Villains and Victims: Image Schematic Role Relationship Theory in Narrative Analysis

Rembrandt Klopper

The fellow who you've got figured for a villain most probably is a victim¹.

Abstract

My primary objective with this contribution is to demonstrate how the theory of image schematic role analysis can be applied as a tool for narrative analysis in qualitative research. It is commonly accepted that qualitative research in general, and content analysis as well as narrative analysis in particular entail the conceptual processes of establishing valid categories, followed by the systematic analysis of texts in terms of identified lexical categories. This contribution extends the generally accepted approach to content analysis by demonstrating that role relationship analysis can foreground dynamic aspects of interpersonal behaviour that reveal much more of groups and organisations than straightforward categorical analysis.

Keywords: Content analysis, image schema, qualitative research, role relationship analysis, role relationship theory.

Conceptual Underpinning of Image Schematic Role Relationship Analysis

An image schema can be characterised as a general recurrent mental pattern

¹ David McCallum in the role of Ducky Mallard, the Coroner, speaking to Pauley Perrette in the role of Abby Sciuto, the Forensic Biochemist in the TV series NCIS, season 5, episode 10.

that provides structured understanding of experiences (Johnson 1987; Klopper 2003; SIL 2004; St. Amant *et al.* 2006; Oakley 2007). Examples of a recurrent mental pattern is the semantically linked agent-patient role pair that denotes an active party whose actions affect a passive party during an event, as in: *the boy* (AGENT)² *ate all the chocolates* (PATIENT).

The theme of a text – the motif or underlying idea that provides coherence to any text – sets the scene for the event interactions that are portrayed in the text, and determines how generic roles like AGENT, PATIENT, INSTRUMENT, TIME, PLACE and EXPERIENCER are deployed in the text. For instance, in transactional events such generic roles form part of interactions that relate to manufacturing, buying and selling, and will be stipulated in greater detail as manufacturers, products, managers, salespersons and clients. In medical settings such generic roles will form part of medical intervention interactions and will be stipulated in more detail as doctors, patients, nurses and the like.

Image schematic role analysis is appropriate for qualitative case study because humans are particularly interested in human-related events, especially events that relate to interactions that involve humans controlling or experiencing the effects of events. In sentences, *verbs* encode whether or not participants are involved in cause-and-effect interactions. Therefore, verbs can be semantically graded in terms of the extent to which they express interactions between participants. Traditionally verbs that do not express causal interactions are termed *intransitive verbs*. Verbs that do express interactions are termed *transitive verbs*. The interaction continuum for events given below explains such degrees of interactivity.

The Event Interaction Continuum

The event interaction continuum relates to degrees of interaction between objects during a wide variety of events like a business transaction, a conversation, wage negotiations, a car chase or a robbery. Starting with verbs that express mere states of *existence* (being somewhere, being alive, being dead), the continuum progresses to *processes* (happenings like water

_

² Terms like AGENT and PATIENT that relate to the meaning of language forms are written in small caps.

running, ice thawing, organisms ageing), activities that entail non-interactions (sitting, sleeping or jogging), causal interactions (like eating, writing, slicing, slashing, healing or killing), and finally processes, actions and interactions (stimuli) that cause passively involved parties to experience some sort of sensation accompanied by an emotive awareness (feeling nauseous, excited, elated, pleased, puzzled, frightened terrified).

Being → Happening → Doing → Controlling → Competing → Experiencing

Figure 1: The Interaction Continuum

The BEING, DOING and HAPPENING schemas present relatively mundane, background scenarios, and are often used to set the scene for the more interesting interactions that involve active parties (AGENTS) and passive parties (PATIENTS), parties that cooperate with one another (CO-AGENTS), parties that oppose one another (COUNTERAGENTS), parties that benefit from interactions (BENEFICIARIES) and disadvantaged parties, (VICTIMS), and finally parties that are emotionally or conceptually affected during interactions (EXPERIENCERS) and the parties, objects or interactions that cause the experience (stimuli):

- With the exception of *BEING* scenarios where the focus is merely of the fact that an entity exists, and the *DOING* scenario where parties act on their own without affecting other parties, all other events entail interactions and therefore portray cause-and-effect relationships between entities identified in statements.
- We use the *BEING schema* to simply situate entities in time and space.
- We use the *HAPPEN schema* to portray passive processes.
- We use the DO schema to portray individuals engaged in activities on their own.
- We use different varieties the *AGENCY schema* (sole agency, coagency, counter-agency) to portray different forms of causal physical human interactions.

