick, Levinson and Stanford (The Authoritarian Personality) and Festinger (Cognitive Dissonance).

Much of the early experiments in Social Psychology are documented in *Experiments with People* by Abelson, Frey and Gregg (2004). The growth and development in the modern movement in Social Psychology is anchored to research into the Nazi phenomenon and the Holocaust. In particular, seeking to explain why the Nazis could systematically exterminate the Jews and others.

The Society for Personality and Social Psychology was founded in 1974. The Society of Australasian Social Psychologists was not founded till 1995.

First Contact with Social Psychology

I was first introduced to the notion of Social Psychology through my study for teaching in 1971. The text *Social Psychology of Teaching* by Morrison and McIntyre (1972) was a foundational text in my second year at Bedford Park Teacher's College in South Australia. Bedford Park was a radical Teacher's College aligned with Flinders University and was later to become a College of Advanced Education (CAE) and then University under the Dawkins review of Higher Education.

Bedford Park had a number of radical post-Marxists on staff and a sharp edge in critical thinking. My very first tutorial was with Dean Ashenden (later to become founder of the *Good University Guide*) and the opening tute was on determinism and free will. many of my orthodox foundations were shaken in that first year.

I remember Art with Tom Gleghorn and English Literature with Mem Fox, both radical in the way they challenged old paradigms. I studied Gestalt Psychology, Transactional Analysis and a host of New Thinking in Education, Psychology and Sociology at the time. You can read a brief History of these changes by the excellent Education historian Alan Barcan (<http://erpjournal.net/wp-content/>

uploads/2012/07/ERP37-2.-Barcan-A.-2010.-Public-Schools-in-Australia-from-the-late-1970s-to-the-late-1980s.pdf). Similarly, Bambach presents an effective overview of the times: <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1030&context=ajte>.

It was the early 1970s the South Australian and Australian Governments both had radical leaders open to post-Marxist thinking namely: Don Dunstan (https://en.wikipedia.org/wiki/Don_Dunstan) and Gough Whitlam (https://en.wikipedia.org/wiki/Gough_Whitlam). It was also a period of major social upheaval with the Moratorium Movement (<https://www.nma.gov.au/defining-moments/resources/vietnam-moratoriums>) against the Vietnam War and a fresh music scene full of protest, hippies, psychedelics, free love and critical thinking.

How was I to know that years later I would apply the discipline of Social Psychology not just to Teaching but also to Risk. I first began to apply the ideas of Social Psychology to risk in 2003.

Other foundational influences of the time in my studies were Ivan Illich *DeSchooling Society*, Paulo Freire *Pedagogy of the Oppressed*, Michael Macklin *When Schools are Gone*, Neil Postman *Teaching as a Subversive Activity*, Everett Reimer *School is Dead* and, Paul Goodman *Compulsory Miseducation*.

All of the study I undertook from 1971-1974 was based on Critical Theory, Cultural Theory and Social Psychology. Similarly, the school system was undergoing radical change with the establishment of many alternative schools and Open Classrooms throughout Australia. One of the most famous of the Alternative Schools was The School Without Walls In Canberra. I have worked with several of its graduates in the 1990s and can only say they were amazingly creative and innovative as work colleagues. In my first seven years of teaching I taught in open classrooms where freedom of choice was emphasised and traditional teacher/school authoritarianism was discouraged.

Little was I to know that later in 1995 I would use all I had learned in Social Psychology in starting my own alternative school - Galilee School. Galilee is one of the last remaining Alternative Schools in the ACT and offers High Risk young people an open approach to education and learning that is not available in orthodox schooling. Galilee is modelled on the Social Psychology of Teaching and Risk and continues today (<https://commsatwork.org/services/community/galilee-school/>).

You can see a celebration of the founding of the school in *Figure 3. Certificate of Acknowledgement* and *Figure 4. Newsletter Tribute*.

Figure 3. Certificate of Acknowledgement

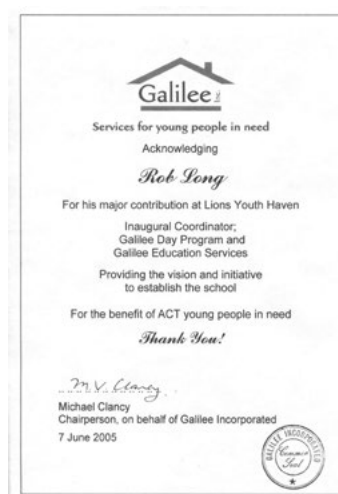


Figure 4. Newsletter Tribute



From the moment I began applying the discipline of Social Psychology to risk I knew it was in stark contrast to traditional and orthodox approaches to risk that were consumed with: legislation, regulation, mechanics, numerics and materialist/individualist/positivist and behaviourist approaches. The moment one approaches risk from a cultural and social-psychological perspective one will automatically come into dissonance/conflict with the fundamentalist-materialist-individualist paradigm most common in the risk industry.

Socio-Psychological and Psycho-Social

The emphasis on the Social in Social Psychology is critical and very different than having a Psychological emphasis on the Social. Each Discipline (Social Psychology and Psycho-Social) has an entirely different focus as is graphed in *Figure 5. Social Psychology of Risk* and *Figure 6. Psycho-Social Risk*.

The emphasis means that the Social condition of humans as persons informs the determinates of human psychology in Social Psychology. Whereas the PsychoSocial emphasis is on the individual psychology of the person that informs the individual social sense of being. Whilst there are some connections between both disciplines it is important not to confuse the two. Both disciplines have a different focus and should inform each other similarly. Similarly, Organisational Psychology starts with a focus on the organisation as a system and should not be confused with Social Psychology. All three disciplines should inform and complement each other.

Figure 5. Social Psychology of Risk

Stress, Distress, Destress, Eustress	Task User Culture Machine Environment Workspace Specials
Mental Health	Psychosocial First Aid
Occupational Design	Ergonomics
Injury	Workers Compensation, Rehab
Work and Time	Fatigue
Body, Musculoskeletal	Diet, Obesity, Disorders
Healthy Factors	Illness, Toxicity
Job Control - Busyness	HR Focus
Climate	Meaning and Purpose
Organisational Justice	IR
Workplace Behaviours	Violence, Bullying, Conflict
Habits, Substances	Supervision, Management
Design - Change	Depression, Anxiety

Figure 6. Pyscho-Social Risk

Social Arrangements	Decision Making
Communications	Semiotics - Significance
Relationships	In and Outgroupness
Community	Obedience - Deviance
Influence - Persuasion	Helping
Power - Aggression	Prejudice, Attraction, Violation
Politics	Conformity - Authority
Groups - Belief	Belonging - Equality
Status	Attachment - Identity
Collective Mindfulness	Heuristics, Biases, Coherence
Culture	Discourse, Language
Complexity - Systems	Wicked Problems
Organising	Sensemaking



Social Psychology of Risk is not Human Factors

Social Psychology ought not to be confused with Human Factors which unfortunately is rarely about the factors of being human and mostly about humans as a 'factor' in a system. Human factors discourse (discourse is about power in language) is common in the aviation industry for example: https://www.casa.gov.au/sites/g/files/net351/f/_assets/main/sms/download/2012-sms-book6-human-factors.pdf. Some of these 'factors' have some similarity to PsychoSocial factors but always the focus is on systems in a 'closed' and mechanical sense.

In SPoR the focus is on humans as persons in an ecology as an organism.

The emphasis on organics and ecology comes from Bateson (1972) and includes understanding the messy, chaotic, random, uncertain, unpredictable and fallible nature of human 'being'. This stands in stark contrast to the common Human Factors genre and PsychoSocial agenda, for example:

- https://www.faa.gov/files/gslac/courses/content/258/1097/AMT_Handbook_Addendum_Human_Factors.pdf
- <https://www.globalairtraining.com/resources/DOC-9683.pdf>
- https://www.researchgate.net/publication/267719453_Human_Factors_Ergonomics_and_Human_Factors_Engineering_An_Analysis_of_Definitions
- https://www.researchgate.net/publication/240237163_Human_Factors_The_Last_Frontier_of_Aviation_Safety
- <http://apps.who.int/iris/bitstream/handle/10665/252273/9789241511612-eng.pdf;jsessionid=77D22DFE4A99805C2E52A71B878689A4?sequence=1>
- <http://www.ajan.com.au/vol30/issue2/7fryer.pdf>

The literature on Human Factors does not mention Social Psychology or the Social Psychology of Risk. Indeed, the literature is dominated by discourse in engineering not organics eg. Hollenagel et.al., (2006) *Resilience Engineering, Concepts and Principles*. It is not that this view is invalid but rather that it is not a Social Psychological view of risk and ought not to be confused as such. Indeed, I have developed the following map at *Figure 7. Schools of Thought in Risk* to help clarify the distinctions between various schools of thought and practice in risk, safety and security. It is important not to read this table in a linear or hierarchical way, it simply lists various emergences over time from left to right.

Schools of Thought in Risk

The purpose of the table is exemplary only, it is not its purpose to be a complete or comprehensive record of all the various players in the discourse on risk. It does however highlight the fact that schools of thought about how to manage risk are present in the risk industry and that each school is conditioned by its anthropological assumptions. One's worldview or paradigm shapes the way one constructs an understanding of humans and this shapes what one envisions humans should do in engaging with risk.

The table seeks to explain the comparative differences between perspectives on risk and how the risk industry is siloed. The purpose of the table is not to demonstrate which approach is right or wrong rather, that each silo has some element of truth that is constructed as a whole. Often the construct of each perspective is undertaken in isolation from other perspectives indeed, some methodologies have no idea of the presence or philosophy of others.

It is also important to reflect on the place of a Social Psychology of Risk (SPoR). No one perspective including SPoR, can have a monopoly on truth. Indeed, an holistic perspective ought to consider all eight (and more) perspectives on tackling risk. This is what is intended by advocating for transdisciplinarity.

Figure 7. Schools of Thought in Risk

Methodology	Orthodox	Scientism Positivism	Behaviourism Neuroscience	Zero Vision
Anthropology Ideology	Human-as-servant	Human-as-object	Human-as-machine	Human-as-perfect
Agents	Robens, Heinrich, Bird, Gawande	Difford, Taylorism, Positivism, Hubbard, Vose, Aven	McSween, Lopez Mena, Coleman, Hausler, Weber, Evans et.al	DuPont, Geller, fundamentalism
Language	Compliance, rules, controls, hazards, risk	Hazards, barriers, preventions, hiererachies, bow-tie, quantitative	Behaviour, punishment, prevention, reward	All accidents are preventable, risk is a choice you make, absolutes
Culture	Cultre-as-rules/laws	Culture-as- mechanisms/ systems	Culture-as- behaviours Regulation	Culture-as-controls perfect people
Question	How can we make people obey rules/ law?	What are the mechanics or risk management?	How can people be controlled?	How many people do you want harmed today?
Focus	Rules, regulation, controls	Method, order, controls, compliance, quantitative measurement	Surveillance	Binary opposition, fundamentalism, transhumanism
Solutions Strategies Methods	Engineering, regulation	Policing systems, quantitative data	Inputs and outputs	Counting and punishing mistakes, certainty



Process-Enterprise	People-Based	Human Factors	PsychoSocial	Social Psychological
Human-as-factor in market/project Risk Management	Human as Person	Human-as-factor in system	Human-as-healthy person	Human-as-social being/fallible
Reason, Hopkins, Hollnagel, Crouhy et.al. Allen, Brown, Hull, Taleb, Ropeik	Thomas, Reason	Dekker, Blacker	Erikson, Dollard, Cara and McRae	Long, Slovic, Weick
Governance, systems, incubation, method, project, market	Human error, Due Diligence	Human error, just culture, due diligence	Health, well being, mental health, work life balance, stressors	Collective unconscious, semiosphere, human decision making, social influence, risk
Culture-as-organising	Culture-as-groups	Culture-as-systems/ leadership	Culture-as-holistic relationships	Culture-as-social construct Collective unconscious
How does organising affect risk?	How does an organising affect risk?	How can people minimize human error?	How can we keep the whole person well and healthy?	How do social arrangements affect decision making?
Improve process and mechanics of systems/process	Individuals in organisations	Individual as factor in systems	Well being, mental health	Learning and social condition, wicked problems
Understanding flow and sequence	Reforming organisation	Reforming organisations and systems to minimise human error	Improve health and well being	Relinquish controls, understanding social construction, influencing decision making

The table also demonstrates the problem with an ‘all eggs in one basket’ approach. What the SPoR approach seeks is not a new exclusivity but rather an acknowledgement of presence and validity in approach to be included in the array of perspectives in tackling risk.

Each School of thought has by its own worldview (methodology), methods and focus/range of programs and strategies for tackling the challenges of risk. Each School of Thought carries its own set of assumptions about what it is to be human (anthropology). The table lists seven criteria for comparison and each helps highlight the differences between each school of thought. These are: Anthropology/Ideology, Agents, Language, Culture, Questions, Focus and Methods/Strategies.

The fundamental driver of each school of thought is its methodology (philosophy/ideology) and what it assumes about the human condition (anthropology). Naturally, if one assumes humans are machines and the sum of inputs and outputs then a behaviourist method makes sense. From an SPoR perspective, this is both limiting and ignores the reality of the unconscious and social reality.

If one objectifies the human then a focus on hazards and viewing humans as a hazard makes sense. Again if one privileges systems over humans as in human factors methodology then, humans become units within a system and all solutions are viewed systemically.

The table doesn’t seek to prioritise one School of thought over another but simply to show the limitations of all schools of thought including my own. The order of each column in the table is simply arranged historically from left to right, there is not an intended priority order. Although, it is the purpose of the SPoR School of Thought Table to highlight the fact that this view in particular is omitted from the discourse of the risk, safety and security industries. The core motivation for developing this comparative table is the search for acknowledgement and validation. The question is: if the SPoR School of Thought was recognised more in the industry would this affect a change in the way industry tackles risk?

The Parable of the Blind Man and the Elephant

There are many versions of this parable but the following will suffice:

In a distant village, a long time ago, there lived six blind men. One day the villagers announced, ‘Hey, there is an elephant in the village today.’

They had never seen or felt an elephant before and so decided, ‘Even though we would not be able to see it, let us go and feel it anyway.’ And thus they went down to the village to touch and feel the elephant to learn what animal this was and they described it as follows:

‘Hey, the elephant is a pillar,’ said the first man who touched his leg.

‘Oh, no! it is like a rope,’ argued the second after touching the tail.

‘Oh, no! it is like a thick branch of a tree,’ the third man spouted after touching the trunk.

‘It is like a big hand fan,’ said the fourth man feeling the ear.

‘It is like a huge wall,’ sounded the fifth man who groped the belly .

‘It is like a solid pipe,’ Said the sixth man with the tuskin his hand.

They all fell into heated argument as to who was right in describing the big beast, all sticking to their own perception. A wise sage happened to hear the argument, stopped and asked them ‘What is the matter?’ They said, ‘We cannot agree to what the elephant is like.’

The wise man then calmly said, ‘Each one of you is correct; and each one of you is wrong. Because each one of you had only touched a part of the elephant’s body. Thus you only have a partial view of the animal. If you put your partial views together, you will get an idea of what an elephant looks like.’

The point of the parable is this. All views of the world are biased, none is more valid than another (further see the work of Kuhn, Feyerabend and Lakatos etc). The STEM worldview is as subjective as the SPoR worldview or a theological worldview. To privilege one over another simply deprives one of the other.

Each School of thought is a worldview that has its own kernel of truth, and this is also the case with SPoR. However, all 'isms' represent a philosophy/ethic/ideology that grasps a kernel of an idea and makes it the whole. This is why a transdisciplinary approach across all Schools of thought is the best way forward in tackling risk.

It's the -ism That Matters

There's nothing wrong with wanting to be safe but Safetyism is a psychosis. There's nothing wrong with Science but Scientism is dehumanizing. There is nothing wrong with being rational but Rationalism warps a sense of human 'being'. The notion of an 'ism' infers taking political sides, and making an idea political (ideology).

When something becomes an ideology it enters a new dynamic with hidden political power and distortions in trade-offs and by-products. When a good idea is made the 'only' idea or 'an all governing idea', an absolute, then it takes on a whole new 'politic' and social imbalance (<https://www.tandfonline.com/doi/full/10.1080/13569317.2018.1502941>).

It is often under the power of an ism that abuse is normalized for the power of the ideology.

There is nothing wrong with wanting to be communal but Commun-ism is toxic. There's nothing wrong with being social, but Social-ism takes on a whole new meaning for how the Ideology expects us to live and behave. (Ideologies are like Archetypes, they take on a life of their own).

Please note: *Capitalisation of concepts in this book is used to denote archetypes.*

There's nothing wrong with believing in some fundamentals but Fundamental-ism commands total unquestioned compliance. Fundamentalism knows only black and white, you're in or out. We know something has become an Ideology because it ushers in political fear and any sense of dialectic or balance is demonized as 'anti' the ideology. Any criticism of Ideology is then symbolized as taboo and thus strengthens the religious power of the Ideology itself.

Unfortunately, sometimes the power of the archetype in an Ideology promotes ideological attraction eg. Capital, Safety. In such things even by name there is no neutrality. It seems like the power of Capital drives to Capitalism and the power of Safety drives to Safetyism. We see this with the ideology of Zero. There's nothing wrong with wanting no one to be harmed at work but when Zeroism takes hold in an organisation it becomes an all encompassing political/religious Ideology that will accept no debate or dissent. One can't move to transdisciplinarity if one is fixed in an absolute. All ideologies demand total compliance and as Ideologies demand blind following as an 'all governing idea'.

