

Creative Contradictions

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Abstract

When trying to appreciate a complex social situation, we do not know what we do not know. We need ways of both opening up our mind and motivating it. Early systems thinking advises doing this by concentrating on betweenness, connections and relationships; later systems thinking advises concentrating on the contradictions inherent in the betweenness. This paper revisits using contradictions, de-centring, irony, paradox and humour as an opportunity to learn. Specifically, it will argue that the contradictions approach to appreciating complex situations is in need of being consolidated and given a pragmatic identity. The paper reviews the recent irony, paradox and humour management literature and the multiple perspectives literature to start the consolidation exercise. It also attempts to place the contradictions approach in the epistemology literature. Examples are provided.

Keywords, Systems thinking, contradictions, irony, paradox, multiple perspectives

Problem Statement

One stream of systems thinking (Churchman, 1971) (Ackoff, 2000) has provided us with a pragmatic way of thinking about complex social phenomena such as organisation change or the design of socio-technical systems. Rather than merely thinking about the relations between elements in the situation, it suggests looking at the dialectic, or contradictions, between those elements. How have they created and sustained the situation? Whether these contradictions are real or merely ways of sense-making (Weick, 1995) is not as relevant as how to imagine these hidden forces.

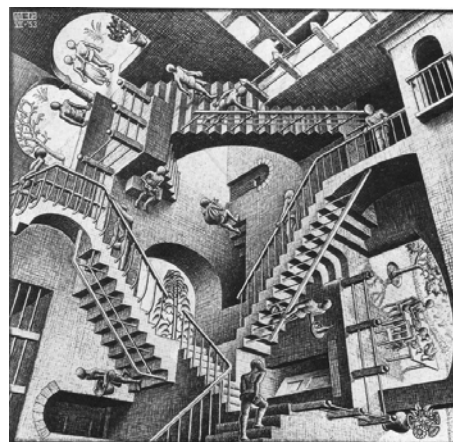
Exposing contradictions has a distinguished, if often neglected, track record as a creative way to think about complex social phenomena; as a way of knowing. Many readers will be aware of Checkland's contradictory worldviews (2000), Mason's dialectic strategy formulation (1969), Mitroff's dialectic inquiries (1979), Morgan's metaphors (1986), Linstone's contradictory TO&P perspectives (1999) and Marx's dialectic (Sowell, 1985). These sorts of writers either provide contradictions in need of study, methods for creating or exposing contradictions or suggest how to critique contradictions once created or exposed. However, using contradiction as a thinking 'tool' is a somewhat fractured literature. For example, the post-modern management literature (Lewis, 2000) (Rorty, 1989) discusses the need not to resolve ironic or paradoxical contradictions. These can be thought of as contradictions that have already been exposed. For example, consider a very well known ironic quote:

We shape our buildings; thereafter they shape us (Winston Churchill)

This suggests a contradiction between people and buildings. The first part of Churchill's statement is the traditional view that we are in control of nature and design our building to our specifications. The second part, however, starts to open up a perspective where we, as both the users and designers of buildings, are the product of our environment. A building designed to allow social interaction may encourage more creativity. The second perspective also opens up thoughts of a feedback loop in the relationship between our buildings and us. This ironic contradiction acts to stimulate thought.

That contradictions encourage thought suggests that they work by creating some sort of cognitive dissonance, and/or logical jumps, between perspectives. Reminiscent of cognitive switching, the differing perspectives are not expected to provide explanations about the gaps between themselves. The dissonance is thought to be de-centring and encouraging the brain to go into a state of rapid sense-making (Weick, 1995), or at least be open to the senses while attempting to interpret inconsistencies.

The arts have not missed this opportunity to play with people's minds. A visual contradiction is provided in Escher's picture "Relativity" (see below). Each of the people in Escher's picture can be seen as having made sense of only the staircase immediately before them; they interpret their world from their own perspective. However, when brought together there is a contradictory view, the absence of one universal worldview; the God's eye view is contradictory. The picture, like the quote perhaps creates some confusion in the brain, some de-centring, which encourages thought in an attempt to make sense of what has been exposed.