• We use the *STIMULUS-EXPERIENCER schema* (and its mirror pattern, the *EXPERIENCER-STIMULUS schema*) to portray the psychological effects of external stimuli on experiencers' mind states.

The semantic relationship between the different entities involved in an event can be characterised as a *role relationship image schema* for each type of interaction, often just abbreviated to *image schema*:

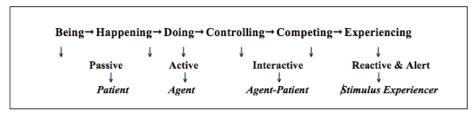


Figure 2: Semantic Roles mapped to the Interaction Continuum

Figure 2 implies the following:

- Verbs that relate to states of *BEING* and *HAPPENING* entail physical passivity for which the *PATIENT* role is appropriate.
- Verbs that relate to *DOING* entail physical activity of an entity on its own for which the *AGENT* role is appropriate.
- Verbs that relate to *CONTROLLING* and *COMPETING* entail physical interactivity for which the *AGENT-PATIENT* role pair is appropriate.
- Verbs that relate to physical reactivity accompanied by mental alertness entail mind-internal experiences for which the STIMULUS-EXPERIENCER role pair is appropriate.
- The AGENT-PATIENT and EXPERIENCER roles are associated with CAUSATIVE events.
- Optional roles like LOCATION, PLACE OF ORIGIN, PATH, DESTINATION, INSTRUMENT, POSSESSION and TIME are used to locate entities in space and time.
- Within specific event-contexts generic roles can be specified more specifically. In the law enforcement context agents could for instance be policeman or bank robbers. During standoff interactions

... Image Schematic Role Relationship Theory in Narrative Analysis

the detective and the bank robbers would be counteragents, and hostages would be patients, etc.

■ In transactional scenarios, typically used to portray events in organisational and business contexts, roles like *AGENCY*, *CO-AGENCY*, *COUNTER-AGENCY* are commonly expressed more specifically with terms like general manager, manager, competitor, product, service, contract, etc. That managers are in fact *AGENTS* from a causality point of view is born out by the fact that they are legally accountable as *AGENTS* acting on behalf of their organisations.

Simply Being Somewhere Image Schema

An object exists/ is situated somewhere in three-dimensional space, but isn't interacting with other objects:

- The vase (PATIENT) is on the table.
- Your clothes (PATIENT) are in the wardrobe.
- My car keys (PATIENT) must be somewhere.

Things Happen without Sentient³ Intervention Image Schema

A passive entity (patient) is involved in some process, but isn't interacting with other objects:

- The tap (PATIENT) is leaking.
- The water (PATIENT) is boiling.
- The children (PATIENT) are sleeping.
- The vase (PATIENT) gleams in the moonlight coming in through the window.
- The curtains (PATIENT) are blowing about in the wind.

³ The term *sentient* relates to any organism that is conscious of its environment through sensory stimulation, and that actively responds to such sensations.

DOING THINGS ON ONE'S OWN Image Schema

An active entity (AGENT) is performing some sort of an activity that causes some self-reflexive effect to her/himself:

- *John (AGENT) is out jogging.*
- Jamie (AGENT) is studying.
- *He (AGENT) went sailing early this morning.*
- Jack (AGENT) cycles to work every morning.
- They (AGENT) went hiking in the mountains (separately).

CONTROLLING THINGS ON YOUR OWN Image Schema

An active participant (*AGENT*) is dominating a passive participant (*PATIENT*) through some action, with or without an instrument, by supplying the energy for the action, controlling the course of the action and causing some effect to the passive participant through the action:

- The doctor (AGENT) operated on the patient (PATIENT).
- The dog (AGENT) chased the cat (PATIENT).
- The woman (AGENT) folded the cream (PATIENT) into the batter (PATIENT) with a whisk (INSTRUMENT).
- Charles (AGENT) ate all the bagels (PATIENT).
- John (AGENT) stole stamps (POSSESSION) worth R400 (POSSESSION) from Pete (DISADVANTAGED).