Facial Recognition Technology

The power of Safetyism can be observed in recent moves in Australia to bring in facial recognition into several of our cities. (<https://www.theguardian.com/technology/2019/jun/12/perth-councils-facial-recognition-trial-accused-of-blanket-surveillance>). Despite the fact that facial recognition technology is not neutral and is only a tool, it is justified in the name of 'safety', regardless of trade-offs and by-products. When safety is used to justify a social political outcome you can quickly recognize the Ideology of Safety at work because it uses fear and propaganda as a weapon.

Interestingly, in the place where the many tech industries developed facial recognition technology it has been banned because of its unhealthy by-products and trade offs! (<https://www.nytimes.com/2019/05/14/us/facial-recognition-ban-san-francisco.html>). Ideology abuses and absolute ideology abuses absolutely, because it develops a life of its own.

Sometimes people who don't understand ideology or social politics get this strange idea that I don't want or like safety. When something that is presented is antithetical to one's worldview it's just easier to write it off as some

‘wacky idea’ from a maverick or a warped view of irrationality. Nothing could be further from how I see the world. Indeed, it’s more likely that such comments are evidence that the complainant has been captured by an ideology and doesn’t know it.

Understanding the nature of ideology and archetypes ought to be foundational for anyone in risk and safety. Because, in the end Safetyism doesn’t care about risk and safety, it cares about political compliance.

Can There Be Other Valid Worldviews?

The challenge of worldviews is the challenge of the unknown unknowns. How can I know another worldview, when all I know is my own? Can there be a different view of the world other than the lens I use to see it? Could it be that another worldview that is antithetical to my own, could have just as valid a claim to knowledge? How can I know another worldview without experiencing it?

All these questions challenge the future of the risk industry whose worldview is principally STEM-only (Science, Technology, Engineering and Mathematics) knowing and positivistic philosophy. This is easily demonstrated by analysis of the the Safety or Security Bodies of Knowledge (<https://www.ohsbok.org.au/download-the-body-of-knowledge/>; <https://onlinelibrary.wiley.com/doi/pdf/10.1002/9780470494974.fmatter>)

The dictionary defines Positivism as:

a philosophical system recognizing only that which can be scientifically verified or which is capable of logical or mathematical proof, and therefore rejecting metaphysics and theism.

Moreso, the commitment of STEM to associated worldviews of Behaviourism, Cognitivism and Rationalism reject out of hand disciplines that cannot verify evidence in the same way as defined by Scientism. See further: <https://en.wikipedia.org/wiki/Positivism>

This doesn’t mean that the evidence of non-STEM views are invalid, it’s just that non-STEM knowing doesn’t fit the way Scientism/Positivism defines knowledge. Therefore, any assertion that faith, intuition or embodied knowing is valid must be rejected. Whilst it never used to be so, it is now asserted by Scientism that faith and reason are opposed to each other in binary oppositionalism. This is fascinating because one can’t talk about certainty in human fallible knowing without discussing ‘leaps of faith’ in risk.

Boundary Objects

One of the historical benchmarks of the disciplines is the creation of boundary objects that limit cross-disciplinary flow, understanding and collaboration. This is the purpose of professionalization. We experience this whenever we consult a doctor, lawyer, nurse, social worker or teacher. Once something is professionalized it creates its own politics of difference. This occurs in: discourse, language, models, symbols, anthropology, ideology/methodology, methods and sub-culture. The professionalization of a class or group of people creates political and social power. This can then be traded off against the other professions when that profession wants to exercise political power.

Remember going to that parent-teacher night and wondering why you didn’t understand what the teacher was talking about? We know what its like visiting the doctor and understanding that the Doctor knows more about your own body than yourself? Ever been bitten by a lawyer who knows how to charge a fortune because you don’t understand their world and the courts?

It’s like we need interpreters between the professions just so they can speak to each other. Professionalization focuses on what separates the disciplines rather than what they share in common.

If tackling risk is ever going to transcend across the professions then the risk industry needs to be trained as generalists not as a professionalized class of experts who cannot translate to and across the professions. In a

similar way Education is a discipline that speaks across all professions. Creating boundary objects for a class of people who claim exclusivity in understanding risk mitigates the ability of that group to break across boundary objects to the professions.

Pushing Boundaries

I first encountered the risk industry in 2003 after having undertaken a number of careers in various professions in the previous 32 years. In each of these professions I had belonged to unique associations with their own: discourse, bodies of knowledge, worldview, language, anthropology, symbolism and qualifications for entry. Then when I first encountered the risk industry I realized very quickly that I shared very little in common. I deliberately undertook a Masters in WHS so I could validate my understanding of the industry's theory and practice.

I came into the risk industry through an organization that wanted to develop a research, education and training division. My experiences and qualifications in education, learning, teaching and the psychology of learning were what were wanted. From the start of my time in this organization I discovered I was out of step with the ideology of the founder, particularly associated with: the ethics of education, learning and a fixation with Behaviourism and *Technique*.

What was even more bizarre was the fact that the founder had no awareness of: ideology, philosophy, ethics, learning, education, semiotics, language or anthropology. It was like risk knowledge was a neutral beast that didn't have to give an account of itself to anyone. Of course I quickly fell out of favour because I asked questions, and questions were considered anathema to Compliance. The culture was about: here are the rules, police the rules and punish dissent. Moreso, my questions themselves challenged the boundaries of the discipline of the risk industry and were interpreted as: troublemaking, disobedience, crazy and 'wacked'.

The idea that people could think differently outside of the closed system of Positivism was anathema. My questioning of the worldview was met with heightened defensiveness as if all repositories of knowledge were contained in the risk industry. How could one dare question the assumptions of Behaviourism? How could one perceive the language of risk as religious discourse? How could one question the ideology of zero? Surely, I had come from another planet and need to be demonized? Surely my questions were a deliberate attack on the credibility of the industry? How could you question the Bradley Curve, Heinrich's Pyramid or Reason's cheese??? Surely I was being deliberately obstreperous and disruptive? It couldn't possibly be that there was any validity to my worldview, research or questioning. It couldn't possibly be that there was another worldview that was valid but completely foreign to the assumptions of this risk industry.

I had a similar experience when I was recently asked to undertake a two day workshop at Monash University with final year Engineering students. The resistance to what I presented, how I presented and the body of knowledge I presented was received as anathema. Only 50% of participants returned for the second day. The discipline of Engineering and its assumptions about humans must not be questioned.

When I decided to question the mythology of the risk industry I discovered that I had more in common with the legal profession. Lawyers understand: social politics, language, archetypes, semiotics, discourse, jurisprudence, ethics and philosophy. I guess this is why the 3 days of conversations with Greg Smith went without a hitch (<https://vimeo.com/showcase/3938199>). Lawyers understand that questioning and debate is the foundation for discovery, learning, creativity and critical thinking. None of this is abnormal indeed, it is considered essential.

When I wrote the allegory of the Kingdom of Norom (<https://safetyrisk.net/safety-in-the-land-of-norom-from-the-book-of-nil/>) I was trying to explain just how foreign the risk industry seemed to me. How could an industry globally deny fallibility? In what land of denial could an industry propose perfectionism as normal?

Does Something Have to Be True to be Real?

This is one of the critical questions for understanding symbols as myth and myths as symbols. A Ricoeurian understanding of myth/symbol is critical for SPoR.

When we have an idea that takes on significance it becomes symbolic for us. Take for example a change in life. We can often mark a change in life by a moment or action or event that symbolises that change perhaps the act and event of marriage. Yes we do all kinds of things in planning for the wedding day and attach to all kinds of symbols on the day like: rings, vows, dress, meals, kiss and music. But all of the things that symbolise the day become sub-symbols for the bigger symbol of marriage. We symbolise the reality of being committed to another person not just by the event or a certificate we sign but by the many intangible values and attitudes embodied in those symbols. However, at its foundation a marriage is a social contract empowered by the symbols to which we attach emotionally, physically and psychologically.

All symbols embody the power of the myth embedded in the symbol. The symbol embodies the narrative of the event, act or moment that has since become history. The symbol serves as an attachment to that history and a reminder that the event was real because it captures your commitment, beliefs and values at that time. I remember in my wedding vows saying 'with this ring I thee wed'. The ring on the finger from that day symbolises that commitment.

In an understanding of SPoR and semiotics we know that a myth is a symbol and a symbol a myth.

A myth is not a fable or fairy story, it is a real thing that symbolises something. Something doesn't have to be true in the sense of scientifically factual to carry symbolic power, meaning or significance. Something doesn't necessarily have to be true to be real. In religion and theology this is how symbol and myth are understood. A narrative doesn't have to be factually true to be symbolically powerful and significant.

We learn through the studies of religions just how powerful symbols are as myths that hold power and significance for people. An initiation ceremony, smoking ceremony, story, artefact, drawing or act of baptism can carry enormous significance for a person or group. The commitment to symbols is really the commitment to the myth embedded in a narrative that the symbol represents. To better understand this read:

Bourdieu, P., (1991) *Language and Symbolic Power*. Polity Press. Oxford.

Douglas, M., (1966) *Purity and Danger, An Analysis of the Concepts of Pollution and Taboo*. Ark. London.

Eliade, M., (1957) *The Sacred and Profane, The Nature of Religion*. Harvest Books, New York.

Jung, C. G., (1964) *Man and His Symbols*. Dell, New York.

Ricoeur, P., (1975) *The Rule of Metaphor*. Routledge. New York.

We see the connection between myth, narrative and symbol in how people mark significant moments in time that take on power beyond the moment. It doesn't matter whether it's a cross or tribute on the side of a road to commemorate a road fatality or a phrase on a grave, these things take on much more meaning than themselves in what they symbolise. And, the recollection doesn't even have to be true to be real to the agent for that memory. In the end, a ring, diagram, object, artefact, graphic or icon takes on much more significance than itself because of what is attributed to it. Often the symbols through attribution take on political power that then must be politically defended.

We see the power of symbolism as myth and myth as symbolism in many of the myths/symbols that are made sacred in the risk industry. The tool, artefact or model may not be true or efficacious but becomes symbolically powerful and significant by what is attributed to it. This is why a symbol is a myth. Many symbols, myths and models in risk are not factually or scientifically true but nonetheless are attributed as powerful and effective symbolically and this is their 'myth'. I see this often as people defend the Bradley Curve, Heinrich's Pyramid, Bowtie or Risk Matrix, none of which do anything more than symbolise the beliefs of a group and the ideology

they defend. This is how a symbol becomes a sacrament (Douglas). It is no different from the bread and wine in church, it's just bread and wine but is made a symbol of the Christian narrative and made sacred and mythical by what is attributed to it.

The Book of Symbols (Ronnberg, A., and Martin, K., (eds.) 2010, Taschen Books. Cologne) is a fascinating study of symbols through the ages. The book is sub-titled 'Reflections on Archetypal Images'. Archetypes, symbols and myths all interconnect. In many ways symbols are like Archetypes, over time they take on a life of their own apart from the physical presentation of the symbol itself. This is how symbols take on mythological and sacred power. The symbol itself is not particularly important in itself but what is attributed to it politically, socially, ideologically and culturally can be out of all proportion to the original act or narrative itself. A good example is what has happened to the message of Christmas. The idea of a baby being born in a feed trough at the back of a pub in an isolated humble town in Palestine has long gone. Now baby Jesus is deified in gold, jewels, decorated Department stores in September and starry adornments like a Hollywood myth.

So let us explore a few symbols to see how symbols take on mythical and archetypal power so we can carry this framing for the rest of the book.

It is important to note through the book that symbols as myths, myths as symbols and both with Archetypal power have been capitalised to emphasize significance.

We often speak in archetypal ways about 'the Market, 'the Economy' and about cities eg. the media often refer to my city Canberra as a person such as 'Canberra dictates new tax laws' or 'Canberra has a new policy on immigration'. This is because my city is the place of the Australian Parliament and so my city gets personified as if it is a person. Here are some classic examples of personified archetypes:

The Beast is a symbol of power, domination and evil. In biblical apocalyptic literature it refers to Satan and the will to power. A shirt was in circulation on the conference circuit in Aust and USA stating 'I am a beast for safety'. Of course I fell out of favour for offering some critical thinking of the language and symbol.

The Compass has been used for thousands of years and in secret societies such as the Masonic worship, to represent divination, design and measurement. Blake's Urizen wields the compass to restrict imaginative horizons.

The Goat has always represented cunning, evil, deviance and Pan, Satan and Lucifer.

The **Pentagon** is also linked to the goat's head and **Baphomet**. It is associated with the **Occult**, demons, alchemy and heavy metal music culture.

The Hero is used widely in the risk industry as a symbol for power and perfection. The archetype of the hero is situated in Greek legend and symbolises being 'above' and 'superior' to mortal fallible humans.

The Tongue represents the power of speech and the power to destroy. We speak of a 'slip of the tongue', 'tongues of fire' and 'tounge-in-cheek'.

The Veil is not just a covering of the face but represents the dynamic of concealment. Even now a 'veiled face' has become political dynamite in countries that seek to ban the burka and hijab.

The Wreath carries enormous power that is invoked at ceremonies for the dead and fallen often to commemorate war sacrifice. Wreaths are laid every evening at the Australian War Memorial by school children at the **Pool** of Remembrance in front of **The Eternal Flame**.

Zero has always symbolized nothingness and from Babylonian times and Mayan culture to represent the abyss.

The Book of Symbols lists 790 pages of symbols and myths that permeate all cultures and speak across cultures with archetypal significance. Jung's book *Man and His Symbols* (1964) is foundational for understanding just how symbols and myths influence the collective unconscious throughout cultures as communicators of meaning in living.

In most cases the risk industry identifies with symbols and myths that unconsciously alienate people because of symbolic focus on salvation, harm, death and zero. This aligns well with the industry's focus on transhumanist language that denies fallibility and seeks immortality and perfection.

What Can Theology Bring to the Discussion on Risk?

It is unique to bring a background in Religious Studies, Theology, Metaphysics, Philosophy and the Profession of Clergy to the mix in thinking about risk. The concerns of theology are: metaphysics, ethics, soteriology (salvation theory), religious history, spirituality, faith-belief, hermeneutics (theories of interpretation), Justice, Hope, Love, apocalyptic, taboo, evil, theodicy, sacramentalism and semiotics.

It is interesting how all these intersect with the risk industry because of its fixation of risk aversion and salvation. It is fascinating to observe the profound religiousness in symbols, language, myth and orientation in risk discourse. None of the issues studied in theology are part of the risk industry, neither are risk people educated in such matters. Hence, the sector is completely unaware of its unconscious religiosity, theology and alignment with sacred practices. The work of Mary Douglas is critical in demonstrating these connections. See further:

Douglas, M., (1966) *Purity and Danger, An Analysis of the Concepts of Pollution and Taboo*. Ark. London.

Douglas, M., (1992) *Risk and Blame. Essays in Cultural Theory*. Routledge. London.

It is interesting how the assumptions of Scientism and Positivism reject the assumptions of Theology with no more or less evidence for the assumptions of their belief. It is interesting that Scientism and Positivism privileged certain forms of knowing over others. Thereby declaring that knowledge through intuition, dreaming, gut thinking, faith, belief or unconscious knowing are somehow invalid because they cannot be validated empirically as defined by the assumptions of Positivism.

Being, Offense and Unlearning

Criticism and challenge can be received as an offense and trigger defense depending on the sunk cost of one's worldview. There is always a deep emotional cost in cognitive dissonance (Festinger) and this is strengthened by personalising any criticism.

I remember as a kid being reified in Fundamentalism by the leaders of my cult by demonising the enemy. The strategy of demonising the other is a foundational method for identity formation, in-groupness and stasis. The enemy of our beliefs were paraded and demonised in church services and text. We knew who we were and why we belonged because of who we were not. This is the appeal of binary Fundamentalism, it creates very powerful bonds to others regardless of personal differences. In-groupness is often demonstrated through dress in my case, head covering for females or non-tattoos for males. The sacralisation of Sunday, tithing, dress, language, sport and associated symbols all reinforced who we were and who we were not. We were taught to easily identify the enemy by how they looked. To break from our collective signs and symbols would be anathema and rebellion, hence why it is so hard for people to break from cults.

When I was 15 I had one encounter with a clergyman in a public forum who questioned the assumptions of my cult. I was shaken by this challenge and when I returned to the group was assured that the clergyman was a 'wolf in sheep's clothing', an ally of the devil. This helps invalidate questioning, debate and enquiry. I was then led to a misreading by St Paul on the nature of offence and it was explained to me why the clergyman and his questions were offensive. It wasn't to be till I was 28 years of age that I was able to escape from Fundamentalism and the entrapment of binary opposition.

When I worked in Government as a senior executive in Community Services the local Assembly balance of power was held by a Fundamentalist Christian and it looked like that person could bring down the government by denying supply. I was approached by my boss to see if I could broker a deal as I knew and could speak the language of the person and could engender trust. Language and symbol in any group is a



code for identity and one can easily sort out who can be trusted if they cannot recognise key symbols and speak the same language.

So I met with the person (secretly) and we chatted for an hour and I discovered he wanted a particular Fundamentalist program put into public schools. The Program is called Focus On The Family (FOTM) and I knew of it and had experienced it. FOTM was started by an evangelical Christian called James Dobson (<https://www.focusonthefamily.com/about>) and it espouses conservative Mid-West American values on the nature of the family. It's recurrent budget in the USA is over \$80 million.