"Relativity" By M.C. Escher

This paper will argue that the contradiction approach to thinking about complex social problems is worthy of a distinct identity of its own, but needs pulling together and making pragmatic. After discussing the power of irony, paradox and humour as forms of contradiction useful for encouraging new perspectives; this paper will discuss some of the managerial contradictions that writers have recognised. Lastly there is a discussion on the epistemology of contradiction.

Exposed Contradictions

Irony

As Muecke (1982) points out, any word with a history is hard to define. Irony is a good example, and one whose modern meaning is beginning to forget how it differs from paradox and other forms of contradiction. Muecke gets around this problem by dividing irony into at least two types, which he calls observational and instrumental. These may or may not be humorous, but they often cause a mingled effect of pain and amusement. Observational irony is explained using the example of 'is it not ironic that the swimming coach drowned?' The contradiction here is that there is one perspective of the expert swimmer advising others how to avoid dying in water and yet another perspective of wanting to explore circumstances when being an expert swimmer will not be sufficient to avoid drowning. It is an ironic contradiction because when twisted back on itself opposites are created, and the expert becomes the victim. Instrumental

irony, the form of most interest here, is explained by Muecke, who uses the Vietnam War example, 'kill a Commie for Christ today'. Although this only becomes instrumental irony to the extent that different people interpret the phrase in different ways. It was seen by some to turn Christian values back on themselves, others saw little that was contradictory, while yet others simply saw it as an anti-war slogan. Whether one meaning is true and another false, is immaterial, more relevant is that there are different perspectives being revealed. It provides what Muecke calls "a double exposure... on one plate," "co-existing, irreconcilable, irrelatable realities" This is not problematic but rather enlightening. Ironies are not statements that are to be believed, but rather are made to improve understanding.

Another example of irony is the declaration, 'I tell lies'. It can be turned back on itself to reveal an opposite. Is the declaration itself a lie? A moralistic person might choose not to see the irony but rather believe the declaration to be a confession of sin. To us as the audience on this discussion, the declaration may be helping us to understand irony. Irony would therefore appear to be one means of understanding or revealing multiple perspectives, provided those people with differing interpretations are able to communicate with each other.

Consider the worldlier example of the ironic claim that international trade is a means to preserve unique cultures which otherwise might risk the oppression of poverty. The claim suggests you have to mix with others in order to preserve your own separate identity. This ironic contradiction opens up at least the perspectives of worldwide trading, and of understanding uniquely distinctive cultures. It may also open up the perspective of social phenomena being recursive, of folding opposites back on themselves, and dispelling the perspective of linear causality (Hofstadter, 1979).

In the management literature Oswick, Keenoy and Grant (2002) pick up on the role of irony as being more stimulating than metaphor as a means for improving our thinking about complex social situations. Metaphors emphasise similarities, as in "the organisation is like an adaptive organism", while irony attempts to 'de-centre' the reader, sometimes in a humorous manner. As an example they revisit Willmott's exposure of the irony of organisational empowerment where those chosen to be empowered are often those who have so far exhibited the highest degree of conformity. Further examples they use include the idea that anarchy is a form of organisation, as in Heller's *Catch 22*, and Burrell's *Pandemonium*. These demonstrate irony as purposefully attempting to use contradiction to decentre the reader initially; to force their reasoning to engage.

Hatch (1997) studied ironic remarks by reflecting on what managers had said immediately before an outburst of laughter. She was particularly interested in the need to be able to appreciate the context around an ironic remark before it appeared humorous. This underscores the locality of knowledge revealed by irony in contrast to a universal perspective. One example she uses was when an engineer presents to the General Manager that her department had achieved a quality rating of 51%. The GM's response was "Fifty one percent? That's Engineering. What would we do without Engineering? We wouldn't have any comedy!" This too can be used to identify contrasting perspectives. One is that of engineers taking measurement, precision and quantification very seriously. Historians of science such as Cohen (1994) and Latour (1986) emphasise the importance of precision and rigour in the physical sciences. However, as identified in Snow's two worlds when dealing with self conscious human beings, such precision needs to be replaced with the insight, imagination and perspective that may come from comedy. Precision in quality management practices has the same connotations as

calls for precision in beauty. The General Manger's comments act to refocus physical science criteria towards social inquiry criteria.

It is unclear, however, if irony exists except in language. It may simply be an amusing and novel means of communication. Hatch found more use of irony in some management groups than others. Some groups may simply have learnt to present the everyday as ironic. This may depend on the mood and creativity of people rather than exposing some physical occurrence.