CONTROLLING THINGS ALONG WITH OTHERS Image Schema

Two or more participants are actively cooperating with one another to achieve a mutually beneficial objective:

- Sue and Jane (CO-AGENTS) are planning the party
- The boy (CO-AGENT) is helping his father (CO-AGENT) carry the table up the stairs
- John (CO-AGENT) sold his stamps (POSSESSION) to Pete (CO-AGENT) for R400 (POSSESSION)
- They (CO-AGENTS) went hiking in the mountains (together)

COMPETING WITH OTHERS Image Schema

Two or more participants are actively competing with one another, or acting in confrontation with one another to achieve a mutually beneficial objective:

- Sue and Jane (COUNTER-AGENTS) are arguing about the party.
- The boy (COUNTER-AGENT) is fending off his attacker (COUNTER-AGENT) with a stick (INSTRUMENT).

STIMULATING AN EXPERIENCE OF EXPERIENCING A STIMULATES Image Schema

An entity that operates on one's senses evokes some sensation in an *EXPERIENCER*:

- The chattering monkeys in the trees (STIMULUS) drove the dogs crazy (EXPERIENCER).
- Somersaulting (STIMULUS) disoriented the boy (EXPERIENCER).
- Children (EXPERIENCER) hate cabbage (STIMULUS).
- The rookie (EXPERIENCER) vomited when he saw the beheaded corpse (STIMULUS).

Neurophysiologic Justification for Role Relationship Analysis

My proposal to use role relationship analysis as theoretical framework in qualitative content analysis is based on the epistemic principle that image schematic role relationships are grounded in actual human thinking. The Neurophysiologist Calvin (1996a; 1996b) considers the theory of image schemas to present a plausible account for the symbolic nature of human thought. I quote two paragraphs from the account given by Calvin regarding the crucial role that image-schemas play in cognition in general and in grammar in particular:

Underlying our vast network of interrelated literal meanings (all of those words about objects and actions) are those imaginative structures of understanding such as schema and metaphor, such as the mental imagery that allows us to extrapolate a path, or zoom in on one part of the whole, or zoom out until the trees merge into a forest

. . . .

... common schemas are blockage, center-periphery, fullempty, more-less, near-far, splitting, attraction, balance, matching, removing a restraint, attracts, circles, part-whole, and the easy to misuse containment. Note that schemas tend to refer to movement, rather than static properties (they're often <u>structures</u> of an activity, not attributes of an object such as wet or cold). Even more than abstracts, schemas are flexible enough to fit many similar situations with differing details (Calvin 1996b: chapter 10).

From Calvin's analysis in the above two paragraphs of image schemas it is clear that image schemas form the basis of human cognition – of how neural impulses in the human brain are symbolically represented in human thought.

Sentences as Dynamic Role Relationship Encoded Mini-Narratives

Humans have an anthropocentric perspective of the physical world, being mainly interested in events that involve humans. We mostly take for granted the time and place of events, and the instruments that we use, and often leave them unspecified in sentences, which are the most basic mini-stories that we tell one another. We populate our sentences, and the narratives that we weave by combining sentences into paragraphs, with types of agents and patients that we construe as heroes, villains and victims. In sentences, AGENTS, PATIENTS, STIMULI and EXPERIENCERS are obligatory roles, while it is optional to stipulate INSTRUMENTS, TIME and PLACE, as can be seen in *He sliced the cake* (TIME in the kitchen) (PLACE with a knife).

Promoting and Demoting Entities from One Role Category to Another

INSTRUMENTS can be foregrounded by using them in theme position at the head of sentences, as in *the dog fetches the paper every morning*, which becomes *every morning the dog fetches the paper*. Similarly, INSTRUMENTS can be foregrounded by using them in the theme position, as in *he killed his opponent with this dagger* which becomes *with this dagger he killed his*

opponent. Instruments can also be foregrounded by reconceptualising them as AGENTS, as in *this dagger killed his opponent*.