I went back to my boss and so the Program was instituted in state schools as a pilot and the Government received the vote of the Fundamentalist independent.

Interestingly, the values and beliefs of FOTM would be deeply offensive to any blended or non-traditional nuclear family. FOTM is anti-LGBTQI and anti-abortion similar to what I had been brought up with as a child and in the full infallibility of the Bible (<https://www.focusonthefamily.com/about/foundational-values#beliefs>). There are still groups in our Federal Parliament in Australia who wield similar power which surfaced in 2019 in the Israel Falou saga (<https://www.stuff.co.nz/sport/rugby/international/112664089/god-spoke-to-me-israel-folau-explanation-to-rugby-australia-tribunal>).

Step forward to SPoR and the challenges it poses for in-groupness in the risk industry and there are similarities. Any group founded on a binary absolute in zero must demonise the other and create identity by what it is not. This means that any challenge to the symbol and language of zero will be interpreted as offensive. In this light I know that all of my books, my questioning and writing are constructed as offensive to the cult of zero, especially as most don't recognise that zero is a cult. Similarly, the constructs of zero, Safety and STEM form a fortress against change.

Could There Be Change?

I have hope that there might be some in the risk industry who are seeking change.

1. The first step in change is the realization that one needs to change.
2. The second step is knowing what is limited and closed and having a method to transcend those limits.
3. The third step is the courage to question and dissent and not being fearful of imagination, creativity and learning.
4. The fourth step to change is entering into dialectic, that in-between space where the validity of the other is acknowledged.

From then on its all about suspending agenda, conversation and discovery.

Transition

Now that we have positioned SPoR amongst the disciplines it is time to describe what SPoR is. In this regard the use of semiotics is essential. SPoR is best expressed through semiotics moreso than text. This is why this book has over 120 different figures, tables, pictures and models. Semiotic thinking transcends the boundaries of the disciplines because all disciplines can speak to each other through: symbols, signs, metaphor, poetics, models and semiotics. All disciplines use these methods and devices to converse within themselves and so these can be used to converse across the disciplines. SPoR is uniquely placed for such a conversation.

So we need to start that conversation with a discussion of educational anthropology. The starting point for understanding is one's idea of what makes the human person and human 'being'.



CHAPTER 2

One Brain Three Minds

Phrenological Thinking Must be Resisted at All Costs. Antonio Damasio - The Feeling of What Happens, Body and Emotion in the Making of Consciousness.

The brain does not issue commands, it hosts conversations. Guy Claxton - Intelligence in the Flesh.

A rigid binary model is so conducive to displays of intolerance and destructive social emotions. Yuri Lotman - The Unpredictable Workings of Culture.

The Embodied Mind

The idea that humans have an individual power (will) to override the world around us, cultural heritage, history, social influence, technique design and emotions is a construct of an Augustinian/Cartesian worldview. All of the latest research in neuroscience, cognition and social psychology makes it clear that the idea of an individual will is nonsense. All of the risk programs arguing that people can become attentive through will power is based on this Cartesian construct but it's not real.

Unless one has an holistic view of work and humans, one will not come close to helping fallible people tackle risk. Indeed, the will power focus of risk programs are most likely to bring disappointment, frustration and negativity because of false promises of control.

The idea that humans can overcome anything with 'will power' ignores all of the influences that exists in the human body and social world. All of the latest research demonstrates that humans have an 'embodied mind'. That is, the brain and all of the body is integrated so much so, that the whole body/psyche is our Mind.

The idea that a human brain is similar to a computer is just plain nonsense. The history of detesting the body and focusing on the human as a brain-as-machine is a construct of Augustinian/Cartesian/Behaviourist ideology. This is not how humans work.

The evidence is overwhelming that the human nervous system, endocrine system and immune system 'think' on their own without strong direction from the brain. The evidence also shows that emotions cannot be 'controlled' cognitively. All of this has huge implications for how people think and tackle risk.

Humans are so integrated and affected by the world around them that the environment also has a mind that by its design, affects the thinking of humans.

Scholars like:

- Damasio - *The Feeling of What Happens; Descartes Error*
- Varela - *The Embodied Mind*

- Claxton - *Intelligence in the Flesh, The Wayward Mind*
- Ginot - *The Neuropsychology of the Unconscious*
- Robinson - *Out of Our Minds*
- Norrtranders - *The User Illusion*
- Sloman - *The Knowledge Illusion*
- Wilson - *Strangers to Ourselves*
- Ramachandran - *A Brief Tour of the Unconscious*

demonstrate that human thinking is embodied. I discuss this as the foundation for all my training in the concept of **One Brain Three Minds** (<https://vimeo.com/106770292>; <https://vimeo.com/156926212>).

The way humans react emotionally, reflex and are stimulated by external influences shows that we are not often in control in the sense proposed in the idea of 'free will'. Indeed, we live so much heuristically and automatically that the idea of turning control on and off or attention on and off, is just a projection from the Cartesian worldview. We may 'feel' like this is what happens but the evidence demonstrates otherwise. Damasio calls this 'the feeling of what happens', Norretranders 'the user illusion' and Slovic 'the feeling of risk'.

Rather than concentrating on the individual will, the risk industry should be focusing on social context, worldview and the collective unconscious. This is where the real power of influence is situated.

Intercorporeality and Interaffectivity

Fuchs' work (2018) is based on a neurophenomenological and 'enactive' approaches to human being. Human *Socialitie* doesn't start from isolated individuals acting as computers on top of bodies, neither as computers that construct and represent the world internally in brains, process information and then direct brains to order movement. Human *Socialitie* is about *Intercorporeality* and *Interaffectivity* that is, how humans are incorporated into each other and society and how humans are mutually affected by each other.

These two combined concepts are essential to understanding *Socialitie* in line with the *Annales* concept of *Mentalitie*. *Socialitie* is the holistic resonance of all humans with other humans - body, mind and environment.

At the heart of the 'enactive approach' to humans in *socialitie* is an understanding of the emotions. Emotions consist of circular interactions with others and the world through embodied subjects, not disembodied brains. All social interactions offer *affective affordances* that is, they invite interactions at all levels just like a chair affords 'sitting' or a bucket affords 'filling' and 'carrying'. Everything in life offers affordances by design and context and create *loops* as they hard wired the human somatic system through experience.

Emodied interaffectivity is a process of coordinated interaction between humans through *bodily resonance*, *mutual incorporation* and *body memory*. Together humans in *Socialitie* build *intercorporeal* and *body memory* that is acquired from early childhood, well before the development of language.

There are countless experiments that demonstrate the dynamics of *interaffectivity* and human resonance (Fuchs and Koch, 2014). Indeed, all *Socialitie* involves humans 'resonating' with others through emotions (via mirror neurons) attracted to or away from what is experienced.

Whether we like it or not we are all affected by the presence of others. This is about much more than sharing a common social existence or some sense of mutuality but via body-memory, a complete interaffectivity with others and the world/environment. *Socialitie* extends way beyond just being affected by language and images and makes sense of what Lotman called the *Semiosphere*. That is, human *Socialitie* is embedded in the world of symbolic/ mythical living and cannot be separated from it. There is extensive evidence for the reality of *Interaffectivity*. For example:

Simple actions like ritual cleansing can help manage guilt (Meier et.al., 2012), holding a pen between the teeth and taking it away can affect the way we respond to humour (Strack et.al., 1988), standing or sitting



in power positions can assist confidence (Cuddy et. al., 2012) and that experiencing warmth or cold can affect the way we respond to people positively or negatively (Bargh and Williams, 2009). These and many more experiments discussed by Fuchs and Koch (2014) show that our *socialitie* shapes *interaffectivity* and *resonance*.

The term *Intercorporeality* simultaneously foregrounds the social nature of the body and the bodily nature of social relationships. As a concept, it emphasizes the role of social interactions in the construction and behaviours of the body. Our existence in relation to others – our *Intersubjectivity* – is something tangible and bodily. In terms of SPoR this is understood as the dialectic between humans embodied in the environment. This is the meaning of Buber's i-thou.

The idea of *Intercorporeality* comes from Merleau-Ponty (*Phenomenology of Preception*, 2005) referring to the pre-reflective intertwining of lived and living bodies, in which my own body is affected by yours as 'embodied communication'. *Intercorporeality* is the opposite of a the theory of humans as brains that represent the world in heads on top of bodies through the sum of 'neural processes'.

In *Intercorporeality* there is no 'inside' and 'outside', inside and outside are not separate domains but only directions of motion (dialectic) between e-motion and affection. This is the same as Moltmann's understanding of *perichoresis* or interpenetration. Whether we like it or not we are all affected by each other and the enactment of others penetrates our being.

From early childhood the presence of others is infused in implicit knowledge as bodily memory in what can be called 'intercorporeal memory'. This is similar to Bordieu's idea of the *habitus*, that set of culturally unconscious dispositions, skills, styles, tastes, beliefs, customs, habits and demeanour that are adopted unconsciously in everyday living.

A metaphor for this is breathing. We not only share the same air as others, we also breathe it onto others and they inhale it, it is the shared life. If that air carries an infection, that person recieves that infection and so becomes sick. This also happens emotionally.

Intercorporeality and *Interaffectivity* are best understood through enaction, action and the metaphor of 'the dance'. The metaphor and action of dance is critical for understanding SPoR and e-motion.

The dynamics of Intercorporeality, Interaffectivity and Interconnectivity are captured in the Holistic Ergonomics Module and in Figure 8. Interconnectivity of Risk and Figure 9. Interaffectivity of Risk.

Figure 8. Interconnectivity of Risk

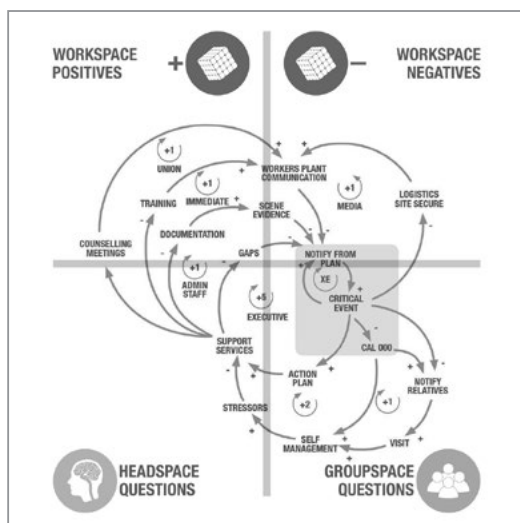
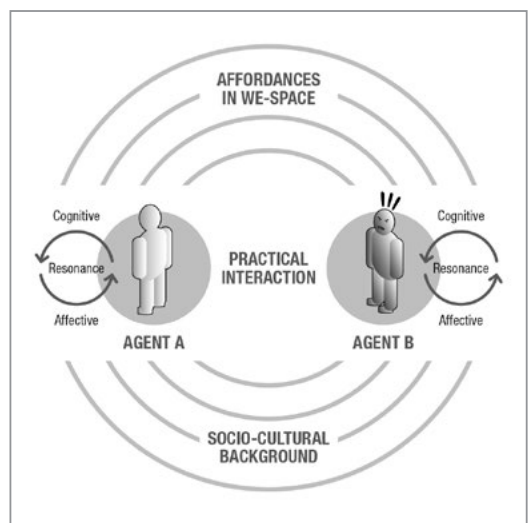


Figure 9. Interaffectivity of Risk



I Wish I Could Dance

I was brought up in a fundamentalist household that projected dance as evil, mostly associated with the Evangelical/Augustinian rejection of the human body known as *concupiscence* (<https://en.wikipedia.org/wiki/Concupiscence>). The doctrine of *concupiscence* understands the 'appetites' of the body as debased and 'carnal'. Much of this is linked to Augustine's construction of fallability and original sin. Yet, there are such bizarre contradictions in this. What kind of god would create humans with sexuality and genitals and then expect you not to use and enjoy them? In this doctrine masturbation is made evil leaving no way out for the celibate priest. What kind of a construct of god would do this?

After escaping Fundamentalism we used to tell a joke about this absurd fear of dancing and bodily being, eg. 'Why don't the Baptists make love standing up? ... because it could be mistaken for dancing'. Unfortunately, not as funny as it was true.

This rejection of body and dance from childhood means as of today, I still don't know how to dance and I am absurdly self conscious about dance. I admire the freedom of those who can dance indeed, I discovered later that the notion of the Trinity is understood as 'the dance of God' (eg. Richard Rohr, Jurgen Moltmann etc). How strange that Fundamentalism in its fear of the body and sexual identity should demonise the beauty of movement and dance. Indeed, the Bible is full of references and authentication of dance none of which was communicated to me in the cult. Only in binary Fundamentalism could the words of Scripture be twisted to make dance an evil. We could of course add other aspects of repression pushed by Fundamnetalism such a covering up the body, playing games of chance, cards playing, alcohol, playing sport on Sunday and anything that resulted in demonising fun in general.

Further, the sacralisation of the day of Sunday was also another of the silly constructs of Fundamentalism, including the doctrine of tithing (giving 10% of earnings). All put together many of these things were about the rejection of the human body, the demonising of pleasure through the body and the association of sin with sex. The Catholic church sacrament of celibacy is a similar and an absurd construction of this mindset. We owe much of this to Augustine, the creator of Original Sin, *Concupiscence* and Penal Substitutionary Atonement (all discussed in *Fallibility and Risk, Living With Uncertainty*)

Of course the beauty, flow and freedom of dance involves the merging, synchronicity and rhythmic mystery of movement between humans. It is amazing to watch one or more people move and change with unrecognisable signals or only signals known to them, in the adventure of expression. It is here where we witness such amazing intercorporeal skills and resonance.

Dance is very much about change, adaptation and transcendence, especially transcending the constructs of Puritanical and Augustinian fears of the body. It is in dance that we learn to rise above the confines of body-as-burden and work-horse construct to the heights of mutual expression and circular interaction.

Of course none of this was helped much by Descartes either. We can thank Descartes for the separation (disembodiments) of body and mind in his reductionist thinking associated with the elevation and separation of cognition over body.

When people dance, the rhythmic movements originate from the body without the need to steer them from the brain. We live in our movements not neural processes that direct movement. Over time the patterns of movement become hard-wired as intercorporeal memory so that I can perform many movements in life through heuristics and automaticity. In a similar way, most of our bodily gestures such as: pointing, calling, holding, stopping, stepping, walking, rubbing, shaking, using and instrument or scraping are 'performed' without thinking rationally. That is, they are all 'performed' without need for neural processes.

Fuchs demonstrates the learning of a child and mother as 'rhythmic mirroring'. In the first months a child well before the development of language, learns to 'dance' with the mother through facial expression, sucking, crying, postures, movement, gestures and vocalisation. Infants express affects that resonate with their mothers through rhythmic, melodic, vocal, facial and gestural characteristics. In many

ways the infant becomes 'attuned' with the mother and the mother with child. Fuchs describes this special relationship between mother and infant as 'a dance'.

We know through the work of Fuchs and others that dance, music and bodily incorporation are highly effective for treating anxiety, depression and a host of mental health issues including dementia and autism. Unfortunately, under the STEM social construction of illness, harm and injury we now look to medications to address issues as defined by the separation of the body and brain.

Dance symbolises and acts as a metaphor for dialectic. The mystery is not so much what happens in the two dancers but what happens between them. Dance is triarchic. The dance is a creative movement that never sits still, there is no Hegelian synthesis when fallible humans dance. All movement is learning and all learning is movement, full of e-motion. Unfortunately, the seduction of *Technique* and technology draws the risk industry further away from understanding the nature of *Intercorporeality* and *Interaffectivity*.

The Social Construction of Mental Health

As the risk industry starts to move into an interest in mental health it brings with it its worldview of STEM. It is through this worldview that it understands such things as: illness, suffering and harm, resilience, psychological injury, suicide and mental health. As we observe how the industry constructs its view of mental health we see critical social and cultural factors entirely omitted from any consideration regarding definition. So, when the problem is defined as a nail, the only solution is a hammer.

The Rosenhan Experiment

In 1973 a collection of doctors and researchers associated with the work of R. D. Laing decided to test the way the psychiatric industry constructs mental health. Led by David Rosenhan (https://en.wikipedia.org/wiki/Rosenhan_experiment) and seven others they decided to fake symptoms of mental health and get admitted to a psychiatric hospital. The pseudo-patients all reported the same symptoms, an auditory hallucination using language of 'empty', 'hollow', and 'thud', to invoke the idea of an existential crisis. All the experimenters had medical expertise in either medicine or psychology.

All of the experimenters were able to get admitted to hospital and in all but one case, were given a diagnosis of schizophrenia or manic depression. Once admitted the experimenters then acted normally and do what they could to be released. They attended therapy, socialized with others, and even accepted their medications which they then disposed of. If asked, they were to say their symptoms had disappeared entirely.

What surprised the experimenters was that staff could not detect that they had been faking their condition. Even their normal behavior was 'medicalised' as schizophrenia or similar. It seems once inside it was easy to socially pathologize normal behavior as deviant. Interestingly, the other patients in the hospitals caught on very quickly that the experimenters were different. They were often asked if they were journalists or academics doing studies.

Unfortunately, the experimenters reported that staff dehumanized them and were brutal. The structure of the institution and the power in discourse reinforced social biases between officers and medical staff. Despite all efforts to demonstrate they were normal the shortest stay was 7 days and the longest 52 days. The average stay was 21 days.