Inquirers might want to seek out ironies as contradictions for the perspectives that have been revealed. This could include applying a purposeful process of contrasting a 'message' with its 'ends', and identifying when they are in contrast. For example, the 'message' in the Vietnam slogan may have been 'that Christians turn the other cheek' while the 'ends' was actually a war against communism. Another, somewhat classic example is the definition of positivism which is ironic in that it proclaims that valid knowledge requires empirical testing; a knowledge claim which itself cannot be empirically tested¹. This approach of contrasting the 'message' with the 'ends' provides a pragmatic for critiquing reports, where the author's advice is turned back on their own actions to seek opposites.

Paradox

Quine (1961) defines a (logical) paradox as a conclusion that at first sounds absurd but does have a reasonable argument to sustain it. Social paradox usually means that two opposites appear to exist at the same time, yet each is sustainable through rational argument. Poole and Van de Ven (1989) use the examples of how organisations (like rivers) are both at the same time constant and constantly changing, and how people are both independent and yet dependent on others. The medical profession both relieves suffering and sustains it. Poole and Van de Ven go on to recommend ways of classifying and resolving these sorts of social paradoxes, which suggests that they see paradox as being in need of, and capable of, resolution. Lewis (2000) points out that paradox denotes contradictory yet interrelated elements that seem logical in isolation but absurd when appearing simultaneously. She however seems to feel that paradoxes are not to be resolved so much as sought, appreciated and learnt from. Both the Poole and Lewis articles appear to be suggesting that paradoxes are real, discoverable objects. The alternative view considers paradox as being merely a manipulation of language and differing interpretations, but still useful as a way of offering contrasting insights.

Lewis describes paradox 1) as opposing interpretations of particular phenomena, 2) as oppositional thinking, 3) as aids to understanding divergent interpretations, 4) as perceptual, 5) as becoming apparent through social interaction, 6) as denoting a variety of viewpoints, 7) as residing in the observer not the observed, and 8) as being a possible outcome of using negatives to define something. She goes on to highlight different approaches for identifying paradoxes. Examples include the analysis of narrative, psychodrama and multi-paradigm. The latter involves using opposing epistemologies as a sensitising device for finding paradoxes. In this paper the opposite orientation was used. Paradoxes are used to find, explain and justify the existence of alternative interpretations which it is thought always exist around any understanding of a complex social phenomenon. Striving to find, remove or work with paradox is thought to be insufficient; rather, paradox needs to be seen as a window through which to creatively appreciate the world.

¹ <http://skeptic.com/positivism.html>

Arnold (2003) in his discussion on the contrariness, paradoxical and ironical nature of mobile phones opts to use the language of 'janus-faced' after the "Roman Deity with two faces, cursed and blessed with the necessity of facing two directions at once". He asserts that mobile phones both make us more liberated yet at the same time leashed, independent yet co-dependent, closer yet more distant to people, private yet public, busy yet available, productive yet consumptive, and, boyish yet girlish. Each opposite opens our eyes to a paradox, a new view of the technology. Moreover, like irony, paradox also reveals another perspective, that of a world of opposites existing together in harmony.

As with irony, however, it is not clear if paradox exists outside of language. It is fun to apparently present paradoxes but do they physically exist or are they merely a clever means of presentation? Arnold's string of mobile phone paradoxes is perhaps simply an imaginative way of presenting. Invoking James' (1907/1910) advice that when faced with a contradiction one should make a distinction, it seems possible to solve Arnold's paradox by careful definition of words. If 'liberating' means that paradoxes reduce risk, thus allowing new activities, then mobile phones are liberating. Questioning whether paradoxes only exist in language is not to undermine their usefulness in improving our appreciation of a situation.

The Abilene paradox provides another example. This states that sometimes a group will decide collectively upon an action that differs from the preferred action of each of the individual members. Presented like this it is intriguing, because it encourages us to stop and think about our intuitions, to be critical. This paper argues that this critique may be done purposefully by exposing some underlying perspectives in the Abilene paradox. One perspective revealed may be an assumption that a group should outperform an individual. Armstrong (2000) presents a lot of evidence that small groups do outperform individuals in experimental conditions. The other perspective this paradox may be seen to expose is one of communication. Small groups appear to be creative because there can be direct, one on one effective rational argumentation between all members. When interpersonal factors come into play, such as loyalty or being supportive, and override rational argument, then the group can be expected to make irrational decisions. The paradox may also encourage thinking about the behaviour of groups in terms of getting the right balance between collective and individual behaviour. The success of the Delphi method is to ensure individual experiences are correctly tempered by group influence.