Narrators conceptually demote opponents by either *dehumanising* them as BEING one of a variety of animals (e.g., 'snake, rat, monkey, baboon, pig, road hog' or 'arse fly'), or by *demonising* them (e.g., 'ogre, beast, monster, troll' or 'the devil himself'). Shortly after the September 11, 2001 terrorist attacks on the USA (now commonly referred to as the 9/11 attacks) a prominent official in the Republican Administration famously dehumanised the attackers and their backers on CNN by declaring: 'We will drain the swamp where they are hiding and eradicate them!'

How Image Schematic Role Analysis Can Be Used in Content Analysis

Image schematic role analysis provides a powerful and flexible framework to characterise interactions between individuals that are involved in the same event. Roles like AGENT, PATIENT, INSTRUMENT, BENEFICIARY and EXPERIENCER are conceptualised generally and value-neutral in order to capture common patterns in interactions, enabling the researcher to compare positions of rank across social domains — for instance by comparing organisational dynamics in families with those of small and medium enterprises (SMEs) to determine whether or not the owners of SMEs fulfil certain 'parental' functions for their employees.

Semantic role analysis in texts is a multi-layered process. It for instance does not entail that the CEO of a company is always the AGENT and the clerk the PATIENT. In a statement like *The CEO addressed his office staff* the CEO is the AGENT and the staff the PATIENT. However, in the context of wage negotiations, in the statement *The staff rejected the CEO's wage offer* the staff collectively acts as AGENT, while the CEO is now the PATIENT.

By contrast, in an organisational context the CEO of a company constantly acts as a SOLE AGENT (major agent) while a manager and salesperson in the same organisation would be CO-AGENTS in relation to a client, which would be in the role of BENEFICIARY.

Because *generic* roles can be *generalised* across knowledge domains, role analysis provides a very powerful means of comparative analysis across

domains. It is also worth noting that *generic role specifications are value neutral*. In the domain of law enforcement an AGENT could be a policeman, detective, or a robber. At the beginning of a confrontation between law enforcement agents and villains, both parties would start out as COUNTERAGENTS. Whoever of the two parties gains the upper hand during an altercation would become the AGENT, with the loser being consigned to the role of PATIENT.

Reduced to its essence content analysis is a form of qualitative research during which one discerns particular semantic categories, or repetitive patterns of occurrence in a group of texts to be compared to establish patterns of similarity and difference (novels, newspaper reports, annual general financial statements, policy documents, magazine articles, scholarly texts, religious texts, including graphical 'texts' like paintings and statues). If one is for instance analysing power-distance relationships in an organisation the systematic analysis of semantic role relationships in texts emanating from the organisation could be a productive mode of analysis. However, in order not to get trapped into cherry picking data ad hoc from individual documents the content of individual documents has to be analysed for patterns of similarity and difference across documents by means of content analysis (Lubbe 1997; Krauss 2006), by means of a software program like OSR Nvivo that has built-in auto coding and statistical category comparison routines (Quilling 2008), or by means of intercoder reliability analysis for quantitative research (Hughes et al. 1990; Lombard et al. 2010), or qualitative research (De Reuver et al. 2009).

Analysis

In this section I utilise text from Gladwell (2009) and Kay (2010) to *briefly demonstrate* how people use image schematic role designations during actual thought and communication, and how role relationship analysis could benefit systematic text analysis. Both examples relate to the domain of traditional mass media product promotion. I provide summary interpretations rather than systematic interpretations of the text fragments because it is sufficient to demonstrate the principle of role relationship analysis in narrative analysis.

Gladwell's material deals with TV advertorials and slogans scripted

to promote cosmetics and discomfort medications. Kay's material deals with a radio interview between an interviewer and an author to promote a forthcoming book.

Gladwell (2009)

PATIENTS and CULPRITS

In a personal interview with the Viennese-trained psychologist, Herta Herzog, who became famous as exponent of the Madison Avenue post-war product advertisement revolution (Gladwell 2009:91-100), Gladwell reveals how Herzog and fellow social scientists based advertising slogans on actual customer perceptions (on the newly developed research principles that later became known as industrial psychology), while working at the Tinker advertising agency, penning iconic phrases like:

- 'Does she, or doesn't she?' the deliberately suggestive hair colour slogan that allowed females to openly colour their hair rather than do so covertly,
- 'Because I'm worth it', a phrase used in an advertisement that taps into self-esteem issues to motivate buyers to justify expenditure on personal rather than on whole family toiletries at a time of austerity.