Once the experiment was over and the hospital outrage died down Rosenhan claimed he had sent in an actor for them to identify. After presenting him with their lengthy list of suspected actors they had admitted, Dr. Rosenhan revealed that he hadn't sent anybody at all!

The Rosenhan Experiment is similar to the Stanford Prison Experiment conducted by Phillip Zimbardo in 1971 (https://en.wikipedia.org/wiki/Stanford_prison_experiment). Of course, the medical profession were defensive and outraged and challenged the methodology of the experiments. More recently the real situation of Abu Ghraib (https://en.wikipedia.org/wiki/Abu_Ghraib_prison) endorses the findings of these studies. Much

of this was laid out clearly by Michael Foucault in *The Birth of the Clinic* (https://monoskop.org/images/9/92/Foucault_Michel_The_Birth_of_the_Clinic_1976.pdf). Others like Alan Radley (*The Body and Social Psychology; Making Sense of Illness*) demonstrate clearly how views of illness, harm, suicide, suffering and mental health are socially constructed.

The purpose of this discussion is not to do a deep dive into these events but rather to demonstrate how much one's view of others is socially constructed.

Throughout the risk industry we observe astounding language claiming that humans can be 'unbiased and objective' particularly in relation to investigations and auditing. This is how one looks at the world through the lens of Descartes. The reality is, the beginning of ethics, incident investigations, audits and understanding human decision making is yet to get over the binary brain-body delusion.

The Mystery of the Emotions

One of the puzzles of human 'being' is the uncontrollability of the emotions. The idea that the brain can just 'will' or 'turn on or off' the emotions is one of the delusions of the behaviourist/cognitivist construct. Why is it that some people have less fear than others? Why are some people less risk averse than others? Why do some people get uncontrollably angry? Why can't humans just 'self-regulate' their emotions? Why do we cry when sad? Go to a funeral sometime and count the number of people wearing sunglasses.

You may hear some of these statements about the place that demonstrate the problem, such as: 'just wake up to yourself', 'stop crying', 'get a hold of yourself', 'don't be anxious', 'you hurt my feelings' and 'stop being depressed'.

An emotion consists of an unconscious evaluation of a situation. Emotions move towards or away from something. This is why we call it an 'e-motion'. Emotions move humans towards or away from something indeed, Tversky (2019) argues that all of our thinking is shaped by motion as it embodies thinking. The traditional approach to cognition thinks that we tend to move where our brain directs, e-motion suggests that we tend to believe where our body moves. Clark (2016) and Fuchs (2018) support this thinking with extensive research in early childhood education and learning.

All learning is about movement, our emotions direct learning. Emotions reveal the orientation of our the unconscious, which of course cannot be controlled by will or neurological algorithm. The behaviourist discourse parading as neuroscience completely distorts the way in which embodied humans respond to 'being-in-the-world'. Without emotions the world would be without meaning. Nothing would attract or repel us to act. All enactment is the result of an emotional movement. Without e-motion, there would be no living.

Emotions could be better called 'bodily affectivity'.

Our emotions are present at birth, well before the development of language or cognitive rationality. Babies 'resonate' with their mother's smile and mother's 'resonate' back. All humans 'resonate' with other humans through many gestures and expressions that take the form of semiotic language. We call this 'inter-affectivity'. That is, we are all 'affected' by others because we are social beings. This complex process is the foundation of all empathy and understanding.

Most emotions precede brain representation. Usually an emotion bursts in on the scene before one realizes (assesses and analyses) what's going on. Emotions are not just 'individual' states within a person but are more often a 'shared' state in inter-bodily 'affection'. That is, try as you might to will indifference, you will be affected emotionally by the emotions of others about you. This is why emotions are not controllable by individual 'will'.

The idea of 'will power' is a delusion of cognitivism. Of course in Mental Health, depression is a loss of inter-affectivity. People with depression become 'disconnected' from the world and themselves, sometimes losing e-motion as 'connection' with others.

Just as depression and anxiety are social constructs, so too is resilience. The individualist/cognitivist construct of 'pull yourself up by your boot straps' doesn't work. Similarly, one can't just suppress an emotion through will

power. Humans need supportive communities to escape from most human challenges including: addiction, mental health issues, fundamentalisms, loneliness and racism.

When things go well and someone is euphoric, the group becomes euphoric. When a cloud of depression comes over a group and things unravel I've witnessed a whole organization drift into depression. Even as we witness the many defense mechanisms (https://en.wikipedia.org/wiki/Defence_mechanisms) people exhibit unconsciously and daily, we realize that many of the things we blame people for are not conscious. You will even hear the unconscious speak today when someone says: 'you're being defensive', 'no I'm not' is the reply.

What are the implications of this for the way we tackle risk?

1. We need to move away from individualist/behaviourist constructs that devalue the importance of the 'social' and 'communal' structures that provide identity, belonging and support. Unless the challenges of mental health are tackled through a social lens it is not likely that much will improve.
2. We need to drop the behaviourist construct of being that supposes disconnectedness as a good thing and start reshaping what we do through the lens of 'being-together-in-the-world'. Eg. most incident investigations set up this notion of disconnectedness as beneficial making it impossible to 'help' in grave situations through pastoral care.
3. It would be helpful if people tackling risk could step outside of the closed focus of the risk industry and step into a more transdisciplinary approach to understanding risk. I have no idea why we keep turning to regulators for vision when their purpose mitigates against it.
4. Drop the slogans that divide community and project blame.
5. Embrace an embodied sense of emotions and what constitutes 'in-group' and 'out-groupness'. We need not be 'afraid' of emotions but rather need to understand the nature of the human unconscious.
6. Better understand social influence and how much of what we do is influenced by social dynamics.
7. Start to investigate how things like aesthetics, design, 'somatic markers', semiotics, place and space, trigger emotions and uncontrolled decisions.
8. Make better use of expressions and gestures in the way we tackle risk.
9. Think more of the brain as a mediating organ and focus more on how the human 'mind' constructs 'being-in-the-world'.
10. Start to give greater significance to connecting with the emotions of a group rather than thinking that risk is just a cognitive decision.

Feeling Through Objects and Tools

One of the fascination things about humans is the ability to feel through objects. It is fascinating how we incorporate instruments as extensions of our body for example: we can hold a tool in our hand and yet feel the shape and sensation of the tip of a screwdriver in a slot. We can drive a car and feel the bumps in the road as if the car itself has nerves as an extension of our body. We play a piano or guitar in a similar way as if we can feel the notes through the strings, just as we write or draw we can 'feel' the tip of the pencil or pen move across the paper. We can use a walking stick as if it is an extension of our hand and operate a digger as if the tip of the digger has feelings as an extension of our hands.

We now know that canonical neurons in the premotor cortex are activated when handling tools or even when looking at them. In this way we can pick up a hammer and hit a nail perfectly at full swing. No brain representation is needed in these processes. This raises huge questions for where my 'self' ends and the 'outer world' begins.

The notion of embodiment has huge ramifications for the field of ergonomics, mental health and resilience. In traditional ergonomics, resilience and mental health the body-mind separation is continued as if from Descartes. When I use the affordance of a chair, in traditional ergonomics there is no idea that I become a part of the

chair but rather that I 'use' the chair. In holistic ergonomics the social embodiment of humans becomes just as important as the objects we use or what those objects do to us.

Holistic ergonomics is about the brain-body-environment operating intercorporeally through interaffectivity.

In this way the social context and environment of objects is as important as the object itself. In this way depression and anxiety are not understood as a dysfunction of neural processes but rather a desynchronisation between the person-body-mind, environment and the brain. In this way depression is associated with cutting oneself off from social meaning just as much as biological dysfunction. In this way social synchronisation becomes just as important as 'fitting the task to the human'.

Personhood

Defining personhood is perhaps the most important concept in the Social Psychology of Risk.

Testing Theories of Personhood

One of the first assignments my daughter had in her nursing degree in 2017 was an ethics essay involving a moral conflict. The topic of the essay put her as a paramedic in a home event involving a dead person and various decisions involving moral compromise of the body. Here is the essay question:

'Sam and Natalie, both senior paramedics, attempted to resuscitate a 78 year old man who had suffered a cardiac arrest at home. After 45 minutes, resuscitative efforts were discontinued due to lack of clinical response. Immediately afterwards, a student paramedic, Jim, who had accompanied Sam and Natalie on the call-out, asked if he could re-intubate the patient for practice purposes. Jim argued that, as the man's wife would not really understand what he was doing, no-one would be harmed. However, Sam and Natalie thought it inappropriate, but were unable to explain to Jim why they objected to his proposal. Jim reluctantly agreed not to re-intubate the man but asked, instead, if he could take a photograph of the deceased man to upload on to his clinical experience portfolio'. Discuss.

The essay confronted the challenge of rights involving dead persons. If a person is dead, what right do they have to conscious decision making? Does it matter what we do to a cadaver/corps? If they are not conscious of what is done to their body, in what sense must we maintain dignity, integrity and compassion?

The detail of the essay is not important for this discussion other than to make clear that even in the first year the nursing profession an ethic of risk and personhood were considered foundational to the profession of 'helping'. It was also helpful to step beyond the simplistic binary notions of 'the easy fix'. It didn't matter what decision the paramedic made, some extended interests/people that were not present at the time had to be considered in decision making. Furthermore, the issue of trajectory and principles had to be considered even though those people of interest were neither present nor informed.

I remember when training in theology I did field placements at a cemetery/crematorium and a funeral clinic. In such circumstances even though family and people of interest are not present, the same principles of dignity, respect, integrity and beneficence must be present because of the principles of personhood. Of course, some come at the notion of care through fear, just imagine if someone found out that their loved one's body was abused? What if the ashes got mixed up? etc. This is the mythology of fear and punishment that dominates the risk and safety industry and cannot ever be a foundation for an 'ethic of risk'.

So what is personhood? How do we define the human person?

The following help to define the nature of personhood. (Concepts highlighted in bold indicate essential capacities of personhood).

1. A person is first and foremost a **social subject**. Personhood can only be understood in relation to others socially and psychologically. We participate in **socialitie** (the holistic resonance of all humans with other humans) and can only be defined **intercorporeally** (Fuchs).
2. As **embodied** persons we are affected by all that happens in, to, around and for us. **Interaffectivity**, (Fuchs) determines all our actions and **limits any sense of autonomy**. Whilst human persons have a degree of **autonomy** this is incomplete and **relative to identity, context and the collective unconscious**. Individuality is only confirmed in relation to socialitie.
3. As embodied persons we act as **agents** in decision making. Most human decisions affect others and involve a degree of **self-consciousness**, however, this is not complete either.
4. Humans are *conscious*, **subconscious** (deficit - Freud), **non-conscious** (Damasio) and **unconscious** (positive - Jung).
5. As self conscious knowers we don't know all things, humans are **fallible and limited as agents**. In this sense, persons are unable to anticipate all things (**mortal**) and so cannot anticipate many consequences of their limited ability to choose (**finite**). Yet despite this, as embodied persons, humans **possess an essential unity**. Human persons are **identified with their body and their soul/spirit/personality**.
6. Humans are not just **rational** beings but also **moral, emotional and unconscious beings**. They are not objects nor machines in a system, they are participants in their **own ecology**.
7. **As self-conscious limited agents humans discover, imagine and create not just physically but semiotically, in language, discourse, sign systems, metaphor, poetics, aesthetics and creation of meaning and purpose (semiosis).**
8. As choosers human persons are **valuers**, for to chose is to value. Most importantly, human **persons dream** and enter into **knowing unconsciously** including, the **creation of music, art, dance, religion and poetics**.
9. A critical capability of personhood is **the making of meaning and purpose through language and semiotics** (sign and symbols systems).
10. Personhood is strongly **anchored to feelings and e-motions** and these are **expressed through language, semiotics, reasoning, metaphor and moral action**. Persons are **able to discover, initiate, create and initiate language and behaviours with and without determination/necessity**.
11. All of these qualities and capabilities mean that a **human person lives and acts in dialectic with their environment, culture, embodiment and fallibility**.
12. Persons **cannot sit at anytime in absolutes neither can they know perfection**. Everything persons do is **contingent on their socialitie and humanity**. A critical aspect of human personhood is **coming to grips with fallibility, vulnerability and uncertainty and the nature of learning, development and risk**.
13. Persons are also **teleological**, that is, they are shaped and formed by their ends. Humans know that when they bury their dead they are viewing their own death and so this facilitates the **creation of meaning**, even **religious meaning** in living.

Benner (2016) uses the metaphor of the Russian nested dolls in an effort to explain how all these qualities integrate and define personhood. All of these sit within another and one cannot dissect human personhood like a machine/object and find the seat of personhood in just sentience, brain or intelligence. Personhood is very much embodied.

One of the best approaches to an integrated sense of personhood comes from the apostle Paul who was the first to integrate all of the following into his understanding of personhood: head, heart, gut, conscience, soul, spirit, body and flesh (Jewett). In many ways Pauline anthropology was both original and radical for its day. Even though Paul used expressions like the 'inner and outer person' he very much saw humans as unified and embodied which was far removed from the anthropology of either Plato or Aristotle. He used the language of heart, mind, flesh, conscience, soul and mind to give purpose to social relationships and meaning in the face of political tyranny.

Why does personhood need defining and defending?

The following helps define the processes involved in dehumanising and de-personalising risk. (Concepts highlighted in bold indicate essential aspects that destroy personhood)

1. A range of ideologies and unethical tendencies have been established in the risk and safety industry that serve to work against personhood and human 'being'. These ideologies include: **Reductionism, Scientism, Behaviourism, Cognitivism, Rationalism and Positivism**. All these ideologies emerge in the risk industry from a **mathematico-engineering view of the world** and result in the definition of **humans as 'objects'**. Indeed, the **scientism** (science as ideology) view (not science view) understands humans as just creatures of the natural world, as biological objects in the sense of 'just another animal'.
2. Recent developments highlight problems associated with ethics, morality and mis-definition of personhood. One such event has been the development of sex with robots (<https://www.forbes.com/sites/andreamorris/2018/09/25/prediction-sex-robots-are-the-most-disruptive-technology-we-didnt-see-coming/#7641193b6a56>). The ethical dilemmas associated with this development highlight all the problems associated with a mis-definition of personhood.
3. We only need to listen to the language of the Technique (the quest for efficiency) and the Technology industry to understand how it views persons. It speaks of: 'Artificial' intelligence, 'Non-human' Intelligence, 'Synthetic', 'Simulation', 'Machine' learning, 'programmed' and 'algorithms'. **Of course machines cannot 'learn' and so machines cannot be persons**. The adjustment of an algorithm in response to another algorithm is not learning. In what ways do machines learn, dream, create and feel?
4. It is clear from any perspective that machines **don't have a 'lived experience'**. Anything machines do can only ever be a **secondary representation** of human experience. In other words it is **not 'real' but simulated and augmented**.
5. Machines **cannot have a 'mind'** in the sense of personhood, **soul, spirit and Mind**. They **cannot 'feel'** emotions interactively (Fuchs) as an embodied person just as machines **cannot dream or learn through the unconscious**.
6. Similarly, machines **cannot know suffering, pain, risk or learning**. The repetition of algorithms is at best 'parrot learning' but **cannot result in a change in personhood because machines are not persons**.

Some Important Texts on Personhood.

Arendt, H., (1958) *The Human Condition*.

Bauer, J., and Harteis, C., (2012) *Human Fallibility, The Ambiguity of Errors for Work and Learning*.

Benner, D., (2016) *Human Being and Becoming, Living the Adventure of Life and Love*.

Fuchs, T., (2018) *Ecology of the Brain*.

Harding, S., (2015) *Paul's Eschatological Anthropology: The Dynamics of Human Transformation*

Jewett, R., (1971) *Paul's Anthropological Terms, A Study of Their Use in Conflict Settings*.

Kirkwood, C., (2012) *The Persons in Relation Perspective, In Counselling, Psychotherapy and Community Adult Learning*.

Lotman, Y., (1990) *Universe of the Mind, A Semiotic Theory of Culture*.

Madsbjerg, C., (2017) *Sensemaking, What makes Human Intelligence Essential in the Age of the Algorithm*.

Martin, J., Sugarman, J., and Hickinbottom, S., (2010) *Persons: Understanding Psychological Selfhood and Agency*

Schwarz, H., (2013) *The Human Being, A Theological Anthropology*.

Semler, L., Hodge, B., and Kelly, P., (2012) *What is the Human? Australian Voices from the Humanities*.

Splitter, L., (2015) *Identity and Personhood, Confusions and Clarifications across Disciplines*







Common Mistaken Models of Consciousness in Risk

The model of the brain as a computer separated from the body, with privileged status over the body is a popular metaphor for understanding human decision making. This symbology only really took hold after World War Two with the development of computers. The following graphic of *The Head as Computer* (Figure 10) represents this anthropology.

One of the greatest curses inflicted on the risk industry is the toxicity of Behaviourism. Behaviourism is that 1940s ideology that constructed the human being as machine, as the sum of inputs and outputs. Nothing could be further from reality. Behaviourism constructs a false world that views humans as objects and naively thinks that motivation and goal setting are about positive and negative reinforcement. This is depicted in Figure 11. *The Behaviourist Brain*. None of this is true yet this ideology is attractive because it offers a simplistic construct to understand the world, observe it and measure it.