Humour

One way of seeing humour is as rapid or playful cognitive reframing (Kelly, 2002). The identification of irony, paradox and other contradictions would seem to sometimes achieve this reframing, but perhaps with less sudden revealing. However, this reframing may also result from an accidental slip, or be driven more by a search for a laughter response than a desire to reveal a meaningful comparison of perspectives. In her study of social bonding in a group of managers, Hatch (1997) studied their use of irony as humour. She identifies ironic episodes as the conversation immediately prior to an outburst of laughter, which reinforces the idea that the decentring nature of irony can be humorous. In an earlier study, Hatch and Ehrlich (1993) concluded that an analysis of laughter could reveal contradictions. Humour was often the result of drawing on very contrasting analogies (metaphors). They used a case study of managers discussing the security at the entrance to a computer manufacturing company. Humour resulted from shifting the perspective of those trying to design an appropriate security system for their firm's reception to talk of gun turrets, chromosome checks and high security prison routines on entry as well as exit from their factory. The contradiction the humour identifies is that the company wanted to operate a friendly workforce based on trust and goodwill but found

it necessary to install a staff security system. Those opting to do overtime were causing the dilemma of putting themselves in a position of suspicion.

Consider the following humorous passage.

Jim and Mary were both patients in a Mental Hospital.

One day while they were walking past the hospital swimming pool, Mary suddenly jumped into the deep end. She sunk to the bottom and stayed there. Jim promptly jumped in to save her. He swam to the bottom and pulled Mary out. When the medical director became aware of Jim's heroic act he immediately ordered him to be discharged from the hospital, as he now considered him mentally stable.

When he went to tell Jim the news he said, "Jim, I have good news and bad news. The good news is you're being discharged because since you were able to jump in and save the life of another patient, I think you've regained your senses. The bad news is Mary, the patient you saved, hung herself with her dressing gown belt in the bathroom. I am so sorry, but she's dead."

Jim replied, "She didn't hang herself. I put her there to dry."

[Source Unknown]

The contradiction in this joke comes in the humorous 'punch line' which works by suddenly providing an alternative perspective on Jim's behaviour; his own rather than that of the 'voiceover'. The medical director's perspective is denied. Jim's apparently honest explanation of what he did will presumably stop him from being discharged. My first take was that the voiceover was claiming that the Medical Director could tell what was true, simply based on his 'God's eye view' of the patient, using only the observation of Jim's heroic behaviour in the swimming pool. Asking for Jim's perspective totally changes the understanding of Jim, but still only from the voiceover's perspective. The possibility exists that Jim is sane, that he has a great sense of humour or that he does not want to leave the Mental Hospital. Moreover, if Jim is insane, then how can we trust what he says about drying out Mary? The passage nicely exposes a myriad of perspectives, its humour works by bringing into question the very idea of universal perspective on human behaviour.

Clearly humour is a topic of overwhelming complexity (McGee, 1979), but the reframing type of humour, given that it is so explicitly flagged by laughter, may not only allow the identification of irony, paradox and other contradictions but may also provide an example of clashing perspectives. The same may be said of outbursts of anger. It would therefore seem reasonable to suggest to inquirers to seek occasions of humour or anger and to use these to expose contrasting perspectives.

From Perspective to Contradictions

Irony, paradox and humour represent exposed contradictions. Identifying, creating or imagining these contradictions can be difficult. Those involved may provide some. An alternative is to merely stand back from the situation and ask yourself what are the underlying tensions (contradictions) that have created and sustained this situation? Previous researchers have suggested some specific perspectives within which to seek contradictions, such as Marx's politics and economics, and Nielsen's 'ideas competition'. This has been generalised by writers

like Linstone who provide alternative perspectives whose use can create contradictions between themselves. Root metaphors can be used in the same way.