Gladwell (2009:96) gives Herzog's account of how the advertisement for product Alka-Seltzer was reconceptualised, based on customer perception research. It clearly demonstrates how people think image schematically and how customer perceptions can be manipulated by having them perceive themselves or a product differently:

'There is one thing we did at Tinker that I remember well', Herzog told me, returning to the theme of one of her, and Tinker's, coups. 'I found out that people were using Alka-Seltzer for stomach upset, but also for headaches', Herzog said. 'We learned that the stomach ache was the kind of ache where many people tended to say "It was my fault". Alka-Seltzer had been mostly advertised in those days as a cure for overeating, and overeating is something you have done. But the headache is quite different. It is something imposed on you'.

This was, to Herzog, the classic psychological insight. It revealed Alka-Seltzer users to be divided into two apparently incompatible camps - the culprit and the victim - and it suggested that the company had been wooing one at the expense of the other. More important, it suggested that advertisers, with the right choice of words, could resolve that psychological dilemma with one or, better yet, two little white tablets. Herzog allowed herself a small smile. 'So I said the nice thing would be if you could find something that combines these two elements. The copywriter came up with ''the blahs''. Herzog repeated the phrase, the blahs, because it was so beautiful. 'The blahs was not one thing or the other - it was not the stomach or the head. It was both'.

Summary Interpretation: In this section of the narrative Gladwell reports Herzog's recollection of how actual customer preference research led her to the insight that not all people perceived Alka-Seltzer as a medication (an INSTRUMENT) to relieve over-indulgence related stomach acid discomfort (the STIMULUS-EXPERIENCER role relationship) as the manufacturers had presumed, but that a significant separate group of clients perceived the product as a medication (an INSTRUMENT) to relieve headaches. Furthermore, clients who took Alka-Seltzer as medication for over-indulgence felt responsible for their conditions (AGENTS of sorts, known as culprits), while those that took Alka-Seltzer as headache medicine felt that the condition was imposed on them, therefore seeing themselves as proper PATIENTS. This left the advertisers with the quandary that there wasn't a generally recognised medical term to cover both ailments, leading to a copywriter creating a new non-specific, category of ailment, 'the blahs'. This recategorisation exercise blurred the line between ailments that resulted from over-indulgence and those that clients considered outside of their control. This fuzzy recategorisation of a feeling of personal unwellness no doubt persuaded clients to extend Alka-Seltzer's usage to relieve ailments like hangovers and early flu symptoms. The present-day wellness equivalent of Alka-Seltzer that exploits consumers' 'culprit' self image due to overindulgence is any of a variety of 'detox' products available as powders, shakes and plasters.

Kay (2010)

CAPTIVES are VICTIMS

The online open source encyclopaedia, Wikipedia, recounts how in 2002 the Columbian senator and presidential candidate, Ingrid Betancourt, was captured by the guerrilla group/ terrorist group (keep in mind that one man's guerrilla could be another man's terrorist in role relationship analysis), Revolutionary Armed Forces of Colombia (FARC) and held hostage for more than six years, along with their captives – mostly changed to a tree or locked in a cage - until they were rescued by the Columbian security forces in 2008. In a radio interview in September 2010 on the USA based Dianne Rehm Show (Kay 2010), to promote her most recent book, *Even Silence has an End*, Betancourt recounts their mistreatment at the hands of FARC in graphic details, by using a dynamic *I said*, *He said* conversational role playing strategy. Betancourt recounts her interactions with the FARC leader, Juan Manuel Santos after their capture:

And I remember he had this very nasty comment, saying, I don't know why we're talking to politicians. And he was kind of, you know, harsh attitude against us. And then he said the only thing that we should do with them is to kidnap them. It's the only thing they will be useful for. *Transcript:* 10:09:38⁴.