The reality is that human beings are not the sum of inputs and outputs. The language of ‘resonance’ and ‘reverberation’ is much better language to use when thinking about social enactment. The popular semiotic of the brain as a computer of inputs, outputs, algorithms and data may satisfy the behaviourist anthropology but does nothing to tackle the complexity of the ‘embodied mind’, experience of the self and unconscious nor, the reality of humans as situated persons in culture, history, social influences and ecological being.

The evidence shows that humans resonate with each other in even such simple things as being affected by another’s grief, crying, pain and distress. Receptors in our brain and chemicals in our heart and gut mirror those of the person we are affected by. Humans are ecological beings that are affected by the environment, environment design, music, sound, weather and social settings. The evidence for the interconnection of embodied humans to other embodied humans and to the world is overwhelming.

<p>Figure 10. The Head as Computer</p> 	<p>Figure 11. The Behaviourist Brain</p> 
<p>Figure 12. The Mechanistic Brain</p> 	<p>Figure 13. The Brain as Puppetmaster</p> 

Another popular model of human decision making resembles the idea of a machine as is represented at Figure 12. *The Mechanistic Brain*. The mechanistic model of human judgement is also popular in the risk industry as fostered by behaviourist and cognitivist ideologies. In this way human errors, mistakes and accidents can then be

attributed against poor programming or ‘having a cog loose’. We even see this in the way the risk industry tries to understand mental health and social psychological well being.

We think with our whole being. There is no little cognitivist computer in our heads directing everything. As Claxton notes:

The brain does not issue commands, it hosts conversations (Claxton - *Intelligence in the Flesh*)

Unless the risk industry understands human judgment and decision making holistically it will always look at error, mistakes and odd behavior as ‘wrong programming’. It is from the computational metaphor that many problems in risk management originate including the addiction to blame and eugenics.

The study of Cognitivism emerged from the cybernetics movement in the 1950s. The central idea behind cognitivism is that human thinking is computational. Unfortunately, Cognitivism like Behaviourism cannot explain such fundamental things as the experience of ‘the self’ or the nature of the unconscious. Some of this ideology comes from a Lockean assumptions of humans born as a ‘blank slate’. This is not the way cognition is understood in the East.

Varela in his book *The Embodied Mind* demonstrates just how out of touch the West has become in its despising of the body and the privileging of the brain in human thinking.

If an holistic approach to human being is understood that includes social, environmental, context, insitu and social psychological influences then, we move from the computer in the head idea and the observation of objects to a better understanding of human ecology and decision making that is not computational. Once we understand human being ecologically (https://monoskop.org/images/b/bf/Bateson_Gregory_Steps_to_an_Ecology_of_Mind.pdf; https://www.researchgate.net/publication/304422422_Bateson_-_Consciousness_Mind_and_Nature) then we can better tackle risk in its unpredictable, messy and emergent state.

Much of human decision making is not irrational as Ariely suggests (*Predictably Irrational*) but is arational/non-rational and, cannot be understood through a brain-focused anthropology.

Another semiotic popular in understanding cognition is the idea of the puppetmaster depicted in *Figure 13. The Brain as Puppetmaster*. Whilst still holding to the demonization of the body and the privileging the brain, this model views the final force in human decision making as outside of the human being. The environment of god thus operates on human programing that can be either resisted or synchronised via free will. This model come down to us through various religious traditions.

The Legacy of Augustine and Descartes

The ‘concupiscence’ (sexual desire, bodily passions) of Augustine and the rationalism of Descartes have had a lasting influence on way the risk industry understands human being and decision making. Augustine the Bishop of Hippo (13 November 354 – 28 August 430) whose theology and writings greatly influenced the development of western Christianity, was the central figure in solidifying the theology of fallibility and Original Sin in the church and Western society. Further, download my seventh book in the series on risk - *Fallibility and Risk, Living with Uncertainty* (<https://www.humandymensions.com/product/fallibility-risk-living-uncertainty/>).

The power of Augustine’s theological influence on Western society is connected to the fact that the church and state were one until the late Eighteenth Century. Even then, the lasting legacy of Augustinian theology continued in philosophers of the Nineteenth Century who were also theologians. Today, the Augustinian version of fallibility and Original Sin dominates the risk industry.

Cartesian rationalism and Cognitivism also have a profound presence in the risk industry. Descartes (1596-1650) was also a dualist that understood the body as a machine that stood apart from the mind. His famous dictum ‘i think therefore i am’ rotates on an anthropology that puts the human as a brain on a carcass. and with that Cartesian rationalism thrust modern philosophy down the pathway of empiricism (knowledge based on observable and measurable experience) and Positivism (only verified knowledge as acceptable) thus rejecting knowledge that was non-materialist and non-conscious.

So we observe in much of the work of the risk industry in the way it understands human decision making and human mind, an attraction to dualist, binary and mechanistic worldviews that foster a fixation on objects, numerics and behaviours as objects.

It is clear that the risk industry doesn't understand fallibility, how could it without a trans-disciplinary approach to knowledge. The idea that human error is about 'a taxonomy', 'science' or 'engineering' is the impost of Science Technology Engineering and Mathematics (STEM) bias on the nature of being human.

We have the legacy of James Reason to thank for the idea that human error is the sum of unsafe acts and unsafe conditions (https://www.galliera.it/20/58/strutture-e-servizi-in-staff-alla-direzione-sanitaria/ugr/pg-ugr/documenti/publicazioni/risk_12.pdf), and the model accepted in all texts on risk as a model of 'human error'.

Error is always attributed to a: lack of knowledge, lack of skills, lack of will, lack of rule compliance, poor programming or lack of ability. Amazing how the binary/dualist/platonic model has been normalized in the risk industry in such a short time without question.

Whilst it is neat to have a binary construct to frame for 'human error management' it unfortunately excludes a host of other ways of understanding human fallibility leaving the risk industry caught in a dualist anthropology of the privided mind over the deficit body. This is also somewhat like the binary construct offered by Kahneman in his popular book *Fast and Slow*. No wonder the book has sold millions to an industry consumed with binary logic. It is good that some like Dylan Evans and Guy Claxton join with me in deconstructing Kahneman's binary framing see: <http://blog.projectionpoint.com/?p=353>.

So now let's turn to a better way of understanding human decision making that doesn't foster this dualist/binary construct of the brain over body.

Mum and Dementia

One of the sad things about my mother's death is that she died many years before she died. Dad died when Mum was just 73 and it was clear that the shock of that loss was a contributing factor to the onset of dementia. Mum died aged 91 on 7 October 2016. For all those years Mum's dementia was the most distressful of experiences.

For some time Mum was able to live on her own at home and under the most amazing, patient and constant supervision of my sister Heather. Later, when Mum had to enter a dementia ward, the suffering for the family was extensive. Mum was in high level care for the final 6 years of her life and again my sister Heather (and brother Bruce) in Adelaide were constantly there, attending to her needs.

Despite all the photos in Mum's room, when I visited she didn't know who I was. I was just some nice man and sometimes a stranger who needed to be evicted from her room! I remember once going to visit Mum and looking for her in the ward and was distressed to find her at the end of a hall scratching at a glass door to get out. Mum was convinced that her mother (who had been dead for 50 years) was just on the other side.

In many ways Mum returned to infant stage of development, wearing a nappy and needing constant care. Mum couldn't comprehend much but sure knew how to get angry. She was distressed by fear and anything strange and couldn't recall much. Yet, if you sat her down at a piano, under muscle memory, she could play hymns for hours without an error. This teaches us a great deal about habit, heuristics and social learning. I sat down with Mum once at the piano and the moment I started to sing the first bar of a hymn, her hands would take over and the tears would roll down my face. I was so choked up because it seemed like my mother was present again.

Dementia teaches much about the brain and mind. In social stimulus Mum was very different when on her own, sometimes she would come alive in a very different conscious state as opposed to a very vegetative state when she was on her own. So, in what way was she conscious in a vegetative state? Was she a person? She certainly did many things unconsciously in dementia that she would have never done

before. Was this my mother enacting this anger? Was this my mother who was distressed? Was this my mother who I didn't know and didn't know me?

What became very clear in observing Mum is that the brain is not 'Mission Control'. The brain is only a part of Mission Control.

On only two occasions I was with Mum when she was lucid and aware of who I was and I don't know what triggered this. Nothing had changed in Mum's brain and when I told my siblings about the experience, they found it difficult to believe me. But something triggered a change and it wasn't in the brain. All sorts of social change triggered a different mind in Mum. It became very clear to me that persons/minds are more than brains.

What my mother's condition taught me was just how important it is to be holistic in care, attending and attribution of illness to others. Fallible humans are socially situated and no amount of drug therapy (which assumes a chemical problem), behavioural therapy (which assumes a behavioural problem eg. anger) or rational therapy (which assumes a logical-rational problem) effectively addressed my mother as a person/mind. Indeed, all of these assumptions would suppose that my mother was 'out of her mind' because they assume that a mind is a brain.

One thing is for sure, assumptions about personhood and treating people as objects (vegetables) results in unethical practice. The Cartesian idea that when one ceases to think rationally or cognitively that one ceases 'to be' - is ethically destructive.

One Brain Three Minds

A Model for Understanding Consciousness in Risk

The concept of **One Brain and Three Minds (1B3M)** is foundational to The Social Psychology of Risk.

Whilst we know so much about the brain we know so little about the Mind yet, the way the individual and collective mind works is critical for understanding human judgment and decision making. Humans undertake decisions and actions in three distinct ways and this has been assumed in many cultures and societies for thousands of years. Yet, many of the ways we seek to deal with risk target only one mode of decision making, the (slow) rational mind. Even though humans have one brain, the Mind operates in three distinct ways as a whole person. The Mind operates in three modes and this has significant implications for how we assess, tackle and manage risk.

It is critical for the following discussion to understand that symbols, myths, metaphor, semiotics (sign-systems) and semiosis (meaning in sign-systems) are foundational to approaching the inexplicable. When STEM limits the human expression of knowledge of the unconscious to a stop, SPoR starts. SPoR has an epistemology that is completely foreign to STEM where: metaphysics, poetics, (arts, dance, music, hedonism, pleasures, psychotics, psychedelics) dreams, intuition, graphics, movies and semiotics are all privileged. In SPoR there is a profound connection between the mysteries of consciousness, human cultures and civilisations as discovered by C.G. Jung.

For this reason it is important to visualise how many societies, civilizations and cultures comprehend human thinking and decision making triarchically. The purpose of this discussion is to establish that down through the ages, all civilizations and human ideas have understood anthropology triarchically as in 1B3M.



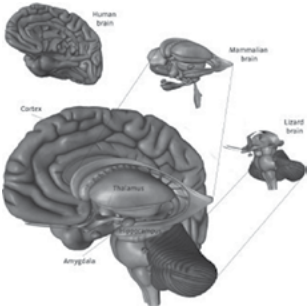

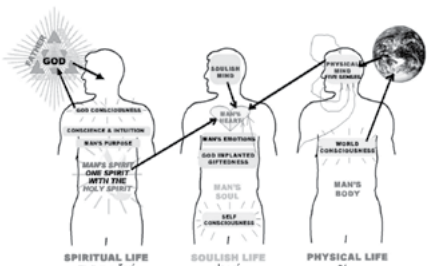

The following discussion provides an outline of the many societies and cultures that assume that humans have one body/brain but three modes of thinking/deciding as a Mind.

Tao Buddhism: believes in One Brain and Three Minds. They call the three minds 'Tan Tiens', these are the upper, middle and lower minds (*Figure 14. Three Minds in Buddhism*). These are symbolised by: crystal, fire and water.

The Yin Yang: is a foundational triarchic concept in Chinese philosophy (*Figure 15. The Middle Path Dialectic*). The Ying Yang represents the middle way between opposites. The middle way merges between the negative and positive in a similar way to a Hegelian dialectic but does not result in synthesis. The Yin Yang is foundational in Chinese cosmology and represents all forms of change and difference such as the annual cycle (winter and summer), the landscape (north-facing shade and south-facing brightness), sexual coupling (female and male), the formation of both men and women as characters, and sociopolitical history (disorder and order).

The Evolutionary Brain: John Medina in *Brain Rules* (2008) discusses the evolution of the brain and mind in three unique parts. He calls these: the lizard brain, mammalian brain and human brain depicted in *Figure 16. The Evolutionary Brain*.

The Christian Triarchic Mind: The Christian tradition is profoundly triarchic. The model of both god and human is proposed as a ‘divine community’ and the Trinity as The Divine Dance (perichoresis as in *Figure 17. Perichoresis/The Divine Dance; Figure 16. Body, Soul and Spirit* and, a fascinating mural on the wall of a Bavarian Church (14th Century) with God the Father, God the Son and God the Mother (Spirit) depicted in *Figure 18. Trinity 14th Century Bavaria*.

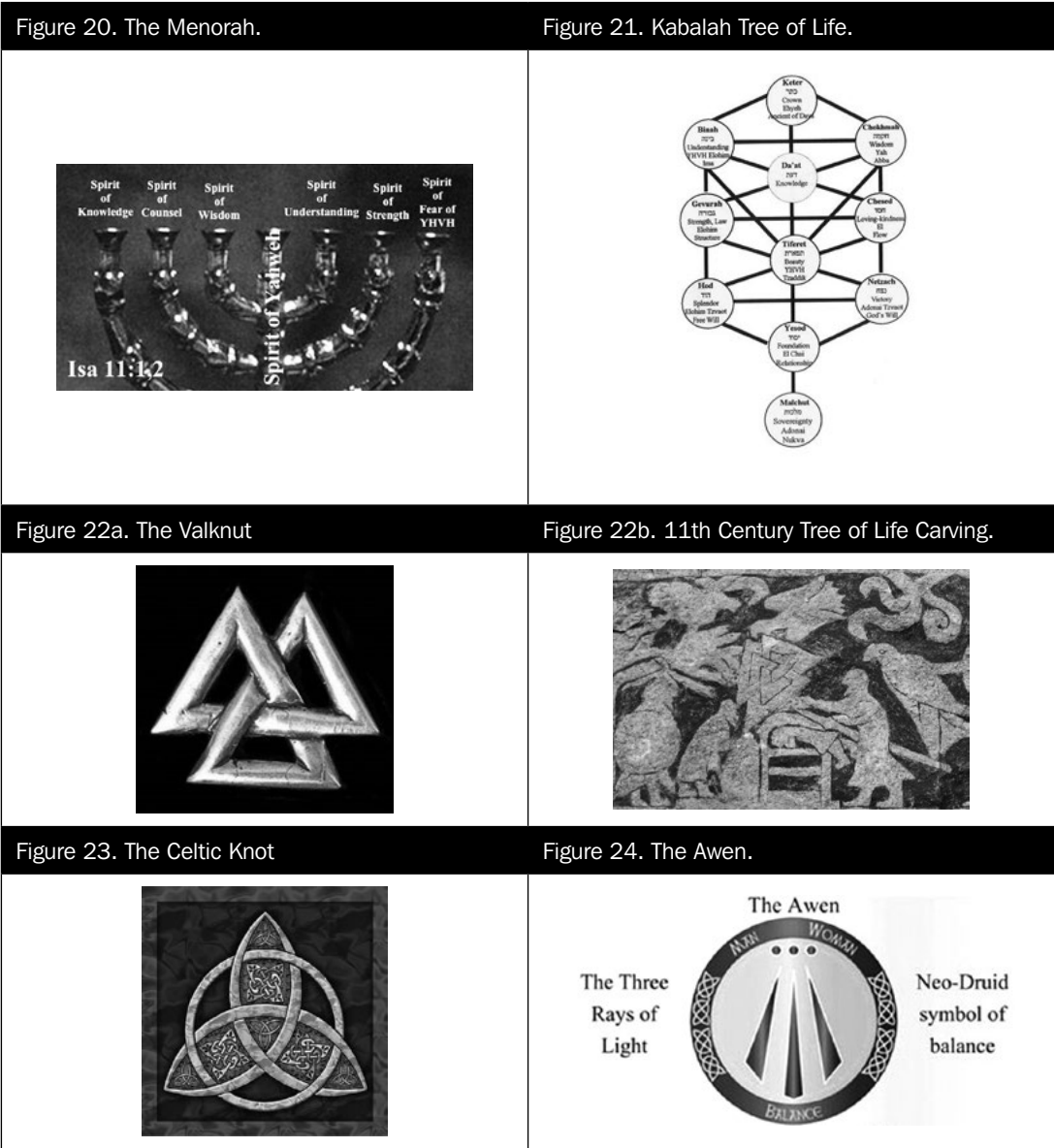
<p>Figure 14. Three Minds in Buddhism</p> 	<p>Figure 15. The Middle Path Dialectic</p> 
<p>Figure 16. The Evolutionary Brain</p> 	<p>Figure 17. Perichoresis/The Divine Dance.</p> 
<p>Figure 18. Body, Soul and Spirit</p> 	<p>Figure 19. Trinity 14th Century Bavaria</p> 

Hebrew Decision Making: The Hebrew Menorah (*Figure 20. Menorah*) as well as the Kabbalah (*Figure 21. Tree of Life*) and various forms of alchemy, depict human decision making triarchically.

The Vikings: The Valknut is a symbol (*Figure 22a. The Valknut*) consisting of three interlocked triangles and represents a triquetra, three elements of life. The symbol is also tied to the god Odin (*Figure 22b. 11th Century Tree of Life Carving*)

Celts: The Celtic Knot or Icovellavna (*Figure 23. The Celtic Knot*) represents the unending flow of life and dates from the early Roman Empire. It signifies the three cycles of life.