Benson (Benson, 1977) discusses the approach of looking for underlying tensions in an organisation, which may provide both the place to start with a change and a the source of potential catalyst for change; the process of becoming. A typical example is the worldwide enthusiastic adoption of a networked airline booking system that is popular with the booking agents but encourages the distortion of airline seating strategies. There was an underlying tension in people's opinions of the system. Tensions are often seen as departmental quarrels, or bad relationships, which may or may not need to be held in balance. Tensions, at least, have obvious physical manifestations, and may be a means for identifying contradictions. However, this may not be enough to identify some contradictions. This is in itself a creative process.

Sowell (1985) presents the identification of contradictions Karl Marx's research methodology for his study of wealth and class. Marx identified the contradictions between politics and economics, especially the means of production. Engels (1964) generalised this contradiction to nature, where species are in tension with each other and the environment. This has generally been a creative outcome, but could quickly slip into a destructive state if one species, humans for example, overly dominates the other species and the environment. Lewis (2000) points out there are numerous interpretations of what controls these contradictions, Marx seems to have believed they have a natural life-force of their own, analogous to biological cycles; in other words, it is a kind of structuralism. An alternative is teleology, which refers to an assumption of change being due to the purposeful actions of participants.

Nielsen (1996), as commented upon by Mason (1996), identifies other pairs of contradictions that may be used to think creatively about organisation change. He provides examples from the history of the Cadbury chocolate company. They are: 1) ideas being in conflict, not people but differing views or solutions; e.g. the idea that technological systems restrict flexibility, 2) physical world experimentation designed to challenge managers' expectations; if your beliefs are correct then so-and-so should happen, let us do an experiment to see if that is so, 3) resource allocations, 4) corporate processes not being aligned with the processes used in the wider society; e.g. democracy, 4) alternative but well justified corporate strategic plans.

Seo and Creed (2002) provide a different list of four contradictions that may be used. These are 1) power versus rationality struggles in an organisation, 2) adaptation processes that blind participants to certain other adaptation options, 3) inter-organisational incompatibilities and 4) identification of actors not served by existing social arrangements. Importantly, in this context, contradictions can be seen as a healthy state of competition and as being simply normal and unmovable.

Linstone (1999) has over three decades developed a three-way contradiction to help with appreciating complex social situations. From a summary of the organisational change literature and from consideration of contrasting epistemologies, Linstone suggests thinking about complex social problems from the contradiction of what he calls the technical, organisational and personal perspective. These equate to the scientific, systems and personal knowing epistemologies. For example, when it was used to think about the Challenger Space Shuttle disaster, the technical perspective suggested the 'O' rings broke, the organisational perspective suggested that the public relations function had overruled the engineering function in a research establishment, and the personal perspective suggested that certain individuals relied too much on incomplete numerical measurements compared to a verbal report by an

experienced engineer. The three explanations are contradictory and attempts to explain them may provide creative suggestions for re-organisation. Churchill's quote on buildings used earlier could be seen as a contradiction between the personal perspective (people's character) and the technical one (building design).

Pepper, Lakoff (1993) and Morgan's (1986) seminal work on metaphors provides yet another means of generating contradictions. Most words are metaphors or at least petrified metaphors in need of refreshing (Gordon, 1961). Therefore the selection of a string of words either in a plan or in a problem solving discussion may be explicitly or implicitly organised around some 'root' or 'conceptual' metaphor (Lakoff, 1993) or underlying image. In science it is seeing. In religion it is feeling. In management, it is efficacy. Stalemate occurs when people cannot identify which root metaphor they are using to see some phenomenon, such as computers as calculators, telephones or three dimensional space, and literature reviews as bricks, jigsaw puzzles, expert witnesses or abbreviated old jokes (Metcalf, 2003). Different root metaphors create contradictions which can be used to think creatively. For example, education might use the root metaphor of personal exercise or as being a product. As personal exercise, you can only do it to yourself. As a product, it can be purchased and transferred. There is a paradox, you must do education to yourself but lecturers are paid to do it to you.

Turning Contradictions into Action

Space does not permit a detailed examination of the issue of how to change an idea into action. Anyway, it has been covered elsewhere. Mason (1969) suggests setting up the contradiction as two equally funded groups. First each collects evidence to support their side and then the two are brought into open debate hoping to find a third way. Metcalfe (2002) suggests using a courtroom style debate. The use of dialectic argument as inquiry (Perelman, 1969; Crosswhite, 1996) (Eemeren, 2003) does seem complimentary to the concept of contradictions. That said, merely presenting a situation as a paradox may be motivating. This is why so many writers present a paradox in their introduction.