Summary Interpretation: In this section of the narrative Betancourt role acts the FARC leader, Santos, as equating captive politicians to kidnap victims. Later in the interview Betancourt recounts a confrontation between her and a guard just before one of her four attempts to escape:

They had put us in a cage made of wooden boards with a thin roof. Summer was coming, and for over a month now we had not had any storms at night, and a storm was absolutely necessary. I spotted a half-rotten board in a corner of our cage. By pushing hard with my foot, I split it enough to make an opening. I did this one afternoon after lunch when the guard was dozing on his feet balanced on his

⁴ This notation means: 10 minutes, 9.38 seconds into the interview.

rifle, but it made a dreadful noise. The guard, edgy, walked all around the cage, slowly like a pacing animal. I followed him, peering through the slits between the boards, holding my breath. He stopped twice, put his eye up to a hole, and for a split second our eyes met. He jumped back terrified. Then, to regain his composure, he planted himself at the entrance to the cage. This was his revenge. He would not take his eyes off me. *Transcript: 10:14:16-10:16: 12*.

Summary Interpretation: In this section Betancourt suggests that the FARC was treating the captives like animals by keeping them locked up in a cage, and her plan to escape by, thereby changing her status from PATIENT (captive animal) to AGENT (escaper). She then dehumanises the guard by recategorising him as a pacing animal.

Betancourt then recounts how she watched the pacing guard (in the pacing animal role) through a gap in the cage (in the captive victim role), his terrified reaction (as EXPERIENCER) when their eyes met (with her being the STIMULUS of his reaction) and how he regained the emotional upper hand (as AGENT) by staring her down (making her feel like a VICTIM again).

From HUMAN CAPTIVE to CAPTIVE ANIMAL

The final aspect of Betancourt's interview that I would like to analyse is where, in response to a question from a listener who called in during the interview, she describes how she experienced the dehumanising treatment shat she was subjected to by her captives:

I was chained to a tree by the neck 24 hours a day for years. And I remember, at one point, there was this huge storm. And they could have put a tent for me to just, you know, be dry, but they didn't. And I want to go to the toilet, and they didn't allow me to go to the toilet. I wanted to drink. They didn't allow me to drink. And I couldn't talk with my companions. I was like a dog, like a dog chained to a tree. ... Then I thought I lost everything. I lost everything. *Transcript:* 10:46:37-10:47: 23.

Summary Interpretation: In this section Betancourt reveals that the she came to see herself as a captive animal, and that having been stripped from her humanity she felt that she had lost everything.

From Captive Animal to Human Survivor

Betancourt reconceptualises herself from feeling like a captive animal to where she sees herself as a human survivor:

There's something that they will never, never take away from me, which is the freedom to decide what kind of person I want to be. And I decided I didn't want to be a murderer. I didn't want to be a beast. I didn't want to be a cockroach. I wanted to fly to the sky. And that has changed me in the way that's -- by just envisioning that woman that I wanted to be, I just decided I was going to begin being that strict now, not waiting for a transformation like, you know, a miracle. No. So that changed the way I looked at me, and it was very, very important because I was no more a victim. I was a survivor. *Transcript:* 10:47:24-10:48: 21.

Summary Interpretation: By using a series of animalistic metaphors (a beast, cockroach, and by inference a bird flying freely in the sky), Betancourt reveals how she envisioned her transformation from being a captive animal to being a human in control of her own destiny, free as a bird on wings - a survivor.

Conclusion

In this contribution I provided a succinct explanation of the theory of image schematic role relationship analysis, explained how it could be used in qualitative content analysis, and demonstrated what a powerful tool of narrative analysis it is by analysing sections of interviews presented in Gladwell (2009) and Kay (2010).

Employing the analytical principles of role relationship analysis outlined in this article would enhance narrative analysis in fields of research

as diverse as advertising, case study, literature reviews and the diagnostic analysis of interviews with patients in a variety of medical settings.