The Druids: The Druids believe in the nature of the Awen (*Figure 24. The Awen*), thee rays or enlightened spirits of living. The Awen represents the balance between Man, Woman and Child.

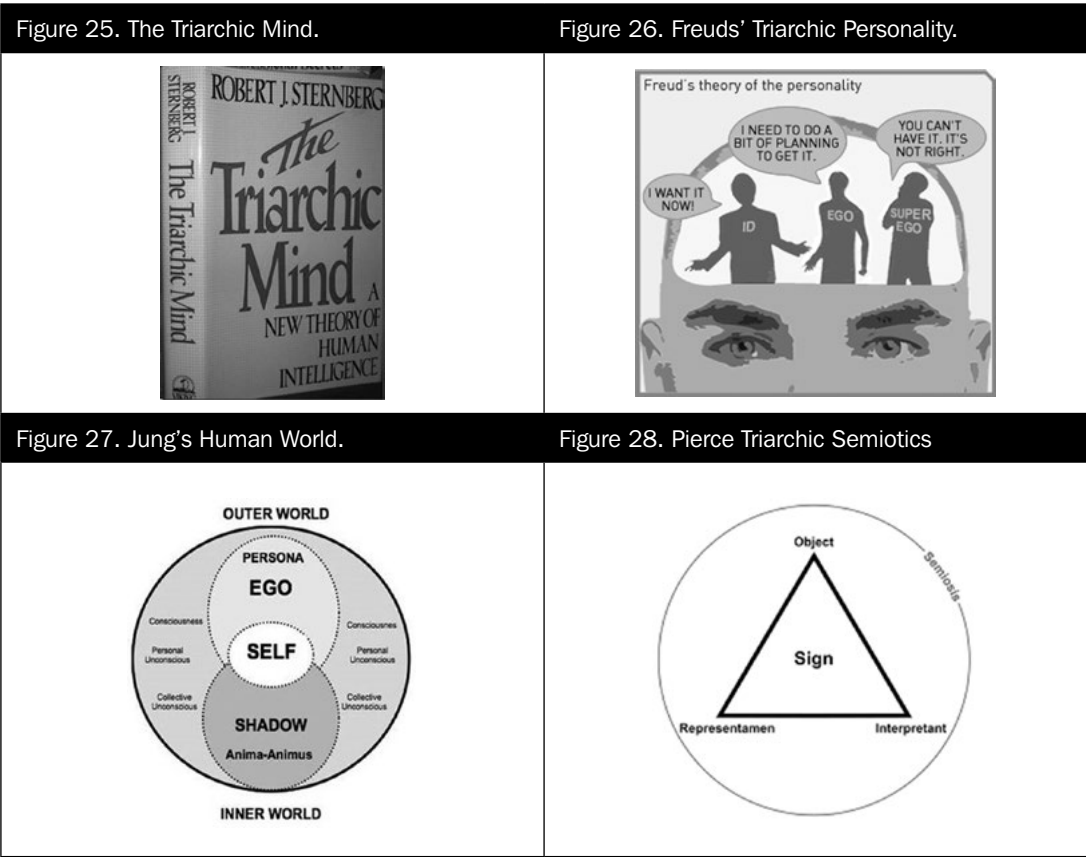


Sternberg: The famous educationalist Robert Sternberg proposes that human intelligence is triarchic and that understanding intelligence in this way is essential for human learning and teaching. This is all discussed in his book *The Triarchic Mind, A New Human Theory of Intelligence* (Figure 25)

Freud: Freud proposed that human personality is triarchic explained by the id, ego and superego visually represented at Figure 26. *Freuds' Triarchic Personality*.

Jung: Jung also proposed a triarchic understanding of the human world of decisions and experience as represented in Figure 27. *Jung's Human World*.

Pierce: Charles Sanders Pierce (pronounce purse) is the founder of semiotics and proposed that all semiotic communications and thinking are triarchic as per Figure 28. *Pierce Triarchic Semiotics*. Pierce proposed that all semiotics are experienced triarchically in what he called Firstness, Secondness and Thirdness as visualised in Figure 29. *Pierce Firstness, Secondness and Thirdness*.



Scientific American: the scientific community are convinced that humans have one brain and three minds as follows:

- <https://www.scientificamerican.com/article/gut-second-brain/>
- <https://www.newscientist.com/article/mg21628951-900-gut-instincts-the-secrets-of-your-second-brain/>
- <https://spinalresearch.com.au/three-brains-head-heart-gut-sometimes-conflict/>
- https://extraordinary-healing-arts.academy/news/the-three-brains-head-heart-and-gut/#.W6b_mVJoTUI
- <http://www.mindsetcomms.co.uk/head-heart-gut-brains-three-physical-brains/>
- <https://www.forbes.com/sites/berlinschoolofcreativeleadership/2013/09/13/decisions-decision-decisions-balancing-your-head-heart-and-gut/#29a7d8d42a13>

This is known as Alimentary Thinking and was repoorted in the *New Scientist* 15 December 2012. (Figure 30. Cover of *New Scientist* Issue 38. 2012.)

Art Therapy: holds to a notion of the embodiment of Mind. Similarly many of the arts such as dance, music and drama accept the idea that one thinks with head, heart and gut. This is exmplified in Koch’s therapy semiotic as represented ar Figure 31. *Art in Psychotherapy*. Art therapy accepts general principles of Jungian psychotherapy, Gestalt, Semiotics, inter-body resonance and family therapy.

Transactional Analysis: in Transactional Analysis established by Eric Berne, the three ego states are represented by a communication/transaction dialectic between the Parent, Adult and Child (Figure 32. *Transactional Analysis Symbology*). Berne published his book *Games People Play* (1964) and *I’m OK, You’re OK* (1969) as a ‘post-Freudian’ explanation of the id, ego and super-ego in transactional styles. In some ways this also represents the sexual dialectic of Mother, Father and Child common to many ancient erotic symbology.

Figure 29. Pierce Firstness, Secondness and Thirdness.




Figure 30. Cover of *New Scientist* Issue 38. 2012.


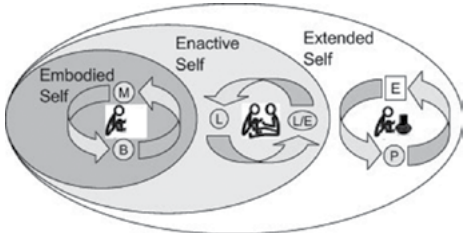


Figure 31. Koch - Art in Psychotherapy



M=mind, B=body, L=life form, E=environment, P=person.

Figure 32. Transactional Analysis Symbology.

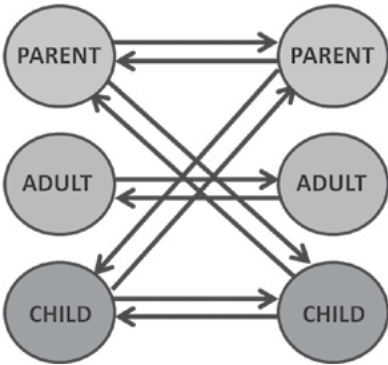


Figure 33. Damasio, Forms of Consciousness.

CONSCIOUSNESS	SELF	BODY/MIND	ORDER
Nonconsciousness	Proto-self	Emotions, and a feeling of the emotions	First-order neural pattern
Core consciousness	Core self	Conscious that one has the feeling	Second-order conscious pattern
Extended consciousness	Autobiographical self	Linguistically conscious	Third-order linguistic pattern

Antonio Damasio: is one of the leading scholars on body, emotion and the making of consciousness. His model of consciousness is structured in three levels. The first level is the nonconscious self that maintains all bodily functions non-consciously. All of these are rarely controlled and mostly happen automatically. The second level is core consciousness where the feeling awareness is made conscious and the third level is the extended consciousness where all sophisticated aspects of human language, symbolism, representation and relationship are demonstrated. This is indicated at *Figure 33. Damasio, Forms of Consciousness*. Damasio’s works include *Descartes Error* and *The Feeling of What Happens*.

As part of Damasio’s discourse he discussed the triarchic nature of embodiment in the form of the three bodily systems of communication. These are the Endocrine System, Immune System and Nervous System. Damasio demonstrates how each of these systems operates and ‘thinks’ without direction from the brain and indeed that these communications systems operate automatically. This is represented at *Figure 34. The Three Body Communication Systems*.

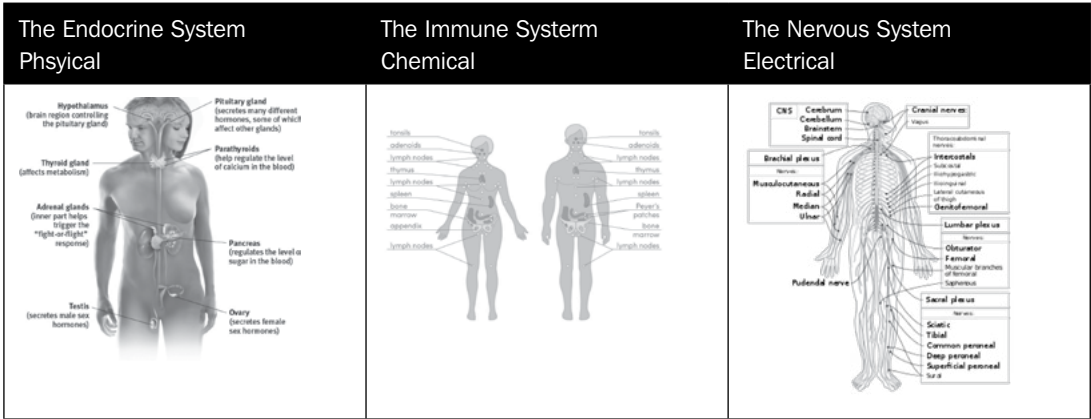
John Bargh: is one of the leading researchers in the world on the nature of the unconscious, framing, priming, anchoring and social influence. In his book *Before You Know It, The Unconscious Reasons We Do What We Do*, he tackles the challenges of time and decision making. We all know about hindsight bias, its so easy to be wise after the event because the past is always present. However, we also know that in our fallibility that even then we don’t remember things with great accuracy but rather construct the past with our minds because we are more tuned in with our emotions to the past than we recall the past like a computer.

Countless experiments show that we don’t recall memories like a computer. Chris Paley in his book *Unthink* and Adam Alter in *Drunk, Tank, Pink and Other Unexpected Forces that Shape How We Think, Feel and Behave* document how we don’t remember things accurately and neither do we predict things accurately. Except we do when stimulated and provoked by a symbol, sign or memory trigger.

Moreso, in human relationships, it doesn’t seem to be that important. Humans are not computers and our recollections are more often made by the whole Mind not by the brain in some kind of computer event retrieval. Bargh demonstrates in his research that the human Mind is in triarchic dialectic (*Figure 35. Bargh. The Triarchic and Dialectic Nature of Time*) between past, present and future and also is influenced by many environmental and contextual factors.

Guy Claxton: is an educator and cognitive scientist who asserts that the brain acts as a conductor not director of decision making. His statement ‘the brain does not issue commands, it hosts conversations’ comes from his book *Intelligence in the Flesh*. Claxton has also written: *The Wayward Mind*, *Hard Brain Tortise Mind* and *The Heart of Buddhism*. Claxton’s focus is on human embodied learning. Claxton’s triarchic mind is represented at *Figure 36. Claxton, The Brain as Conductor*.

Figure 34. The Three Body Communication Systems



J. K. Rowling: is the most successful writer of children’s fiction of all time selling over 500 million copies of the Harry Potter series. She is the world’s first billionaire author. Her inspiration for the Deathly Hallows comes from a symbol - *Figure 37. J. K. Rowling’s Inspiration for Deathly Hallows Symbol*. Rowling revealed her inspiration for the Deathly Hallows’ symbol and commented that she was also influenced by Masonic symbolism <http://www.bbc.co.uk/newsbeat/article/41795562/jk-rowling-reveals-the-inspiration-for-the-deathly-hallows-symbol>.

The Deathly Hallows is comprised of the Elder Wand, the Resurrection Stone and the Cloak of Invisibility. Whoever possesses all three is said to be Master of Death. The triarchic dialectic is a critical part of much fantasy, alchemy and mystery writing.

Triarchic Symbolism: It doesn’t matter where one looks, the nature of life and living is captured triarchically not in a binary way. Here are just a few examples:

- Figure 38. Aristotle’s Five Elements
- Figure 39. American Indian Symbolology
- Figure 40. Astrology
- Figure 41. Kali (Indian) Symbolology (Shiva)
- Figure 42. Yoni Worship and Fertility Symbolology





<p>Figure 35. Bargh. The Triarchic and Dialectic Nature of Time</p> 	<p>Figure 36. Claxton - The Brain as Conductor</p> 
<p>Figure 37. J. K. Rowling’s Inspiration for Deathly Hallows Symbol.</p> 	<p>Figure 38. Aristotle’s Representation of the Five Elements</p> 

Figure 39. American Indian Symbolism



Figure 40. Astrology



Figure 41. Kali (Indian) Symbolism (Shiva)

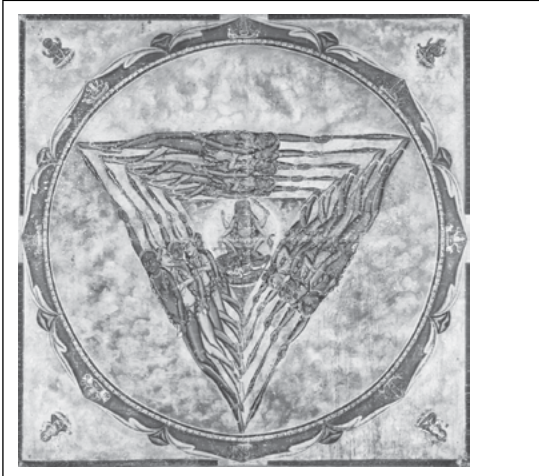


Figure 42. Yoni Worship and Fertility Symbolism



In these and many more myths/symbols throughout history, civilizations and cultures and cultural history we observe an understanding of life, living and decision making that is dialectic and triarchic. This stands in stark contradiction to the quest for binary constructions that seek black and white understandings of life and decision making.

Binary oppositions are a construct that suits fundamentalisms not the nature of fallibility and uncertainty in dialectic in real life.

The Discourse and Language of Gut, Heart and Brain in Mind

The discourse of the triarchic integrated Mind is also present in many cultural traditions and much of our language, for example:

Gut

- 'I've had a gutful'
- 'You don't have the guts'
- 'Go with your gut'
- 'I have butterflies in my stomach'
- 'Gut reaction'
- 'My gut tells me'
- 'I went with gut instinct'
- 'He spewed his guts out' (as in confession)
- 'You're a misery guts'
- 'That was a kick in the guts'
- 'No guts, no glory'
- 'They hate my guts'
- 'We busted our guts'
- 'What a greedy guts'
- 'It was gut wrenching'
- 'Yummy, yummy, yummy, I've got love in my tummy'
- 'Gutless wonder'

Heart

- 'You don't have the heart'
- 'Cross your heart and hope to die'
- 'I had a change of heart'
- 'My heart bleeds for you'
- 'Aching heart'
- 'Be still my beating heart'
- 'I love you with all my heart'
- 'You were half-hearted'
- 'He hardened his heart'
- 'Speak heart to heart'
- 'My heart is set on it'
- 'Their heart is in the right place'
- 'Dear to my heart'
- 'She tried her heart out'
- 'She stole my heart'
- 'I'm only being light hearted'
- 'A broken heart'

- 'Heart break'
- 'Warms the cockles of my heart'
- 'The heart of the matter'
- 'Take heart'
- 'Faint hearted'
- 'My hearts desire'
- 'Young at heart'
- 'Learned by heart'
- 'My heart was in my mouth'

Mind

- 'Mind your own business'
- 'Do you mind?'
- 'Mind your step'
- 'That's a load off my mind'
- 'We're like minded'
- 'He changed his mind'
- 'Blew my mind'
- 'The mind boggles'
- 'Don't mind me'
- 'Frame of mind'
- 'She has a good mind'
- 'Peace of mind'
- 'Back of mind'
- 'Open mind'
- 'Make up your mind'
- 'Mind over matter'
- 'A mind of its own'
- 'I have half a mind to ...'
- 'The mind's eye'
- 'Never mind'
- 'One track mind'
- 'Speak your mind'

Interchangeability in Language

All of this language is used interchangeably so that the gut, heart and brain in Mind represent emotional acting, decision making, forms of enactment, human energy, well being and intuition.

Why is One Brain Three Minds so Important to SPoR?

SPoR is founded on the methodology of dialectic, the dialogue between i-thou. This triarchic philosophy symbolises relationship in constant existential movement, not like the Hegelian dialectic that finds a synthesis in conflict between thesis and anti-thesis. In other words, all oppositions and paradox are in unending movement and hold true to context, social moment and historical place/space.

We know that when we get stressed and anxious, our heart races, when we feel overwhelmed we get ‘butterflies in our gut’ and the same with some sensations such as excessive guilt and fear, we get physically sick, we get an ache in the gut. It is not uncommon for people who are not coping physically to go to the toilet or soil themselves, to cry uncontrollably or to have high blood pressure. These sensations may come partly from the brain yet they are triggered and communicated independently by the endocrine, nervous and immune systems. Under acute stress the body shuts down, and most importantly the sensations are felt in the heart and gut.