Epistemology

Contradictions have been presented as a means of creative thinking so as to improve our knowledge of complex social phenomena. This suggests that contradictions fit into the interpretive epistemologies or more specifically the multiple perspective epistemology, so perhaps it stands in contrast to the positivist epistemology. The positivist epistemology is defined as seeking universal truths validated by means of repeatable, third party, logic or sensory input (empirics, measurement) (Mitroff and Linstone, 1993). By epistemology it is meant an explanation of knowledge, in particular an explanation of the way in which knowledge is to be created (Nodoushani, 1999). The positivist epistemology often does not accept interpretive knowledge, considering it to be open to relativism (anything goes); or not sufficiently validated (Stove, 1998). A contradiction is typically seen within the positivist epistemology as some temporary lack of definition or understanding which needs to be resolved (Poole and Van de Ven, 1989). For example, if there is industry wide praise for the effectiveness and efficiency of a particular system, yet certain companies complain that it is driving them to bankruptcy, then this needs to be reasoned away. This may be done by qualifying the effectiveness of the system, or by finding alternative reasons for the companies to be failing despite the system. Order needs to be returned to the whole fabric of the one universal truth about the system; either it is efficient or it is not. The lack of mention of

contradictions in the findings of most scientific research papers perhaps demonstrates how positivism is uncomfortable with the lack of universal order that contradiction suggests.

The multiple perspective epistemology, within which the various forms of contraction will be placed, is essentially interpretive (Mitroff and Linstone, 1993). Interpretivism is defined as accepting as valid knowledge well justified different interpretations of the same social phenomenon (Davidson, 1992). Interpretivists are uncomfortable with the restrictions imposed on what is justified knowledge by a positivist definition of knowledge which excludes language, disallows non repetitive experiences, and discourages the harmonious co-existence of alternative interpretations of the same social phenomenon. Within the interpretive epistemology a contradiction – the presence of two apparently conflicting interpretations existing at the same time – is the norm. When the differing interpretations overlap, whole new perspectives can be expected to occur. The obvious counter to this idea is that an interpretation may be mistaken, or self delusional. Some validation of an interpretation to an appropriate audience is required. Moreover, there may be some universal interpretations such as the appropriate response to slavery and child abuse.

An understanding of the multiple perspective epistemology might be more appropriately constructed using Quine's 'Web of Knowledge' (Quinton, 1966) or the networked knowledge metaphor, rather than by using the foundations or roots metaphor so common in science. The multiple perspectives epistemology can be seen as one 'website' on this whole network. It is (hyper)linked to the theory of knowledge philosophy sites through Hegel's and Heidegger's separation of the object and the subject, including Kant's concerns about our coming to any inquiry with preconceptions (Haynes, 2000). These link to the Kuhnian (1970) ideas on worldviews in science, which in turn is linked to Checkland's (2000) soft systems concerns to shift stakeholders' worldviews. James' (1907/1910) interpretation of pragmatism provides another link that in turn is connected to perhaps the main link, which is Churchman's (1971 289) system thinking with its boundaries. These also have ethical connotations as stakeholders' perspectives are given voice. All these have, perhaps ironically, been linked to the argumentation theory of Habermas (1984), van Eemeren (2001), and Crosswhite (1996). This literature is an essential aspect of that multiple perspectives as it explains how perspectives might communicate with each other and avoid relativism.

The words 'perspective' and interpretive are being used synonymously here as a surrogate for a collective of similar concepts. This includes view, lens, frame, assumption, a priori, metaphor and theory. More ingrained surrogates are worldview, ideology and paradigm. Intuition may be implicit perspective, one that a person is not explicitly aware he or she is using to see a particular situation (Haynes, 2001). Becoming aware of what perspective is being implicitly used is considered important for understanding. The underlying assumption of a perspectival epistemology is that phenomena can be better known for using a variety of perspectives (Linstone, 1999). The implicit perspective can be purposely replaced by a variety of explicitly different perspectives. It is not only informative to be aware which perspective is being used at any one time but it may also be useful to give some explicit thought to the perspective itself.