In order to convey the embodied nature of decision making I use three brain images as Minds across the semiotic of a speedometer. As much as every model has flaws and weaknesses, this model allows an understanding of how the human embodied Mind ‘thinks’. This triarchic model seeks to explain both the automaticity of human decision making and also the slow rational mode of decision making and thinking. In many ways this corresponds to Damasio’s model expressed at Figure 27. This model is expressed semiotically at *Figure 43. One Brain Three Minds* and *Figure 44. One Person Three Ways of Knowing/Deciding*.

The following explains the model in text.

Mind 1.

In Mind 1. we make slow rational decisions like completing a paperbased checklist or form. If we do a ‘tick and flick’ on the same checklist then we do that in Mind 2. or Mind 3.

Mind 1. is that process of thinking that requires methodical, systematic and rational thinking.

Mind 2

Mind 2. is about heuristical thinking ie. thinking that relies of ‘learned shortcuts’ and practiced habits. This kind of decision making is essential for humans to be fast and efficient. This is decision making based on patterns, trial and error and habits that become infused into our thinking through experience and are triggered by either perception, experience or memory. Much of this type of decision making doesn’t involved rational choice or analytical thinking. It is quick and efficient. The best place to read on this are Gigerenzer and Plous:

Gigerenzer, G., Todd, P., and the ABC Research Group. (1999) *Simple Heuristics That Make Us Smart*. Oxford. London.

Gigerenzer, G., (2000) *Adaptive Thinking, Rationality in the Real World*. Oxford. London.

Gigerenzer, G., (2002) *Calculated Risks, How to Know When Numbers Deceive You*. Simon and Schuster. New York.

Gigerenzer, G., (2007) *Gut Feelings: The Intelligence of the Unconscious*. Viking, New York.

Gigerenzer, G., (2008) *Rationality For Mortals, How People Cope with Uncertainty*. Oxford. London.

Gigerenzer, G., (2014) *Risk Savvy, How to make Good Decisions*. Viking. New York.

Plous, S., (1993) *The Psychology of Judgment and Decision Making*. McGraw Hill, New York.

Mind 3

Mind 3. thinking is about total automaticity, what Damasio states as non-conscious decision making. In this state one is unaware of the process of deciding, thinking or rational processing. This is often referred to as ‘gut thinking’ or intuitional thinking but is commonly understood as ‘auto pilot’ or ‘gut’ thinking.

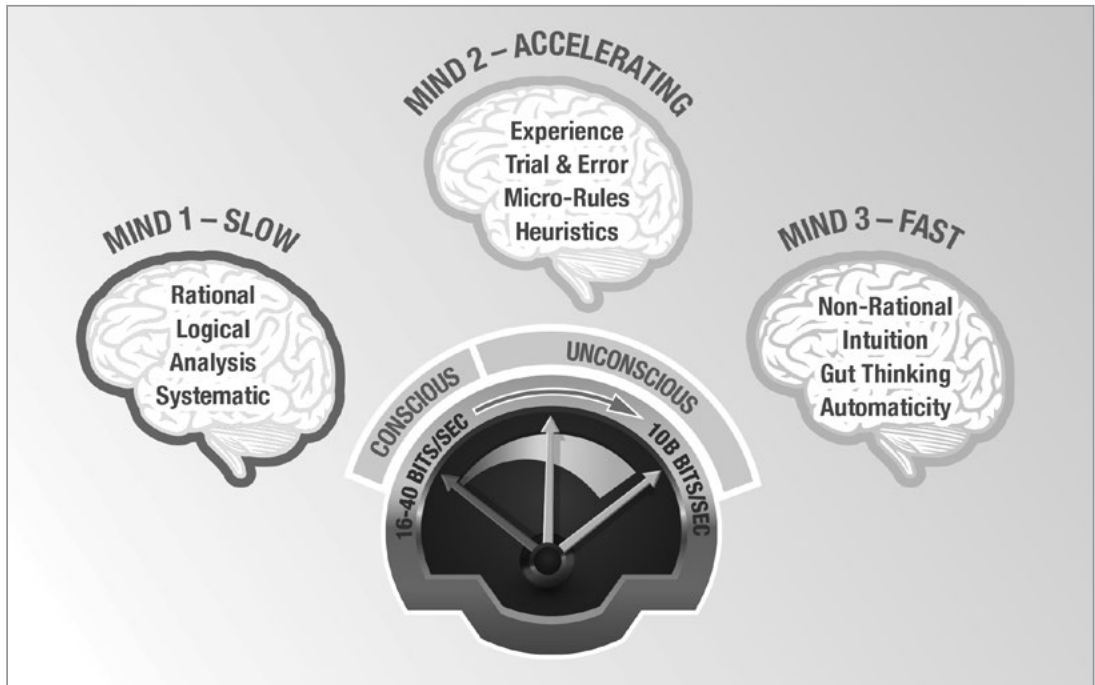
The best to read on this is:

Bargh, J. A., (ed.) (2007) *Social Psychology and the Unconscious: Automaticity of Higher Mental Processes*. Psychology Press, New York.

Hassin, R., Uleman, J., and Bargh, J., (2005) *The New Unconscious*. Oxford University Press, London.



Figure 43. One Brain Three Minds.



The Embodied Integrated-Ecological Human Being

One of the greatest impediments to an envisioned understanding of risk is how worldviews define the human person and culture. The idea that the fallible human is divided between a body and a brain completely distorts all strategy in risk.

The problem of consciousness and of knowing in risk can never be properly tackled as long as the human mind and life, brain and body, environment and inner self, are conceptualized in such a way that they exclude each other. As long as the risk industry remain anchored to behaviourist/cognitivist paradigms all solutions and strategy will fail to respond holistically to humans as socially embodied persons.

The traditional response in the risk industry to the problem of harm and injury has always been focused as a brain-environment problem. Whilst the industry has worked over history in shaping a safer environment, it still doesn't understand how embodied fallible humans respond to that environment.

The focus on human judgment and decision making in risk training has always found its locus in the brain and systems. Indeed, in the language of the industry 'the brain' and 'mind' are used interchangeably as if they are the same thing. And so, the language of risk is primarily mechanistic focused on the brain as an interpreter and representer of systems. By confusing and integrating the language of brain and mind, the industry misses the opportunity to understand how decision making is embodied and so understands thinking as cognition.

If one understands humans as embodied then consciousness doesn't stop at the skin. This is why SPoR studies the emotions and affectivity.

Moreso, the discovery of canonical neurons in the premotor cortex in the 1990s helps us understand our own agency in the world and how we 'feel' part of it. Our environment 'thinks' and 'feels' just as much as we do (Bateson).

The model of the brain as a computer ‘driving’ the body, is simply not supported by the evidence. The idea and approach of ‘reprogramming’ the brain has little chance of making much difference to the practice of tackling risk.

The brain does not create the Mind. If humans are ‘embodied’ then the brain is not the organ of creation or instigation but rather a relational organ that ‘mediates’ our living in the world. As Claxton (2015, *Intelligence in the Flesh*) notes:

the brain does not issue commands but rather hosts conversations.

What are the implications of human embodiment for tackling risk?

1. Risk must be viewed much more as a socially enacted process, where all factors not just process, human and *Technique* are viewed as interconnected and ecological.
2. The idea of complacency (*The Wayward Mind*) must not be viewed as just a brain problem. If the Mind is an integrated whole then everything should have significance in tackling risk.
3. If humans are not conscious of many things but ‘repress’ aspects of themselves even to themselves, then social presence must be given much more importance in knowing oneself in context and in tackling risk.
4. As social and ecological communicators all symbols and language should be given much more significance in an industry including what current messaging and symbols communicate to the unconscious..
5. Moreso, issues of Mind, psychological health, resilience and well-being must be viewed as a social challenge not just an individual challenge. We have to stop viewing resilience as ‘pulling oneself up by the bootlaces’ but resilience as the holistic and ecological challenge.
6. Much more interest needs to be shown from transdisciplinary approaches to tackling risk. This means that such interests an anthropology, social psychology, education and learning, pastoral care, ethics and semiotics should be included in the curriculum.
7. An awareness of what is unconscious should therefore become of interest including interest in the human and ‘collective unconscious’.
8. The mechanistic and dehumanizing trajectory of excessive systems and excessive objectifying should stop and a new vision for risk should be countenanced as an ecological process.
9. Training should therefore shift from a training room focus to an embodied process in situ, where implicit knowledge receives greater value and heuristics are taken seriously.
10. If leadership is about vision then the current focus on meaningless data, language and symbology must be dropped and a new narrative created in how tackling risk is practiced.

To take up any of these challenges will require a real sense of vision and change. Whilst lots of language about ‘disruption’ and ‘vision’ is used in the risk sector there is still yet to be any conversation about the need for a fundamental paradigm (ideological) shift.

Mirror Neurons

Vittorio Gallese (https://en.wikipedia.org/wiki/Vittorio_Gallese) discovered that we all have 'mirror neurons' and that our internal organs are set off by neurochemical reactions that generate sympathy, empathy and identification. This was most demonstrated recently with the picture of young Alan Kurdi dead on a Turkish beach (https://en.wikipedia.org/wiki/Death_of_Alan_Kurdi young boy dead on the beach). The outpouring of empathy across the world demonstrates how 'social resonance' works.

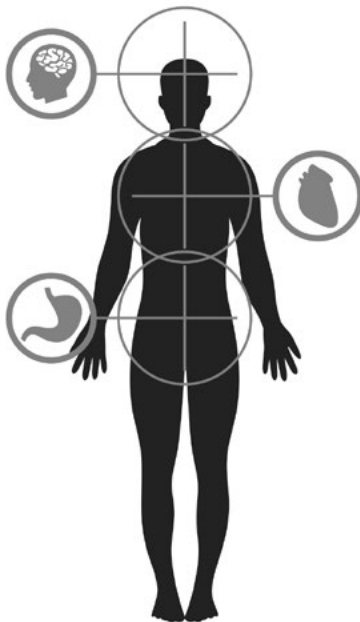
Our bodies are in a continual state of resonance and reverberation with all that is around us and these are not 'inputs' and 'outputs'. The computer metaphor applied to human being is the delusion of the behaviourist curse. Sorry to disappoint the risk industry but humans are organic not mechanic.

All effective communication depends on 'body coupling', that is, the ability to read and connect with others. We unconsciously learn to 'read' others emotions, body language and expressions and our body resonates with our perceptions, without brain direction. Life-mind is much more like a social dance than a binary computer program.

When we read any book on the unconscious, mind, neuropsychology or neurophysiology one cannot avoid the use of metaphor in trying to make the incomprehensible comprehensible. It is simply a fact of human discourse and communication that *The Rule of Metaphor* (Ricoeur) is foundational to all human thinking and communication. If any of the disciplines shared anything in common it is the use of metaphor. This is also why a study of semiotics is essential to the Social Psychology of Risk. This is why in SPoR much is explained graphically and semiotically as a visual discourse to convey meaning (semiosis).

Humans are much more than a biological animal which is why scholars and philosophers have struggled through the ages to explain 'the self' and consciousness. There is simply no way to go into the brain and find the place of consciousness because humans are both embodied individually and socially. This is symbolised in *Figure 44. One Person, Three Ways of Knowing/Deciding*.

Figure 44. One Person Three Ways of Knowing/Deciding



Why Does 1B3M Matter?

One's methodology (philosophy), anthropology (understanding of humans) and ontology (theory of being) are essential for how one understands the paradox of risk. If one comes to human 'being' from a computational, behavioural, binary or cognitivist ideology then the pathway of metrics, mechanics, objects, fundamentalist and regulatory capture are the trajectory for method. All these methodologies lead to a dehumanising ethic and a fixation on objects rather than humanising people in the process of tackling risk.

If on the other hand one understands humans as social beings and as embodied then method will be very different. The focus is then on higher-order goals such as: trust, relationship, community, ethics, care, helping, understanding, mutuality and respect. The issue of goal setting, motivation and perception will be discussed later in the book.

The Social Psychology of Risk is interested in poetics (the study of linguistics and literature) and mimetics (the enactment of imitation). When one is interested in the nature of the unconscious and how humans make decisions one moves away from positivist/empiricist approaches to knowledge and looks at a broader approach to understanding decision making.

Beyond Consciousness

One of the truisms of the music, dance, poetry and arts scene is the commonality of psychedelics and accessing the unconscious (Hill, S., (2013) *Confrontation with the Unconscious, Jungian Depth Psychology and Psychedelic Experience*. Muswell Hill Press. London). A study of 19th Century literature and art reveals that opium influenced the creative and imaginative spirit of many thinkers, philosophers, poets, musicians and artists (<https://www.bl.uk/romantics-and-victorians/articles/representations-of-drugs-in-19th-century-literature>; <https://www.worldcrunch.com/culture-society/under-the-influence-tracing-a-long-twisted-history-of-artists-and-their-drugs>). Much of the creative and imaginative work of the likes of: Dickens, Coleridge, Browning, Van Gogh, Warhol, Pollock, Led Zepplin, The Beatles and Rolling Stones were drug induced by accessing the unconscious. And BTW, you don't have to have more than a few milligrams in the body to generate visions, dreams, hallucinations and creative ideas.

There are some of course who have visions, dreams and an imagination that doesn't require psychotic drugs to enact the imagination and creativity. There is no record of either Jung or Blake having taken drugs to induce dreams or visions.

Now before I venture too much further let me say that this discussion does not advocate the taking of psychedelics. What I do want to point out is that even the slightest chemical imbalance in the body can trigger the unconscious to see things beyond conscious control, and lead to practical outworking of decisions and judgments. This is critical knowledge when confronting the massive challenges of mental health in the workplace.

It is interesting that throughout history that visionaries, prophets and seers were considered weird and crazy, but worthy of attention. People knew that the prophet saw things they couldn't see.

Whilst I can't comment on the music scene today, it was clear in the 1970s that much of the creative spirit in music came not from the conscious mind but the unconscious mind (https://en.wikipedia.org/wiki/Drug_use_in_music).

Everytime I undertake workshops in tackling risk I introduce the nature of human decision making through the One Brain Three Minds concept (<https://vimeo.com/156926212>; <https://vimeo.com/106770292>). Unless the risk industry tackles the issue of consciousness it will never understand the nature of *The Wayward Mind* and complacency. Further see Claxton's work:

Claxton, G., (1990) *The Heart of Buddhism, Practical Wisdom for an Agitated Society*. Aquarian. London.

Claxton, G., (1997) *Hare Brain Tortoise Mind, How Intelligence Increases When You Think Less*. Ecco Press. London.

Claxton, G., (2005) *The Wayward Mind, An Intimate History of the Unconscious*. Abacus. London.

Claxton, G., (2016) *Intelligence in the Flesh*. Yale University Press, New York.

Claxton's work ought to be mandated reading for any risk and safety curriculum.

William Blake

The Sun's Light when he unfolds it

Depends on the organ that beholds it

- Frye, N., (1966) *Blake a Collection of Critical Essays*. Prentice Hall, New York.

In literature William Blake is the supreme demonstration of *The Wayward Mind*. At the age of 9 years he was already seeing visions of angels and demons. His art and poetry is a kaleidoscope of demonstrating how humans dehumanizing themselves.

Blake was born in 1757 and saw the best and worst of the Industrial Revolution in England. His poetics testify to his vision/prophetics for humanizing society and the battle of good against evil and, the problem of innocence and naivety. Much of his work is freely downloadable:

- <http://triggs.djvu.org/djvu-editions.com/BLAKE/SONGS/Download.pdf>
- <http://www.93beast.fea.st/files/section2/blake/The%20Works%20of%20William%20Blake.pdf>
- <http://erdman.blakearchive.org/>
- http://www.mindserpent.com/library/blake/the_prophetic_books_of_william_blake.pdf

Many think Blake was a genius, certainly a seer of the English 18th century. His poetry and art have stood the test of time despite his anonymous death in a mass grave and no great legacy of self-promotion throughout his life.

In Blake the conscious and unconscious are united. His vision-like works testify to his inspiration, creativity and discovery of meaning through visions and dreams. Blake takes us into other worlds to make points about the material world. His works expose the entrapment of mechanistic dehumanising through dogma, ideology, industrial *Technique* and greed. His sensitivity to semiotics and semiosis help guide us through the malaise of 'progress' that is regress.

In the *Cradle Song* for example we see Blake's concern for innocence (safety), fragility, transcendence and the unconscious.

Sweet babe, in thy faces

Holy image, I can trace

Sweet babe, one like thee,

Thy maker lay and wept for me

Wept for me, for thee, for all

When he was an infant small.

Thou his image ever see,

Heavenly face that smiles for thee.

Smiles on thee, on me, on all;
Who came an infant small.
Infant smiles are his own smiles;
Heaven and Earth to peace beguiles.

In the works of Blake one cannot separate the text from illustration. For it is in his semiotics (symbols/ myth) that we experience his experience of visions, dreams and his unconscious. We feel his pain for the loss of the world to *Technique* (efficiency) and the way his world dehumanised people through industrialisation. In his illustrations he personifies archetypically the struggles of Evil with Good, Innocence (safety) with Corruption and Aggression with Obedience. For example, In Blake's *Book of Job* he captures the torment of suffering in the dialectic between innocence, reason and imagination, materialism and transcendence and, omnipotence and power. In *Job* Blake sees the struggles of submission, aggression and the human order. His running and dance before God is symbolic of the unanswerable challenges of and mysteries in suffering. *Figure 45. Blake's Book of Job.*

Figure 45. Blake's Book of Job.



Teaching Literature

In a previous life I taught High School and University Literature/English and it's enlightening what we can learn from Blake, Shakespeare, Dickens and T.S Elliot. Whilst we don't have to experience visions like Blake, or take psychedelics like the Beatles, it would be good if just a sceric of the risk industry would be interested in creativity, discovery, learning and the imagination in an understanding of the human unconscious. Wouldn't it been good if more than High School Students and students of Literature and the Arts tackled the mysteries of the unconsiuous in decision making.

Complacency and The Wayward Mind

The issue of complacency is a preoccupation of the risk and safety industry yet one can find little research in the sector beyond the excessive use of the label. It seems once the industry has declared something as ‘complacency’ it somehow knows what has occurred. Usually complacency is interpreted as laziness, inattention or negligence (<https://simplifiedsafety.com/blog/complacency-safety-s-worst-enemy/>; <https://www.safetyproresources.com/blog/combating-safety-complacency-in-the-workplace>; <https://ohsonline.com/Articles/2010/09/01/Complacency-The-Silent-Killer.aspx>; <https://safestart.com/articles/fighting-complacency/>). Amazing that the risk industry talks so much about complacency but doesn’t know what it is. It has nothing to do with laziness, inattention or negligence.

The Wayward Mind is of course another name for lucid dreaming or semi-unconsciousness and such a state has nothing to do with the pejorative attributions the risk and safety industry give to it. It’s a bit like the generic expression of ‘human error’ that offers little definition to what it means beyond Reason’s binary attributions (<http://130.88.20.21/trasnusafe/pdfs/HumanErrorsModelsandManagement.pdf>).

If one wants to know about lucid dreaming or dreaming perhaps read the following:

- Bulkeley, K., ((2016) *Big Dreams, The Science of Dreaming and the Origins of Religion*. Oxford. London.
- LaBerge, S., and Rheingold, H., *Exploring the Work of Lucid Dreaming*. Balentine Books, New York.
- Windt, J., (2015) *Dreaming. A Conceptual Framework for Philosophy of Mind and Empirical Research*. MIT Press, London.

In my training on Risk Intelligence I often ask participants if they have ever had the following experience and every hand goes up. Here is the scenario:

You have a busy day approaching and so don’t want a late night. You have been at a friend’s house and you haven’t been drinking. You decided to go home early and you’re not tired. So you set out for your 40 minute trip across the city. When you pull up in the driveway and turn off the key you realize – I don’t remember one part of the trip I just did!

Everyone in the room identifies with the scenario and so I ask. “Were you negligent, inattentive or lazy?” Of course, this is a silly question, lucid dreaming and semi-consciousness are foundational to fallible mortal living.

Have a look for *The Wayward Mind* and you will only find results in the education sector and of Claxton’s wonderful book of the same name. It is interesting that those most published on *The Wayward Mind* are educators like Robinson (*Out of Our Minds*) and Claxton (*Intelligence in the Flesh*).

Pill Testing

One of the fascinating things about the pill testing debacle in NSW (<https://www.theguardian.com/australia-news/2019/jan/15/overwhelming-majority-of-voters-support-pill-testing-guardian-essential-poll>) is that many miss the point of why people take drugs. People take substances to get into the Wayward Mind state, they want to be in lucid-dreaming and semi-consciousness.

The current approach to drug taking at festivals of prohibition and policing clearly doesn’t work (<https://www.theguardian.com/australia-news/2019/apr/25/nsw-drug-use-inquiry-to-examine-pill-testing-despite-state-government-opposition>). Whilst the regulator battles about the legalities of pill testing the elephant in the room storms about screaming, why do people want to get into the Wayward Mind anyway?

The attraction to turning on the unconscious state threads human history. Nearly every civilization has a history of using plants and substances to turn on *The Wayward Mind*. We know this from rock music industry, poetics, art, religion, movies, theatre, painting, fashion and tv industries. When people want to trigger the creative mind, imagination and discovery there is nothing like a snort of opium or cocaine.

For example: The work of Coleridge (https://en.wikipedia.org/wiki/Samuel_Taylor_Coleridge) is well known for brilliant poetics under the influence of opium (https://en.wikipedia.org/wiki/Coleridge_and_opium). What brilliant poetics in *The Rime of The Ancient Mariner* and *Kubla Kahn*. Indeed, *Lucy in the Sky with Diamonds*.

Now my point here is not that we should all go off and experience psychedelics but rather that there seems so little interest in the nature of the human unconscious. The Wayward Mind is not the enemy of risk just as risk is not the enemy of safety. One thing I do know, the more the industry demonises risk and The Wayward Mind the less it will know why people do what they do and know what to do about it.

Workspace, Headspace, Groupspace

So much of what we do in risk management takes its focus on Workspace. We call this the physical or ‘primary’ dimension of risk. This is easy to administer and regulate because what is required is visible, measureable and accountable through checklists and metrics matched to regulations. Most walks and observations at work are physical (primary) in focus. Walking around and observing what is physically out of place is relatively easy. Unfortunately, this seems to be the majority of what risk and safety people do. Every time people undertake observations they seem to concentrate on the same things they found last time. Without ownership, nothing changes.

Often observation walks take the form of the ‘nitpicky repetition cycle’. The ‘nitpicky repetition cycle’ often takes the form of nagging and threatening others about personal protective equipment, dress, trip hazards, dues dates, tags, tickets, barricades, traffic, exclusion zones etc. Looks can be deceiving.

The idea of Workspace, Headspace and Groupspace[®] captures the fundamentals of the Social Psychology of Risk.

Understanding, observing and influencing Workspace (Physical), Headspace (Psychological) and Groupspace (Cultural) is foundational to the Social Psychology of Risk.

The abbreviation for this concept is WS,HS,GS.

We can go on as many walks and observations as we like but if we only engage with the primary/physical dimension will never engage with psychological or cultural layers of risk.

We must understand and learn to engage with Workspace, Headspace and Groupspace, and the interactions between all three dimensions. We must know how to question and engage and influence the physical (primary), psychological (secondary) and cultural (tertiary) dimensions of risk.

Risk Maturity

I have explained in previous books regarding my model for risk maturity (*Figure 46. Risk Maturity Model*). I have also explained how this is not a static model and ought to be understood dynamically. For this reason when I present the model I am able to show the model can be animated. See <https://vimeo.com/143710374>

No Hand Rail

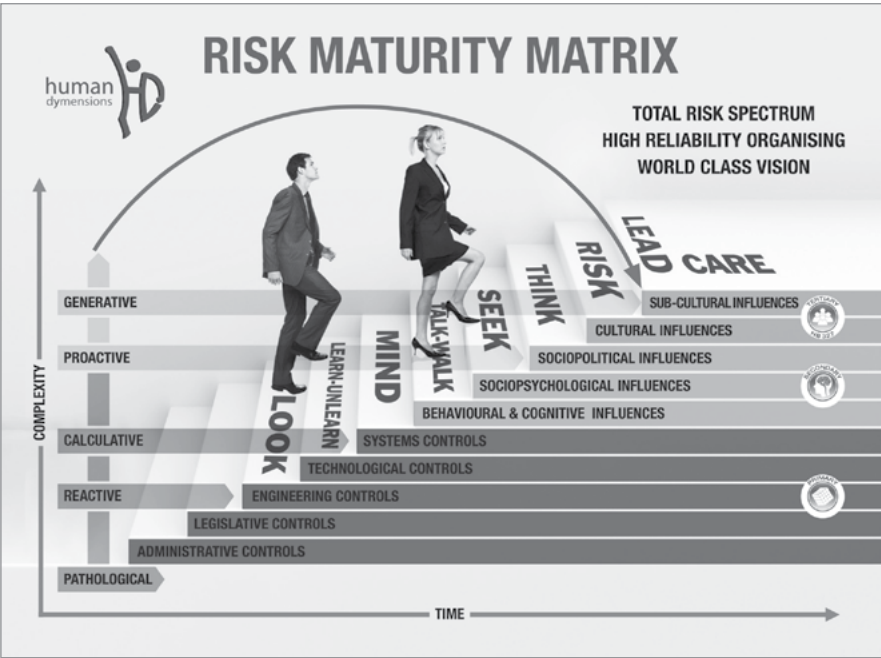
The Risk Maturity model shows a progression in skills and knowledge over time that advances in sophistication and complexity. The best way to demonstrate the profound ignorance of the risk industry to maturity is to recall a presentation I gave at an International Conference in Helsinki. I had finished presenting my model and an executive for a Tier One company stood up and declared that he didn’t like my model. The reason, it didn’t have a hand rail!

Most risk curriculum, knowledge and enactment is confined to the bottom steps in the model. The upper steps are simply not addressed in most texts on risk. For example, do a search for anywhere across the globe where the risk industry shows any interest in social politics, ethics, semiotics or the collective unconscious?

The Risk Maturity model is mapped against the popular Hudson Five Stages of cultural maturation and it is

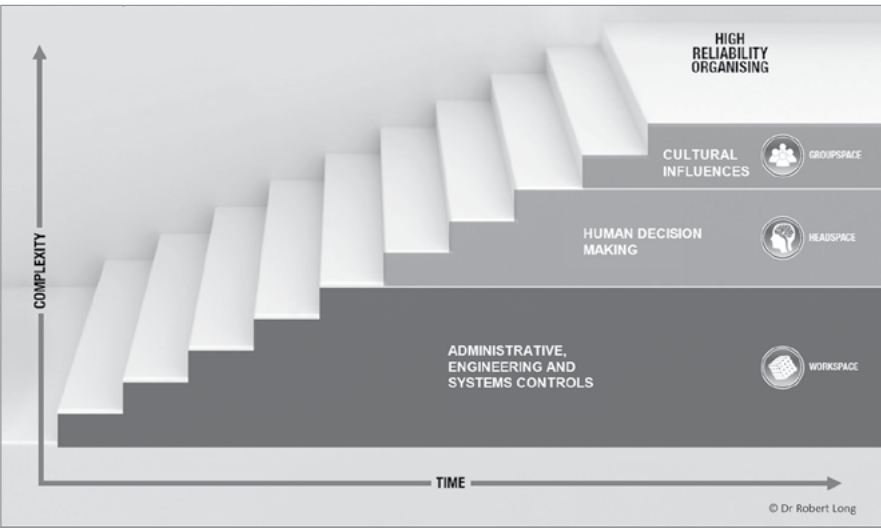
clear that the risk industry is trapped in a ‘Calculative’ understanding of risk. At best the risk industry is dabbling in the behaviourist and cognitivist step but are mostly dragged back into the bottom steps through anxiety, fear, paperwork and materialist discourse.

Figure 46. Risk Maturity Model



The model can also be summarised more simply as is depicted in *Figure 47. Risk Maturity in Three Steps*. In this modified model one can see the correlation between the 1B3M model and the WS,HS, GS model.

Figure 47. Risk Maturity in Three Steps



Practicing Risk Maturity

Engaging others in Workspace, Headspace and Groupspace takes training and practice. You need to know what you are looking and listening for and how to extract knowledge in these dimensions through effective questioning. Unfortunately too many professionals think that the development of ownership in risk is spontaneously generated through telling, lecturing, correcting and policing. These work in the short term but they don't motivate others to ownership and they certainly make no difference over the long term. This is why the 'nitpicky repetition cycle' is one of the greatest frustrations for the risk industry. I often get frustrated when I read and see consultants offering nothing more to clients than proficiency in the 'nitpicky repetition cycle'.

Engaging with Headspace is undertaken best through open questions and generating dialogue. When we engage with Headspace we are listening for: assumptions; micro-rules; heuristics; beliefs; rules of thumb; gut knowledge; values; biases; principles, language 'anchors', 'double speak', habits of mind; competing values, intuitions; emotional decisions; doubts, internal integration and psychological goals. We are looking for: symbols; artifacts; blind spots; omissions; habits and evidence of learning priority. When we hear and see these things we can then respond to them and influence belief and value change through further questioning.

When we engage with Groupspace we are listening for: 'effects'; interaction beliefs; relationships; trust; power discourse; stereotypes, distractions; interruptions; dissonance; heroes and enemies; power politics; exclusive language; shared meanings; 'rules of the game'; 'risk quackery'; situated learning; cognitive load, organic alignments and external adaption. We are looking for: social validation; recognition patterns, stressors; punishment signs and attributions. When we hear and see these things we can then respond to them and influence organisational culture change through more effective questioning.

To conduct observations and conversations in these dimensions with understanding is not something which comes naturally or automatically. Learning how to engage, listen and perceive these things takes learning and practice.

Often as part of training in Human Dimensions we undertake a range of digital assessments (micro-training) and use a range of diagnostics in learning and development. The MiProfile tool that was introduced in *Risk Makes Sense* and *For the Love of Zero* explains one such tool that assists in reflection on culture, organisation, risk and learning. One tool that is used consistently across visual verbal and digital assessment is the Workspace, Headspace and Groupspace[®] tool. The following explains the use of this tool:

1. In PROACT and MiRISC programs participants are often sent out to take digital images and do micro (video) coaching. This is done to demonstrate the capability of the participant to think, engage and converse in Workspace, Headspace and Groupspace. In this way participants are able to demonstrate their ability to see Primary (physical - workspace), Secondary (psychological - headspace) and Tertiary (cultural - groupspace) iCues[®]. The Workspace, Headspace and Groupspace tool (*Figure 48. Workspace, Headspace, Groupspace Tool*) is helpful for helping people think and engage beyond physical-only approaches to understanding humans, risk and learning.

Figure 48. Workspace, Headspace and Groupspace Tool.



In the Culture, Observations and Conversations Program we use digital video to record encounters in conversation with others to demonstrate capability to structure effective conversations. Sometimes we talk about:

- Written assessments
- Verbal assessments and
- Visual assessments or

Written, Verbal and Visual Work Method Statements (WMS).

The Workspace, Headspace and Groupspace tool assists the broadening of observation and conversation engagement.

The digital video method, called 'micro-training' is often used in teaching and nursing training, and has a long history since the 1970s of success in training helping professionals. The Workspace, Headspace and Groupspace tool helps participants consider the ways in which discourse and language are framed and how they 'prime' the unconscious in conversations. On the reverse side of the WS,HS,GS Tool is a symbolic understanding of Risk Listening - *Figure 49. Risk Listening*. This involves not just observing but listening for Workspace, Headspace and Groupspace indicators of risk.

Figure 49. Risk Listening

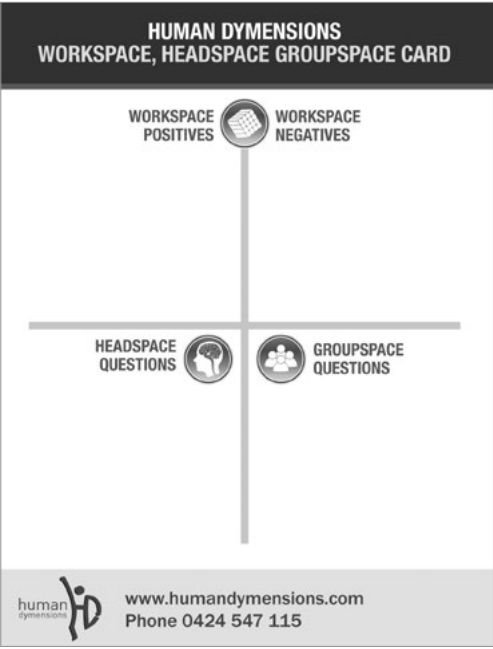


The indicators that one observes and hears are called iCues® The ability to sense these iCues comprises one’s Risk Intelligence. In our training we use the WS,HS,GS Tool to assist observation, conversation to stimulate observation and listening for iCues. For this we use a range of tools one illustrated at *Figure 50. The Open Question iCue* and at *Figure 51. The iCue Listening Tool*.

Figure 50. The Open Question iCue



Figure 51. The iCue Listening Tool



More will be discussed about these tools in later chapters associated with training, curriculum and enactment of SPoR. For the moment it is important to remember that these tools need to be understood and practiced before being implemented in the workplace.

As a part of the 1B3M; WS,HS,GS foundations in SPoR we use digital images in desktop assessments and in ‘storyboarding’ for Work Method or Job Analysis exercises. In industries with low levels of literacy and an overburden of paper-based forms of assessment, this is a much more effective way of developing risk analysis skills and interventions.

Storyboards should be used to replace text-based method statements because they are more effective at demonstrating in-situ behaviours and techniques. The Workspace, Headspace and Groupspace tool itself is an iconic (semiotic) representation of these three spaces and endeavours to assist people to think visually and spacially about these layers of risk and learning.

The MiProfile[®] Tool (Keypad Diagnostics) and methodology are also used for in group surveying and

shared brainstorming experiences. Results of the survey are often framed in ways that address Primary, Secondary and Tertiary hazards and risks in organisational culture.

Transition

The synergies between the concepts and tools introduced in this chapter give a very clear practical pathway to the enactment of an SPoR understanding of risk assessment and how to tackle risk. However behind these tools and philosophy of SPoR is an extensive level of research into human judgment and decision making. This research shows that the majority of our decisions are made in Minds 2 and Mind 3. Unfortunately, most of the ways the risk industry tackles risk is locked into Mind 1 thinking and Workspace analysis/action.

Unfortunately, this is the legacy of an industry consumed with materialist/behaviourist ideology. This ideology creates a myopia that seeks rationalist-only approaches to tackling risk. The result is an industry that tends to dehumanise the risk assessment process and totally misunderstands the way people make decisions.