It is believed that the multiple perspective epistemology is very appropriate for human inquiry and for understanding complex social situations such as the design of expensive social technical systems. Multiple perspectives as an epistemology can be distinguished from relativism by requiring the perspectives to be made explicit and to be justified rationally. It has a foundation in pre logical-positivist science as evidenced by the correspondence of Lambert (1728–1777) (Rescher, 1979), a contemporary of Kant, on appropriate metaphors for thinking

about the cosmos. The multiple perspectives epistemology then threads through the enlightenment as exemplified in Kuhn's paradigms. It aligns with the post-modern in wanting to undo Ramus' (Crosswhite, 1996) efforts to minimise language as perspective in scientific inquiry. The most common exponents of the multiple perspective epistemology are the legal court system and good quality investigative journalism, provided they do not believe that there will be one 'true' or dominant perspective on some event or phenomenon, but rather alternative interpretations of the same phenomenon that can be justified through reasoning and empirics. Using the example of Native Land Title claims by Australian Aborigines, multiple perspective epistemology allows the Aboriginal rights to the land to exist rationally at the same time as the colonising 'Whitefella' farmer's claims, with equal justification, but the claim has to be reasoned to a respected audience.

In Summation

When trying to appreciate a complex social situation, we do not know what we do not know. We need ways of both opening up our mind and motivating it. Early systems thinking advises doing this by concentrating on betweenness, connections and relationships; later systems thinking advises concentrating on the contradictions inherent in the betweenness. This paper has argued for a consolidation, revival and explicit recognition of this particular approach to understanding complex social phenomena. It is an approach which has many and deep roots, alternative epistemologies, and utilises the human brain's habit of seeking sense-making pattern where perhaps there is none. It simply involves creating or being sensitive to the creation by others of irony, paradox and humour in response to the situation, so as to identify the underlying tensions that have created and sustained the situation. Inquirers may use the identification of one of these 'contradictions' as an opportunity to make explicit the contrasting perspectives or interpretations implicit in the contraction. Doing so is believed to improve their appreciation of the phenomenon under consideration. However, agreeing with Lewis (2000), it is most likely not possible or desirable to resolve these contradictions, but rather they must provide opportunity to think about something in a variety of novel ways.

References

- Ackoff, R. 2000. Making a Difference, Systems Thinking/Systems Change, <http://www.judgeline.org/Presentations/GirlsLink/>. Cited Dec 2004
- Armstrong, J., Ed. 2000. *Principles of Forecasting*. Norwell, MA, Kluwer.
- Arnold, M. 2003. On The Phenomenology Of Technology. *Information and Organization* **13**: 231-256.
- Benson, K. J. 1977. Organizations: A Dialectical View. *Administrative Science Quarterly* **22**: 1-21.
- Checkland, P. 2000. Soft Systems Methodology: A Thirty Year Retrospective. *Systems Research and Behavioural Science* **17**(1): S11-S58.
- Churchman, C. W. 1971. *The Design of Inquiring Systems*. New York, John Wiley.
- Cohen, H. F. 1994. *The Scientific Revolution: A Historiographical Inquiry*. Chicago, University of Chicago Press.
- Crosswhite, J. 1996. *The Rhetoric of Reason*. Madison, University of Wisconsin Press.
- Davidson, D. 1992. *Inquiries into Truth and Interpretation*. Oxford, Oxford University Press.
- Eemeren, F. H. and R. Grootendorst. 2003. Pragma-dialectical Procedure for a critical discussion. *Argumentation* **17**: 365-386.
- Engles, F. 1964. *Dialectics Of Nature*. Moscow, Progress Publishers.

- Gordon, W. 1961. *Synergetics*. New York, Harper Row.
- Habermas, J. 1984. *The Theory of Communicative Action: Reason and the Rationalisation of Society Vol.1*. Boston, Beacon Press.
- Hatch, M., Jo., and S. Ehrlich, B., 1993. Spontaneous Humour and an Indicator of Paradox and Ambiguity in Organizations. *Organization Studies* 14(4): 505-526.
- Hatch, M. J. 1997. Irony and the Social Construction of Contradiction. *Organization Science* 8(3): 275-288.
- Haynes, J. 2000. *Perspectival Thinking*. New Zealand, Oneledea Comany.
- Haynes, J. D. 2001. Churchman's Hegelian Inquiring System and Perspectival Thinking. *Information Systems Frontiers* 3(1): 29-39.
- Hofstadter, D. 1979. *Godel, Escher, Bach: An Eternal Golden Braid*. London, Penguin.
- James W. 1907/1910. *Pragmatism*. Cleveland, World Publishing (Meridian).
- Kelly, W., E., 2002. An Investigation Of Worry and Sense Of Humor. *The Journal of Psychology* 136(6): 657-666.
- Kuhn, T. S. 1970. *The Structure of Scientific Revolutions*, University of Chicago Press.
- Lakoff, G. 1993. The Contemporary Theory of Metaphor. in *Metaphor and Thought*. Ed. A. Ortony. Cambridge, Cambridge University Press: 202-251.
- Latour, B. 1986. Visualization and Cognition. *Knowledge and Society* 6: 1-40.
- Lewis, M. W. 2000. Exploring Paradox: Towards a More Comprehensive Guide. *Academy of Management Review* 25(4): 760-776.
- Linstone, H. A. 1999. *Decision Making for Technology Executives: Using Multiple Perspectives*. Boston, Artech House.
- Mason, R. O. 1969. A Dialectical Approach to Strategic Planning. *Management Science* 15: B-403-B-414.
- Mason, R. O. 1996. Commentary of Varieties of *Dialectic* Change Processes. *Journal of Management Inquiry* 5(3): 293-300.
- McGhee, P. E. 1979. *Humor: Its Origins and Development*. New York, Freeman.
- Metcalfe, M. 2002. Argumentative Systems For Systems Design. *IT and People* 15(1).
- Metcalfe, M. 2003. Author(ity). *FQS* 4(1).
- Mitroff, I. and H. Linstone 1993. *The Unbounded Mind*, Oxford University Press.
- Mitroff, I. I. and J. R. Emshoff 1979. On Strategic Assumption-Making: A Dialectical Approach to Policy and Planning. *Academy of Management Review* 4(1): 1-12.
- Morgan, G. 1986. *Images of Organisations*. Calif, Sage Publications.
- Muecke, D. C. 1982. *Irony and the Ironic*. London, NY.
- Nielsen, R. P. 1996. Varieties of Dialectic Change Processes. *Journal of Management Inquiry* 5(3): 276-293.
- Nodoushani, O. 1999. Systems Thinking and Management Epistemology: Second Thoughts on the Historical Hegemony of Positivism. Russell L. Ackoff Conference, Villanova University.
- Oswick, C., T. Keenoy, et al. 2002. Metaphor and Analogical Reasoning in Organization Theory. *Academy of Management Review* 27(2): 294-303.
- Perelman, C. and L. Olbrechts-Tyteca 1969. *The New Rhetoric: A Treatise on Argumentation*. Notre Dame [Ind], University of Notre Dame.
- Poole, M. S. and A. Van de Ven 1989. Using Paradox to Build Management and Organizational Theories. *Academy of Management Review* 14(4): 562-578.
- Quine, W. V. 1961. *The Ways of Paradox*. New York, Random House.
- Quinton, A. 1966. The Foundations of Knowledge". *British Analytical Philosophy*. B. Williams and A. Montefiore. London, Routledge and Kegan Paul: 55-86.
- Rescher, N. 1979. *Cognitive Systematization: A Systems-Theoretic Approach to a Coherentist Theory of Knowledge*. Oxford, Basil Blackwell.

- Rorty, R. 1989. *Contingency, Irony and Solidarity*. Cambridge, Cambridge University Press.
- Seo, M.-G. and D. W. E. Creed 2002. Institutional Contradictions, Praxis and Institutional Change: A Dialectical Perspective. *Academy of Management Review* 27(2): 222-247.
- Sowell, T. 1985. *Marxism*. London, Unwin.
- Stove, D. 1998. *Anything Goes*. New South Wales, MacLay Press.
- van Eemeren, F. H. and P. Houtlosser 2001. Managing Disagreement: Rhetorical Analysis Within a Dialectical Framework. *Argumentation and Advocacy* 37(Winter): 150-157.
- Weick, K. E. 1995. *Sensemaking in Organizations*. Thousand Oaks CA, Sage.