References

- Armstrong, Robert W 1996. The Relationship between Culture and Perception of Ethical Problems in International Marketing. *Journal of Business Ethics* 15,11: 1199-1208.
- Calvin, William H 1996a. *The Cerebral Code. Thinking a Thought in the Mosaics of the Mind.* Cambridge: MIT Press.
- Calvin, William H 1996b. *How Brains Think: Evolving Intelligence, Then and Now.* New York: Basic Books.
- De Reuver, Mark, Harry Bouwman & Ian MacInnes 2009. Business Model Dynamics: A Case Survey. *Journal of Theoretical and Applied Electronic Commerce Research* 4,1: 1-11.
- Edelman, Gerald M 1989. *The Remembered Present: A Biological Theory of Consciousness*. New York: Basic Books, Inc.
- Edelman, Gerald M 1992. Bright Air, Brilliant Fire: On the Matter of the Mind. New York: Basic Books, Inc.
- Gladwell, Malcolm 2009. What the Dog Saw and Other Adventures. New York: Little Brown and Company.
- Harvey, Campbell R 2000. Qualitative Research. Available at: http://www.duke.edu/~charvey.
- Hofstede, Geert 1978. The Poverty of Management Control Philosophy. *The Academy of Management Review* 3,3: 450 461.
- Hughes, Marie Adelle & Dennis E Garrett 1990. Intercoder Reliability Estimation Approaches in Marketing: A Generalizability Theory Framework for Quantitative Data. *Journal of Marketing Research* 27,2: 185-195.
- Hunter, MG & P Carr 2002. Technology in Distance Education: A Global Perspective to Alternative Delivery Mechanisms. *Journal of Global Information Management* 10,2: 52-56.
- Johnson, Mark 1987. The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason. Chicago: University of Chicago Press.
- Kay, Kathy 2010. Íngrid Betancourt: 'Even Silence Has An End'. Transcript of radio interview with Ingrid Betancourt on *The Diane Rehm Show*, on

- WAMU 88.5 in Washington DC. Available at: http://thedianerehmshow.org/shows/2010-09-23/ingrid-betancourt-even-silence-has-nd/transcript.
- Klopper, Rembrandt 2003. Yesterday is Another Country ... Image Schemas in Conceptual Blending to Optimize Human Scale Thinking. *Alter*nation 10,2: 292 320.
- Krauss, Kirstin 2006. Visual Aesthetics and its Impact on Online Communication Intent. M Com Dissertation, University of KwaZulu-Natal, South Africa.
- Liu, S and D Tucker 2002. E-commerce System: An Examination of User Experiences of the E-commerce Site with the Standard User Interface: In Anandarajan, M & C Simmers (eds): *Managing Web Usage in the Workplace: A Social, Ethical and Legal Perspective*. Hershey: Idea Group Publishing.
- Lombard, Matthew, Jennifer Snyder-Duch & Cheryl Campanella Bracken 2010. Intercoder Reliability Practical Resources for Assessing and Reporting Intercoder Reliability in Content Analysis Research Project. Copyright, 2004 Matthew Lombard. Available at: http://astro.temple.edu/~lombard/reliability/.
- Lubbe, S 1997. The Assessment of the Effectiveness of IT Investment in South African Organisations. Published PhD Dissertation, University of the Witwatersrand.
- Moffett, Jonathan D & Emil C Lupu 1999. The Uses of Role Hierarchies in Access Control. 4th ACM Workshop on Role Based Access Control (RBAC), 28-29 Oct 1999. George Mason University, Fairfax, VA., USA.
- Oakley, Todd 2007. Image Schemas. In Geeraerts, Dirk & H Cuyckens (eds): *The Oxford Handbook of Cognitive Linguistics*. New York: Oxford University Press USA.
- Quilling, Rosemary Diane 2008. *Multidisciplinary Teams in Information Systems*. M Com Dissertation, University of KwaZulu-Natal, South Africa.
- SIL International 2004. What is an Image Schema? Extract from the Summer Institute of Linguistics' *LinguaLinks Library Plus CD-ROM* available at: http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/ WhatIsAnImageSchema.htm.
- St. Amant, Robert, Clayton T Morrison, Yu-Han Chang, Paul R Cohen & Carole Beal 2006. An Image Schema Language. Online working paper,

- Information Sciences Institute, University of Southern California. Available at: http://www.cs.arizona.edu/~cohen/cs-665-spring-2010/readings/RSA-etal-iccm06.pdf.
- Walker, Adrienne 2009. Open Source History and Development. *Open and Libraries Class Journal* 1,2: 43-65.
- Wallace, Joseph, James Hunt, Christopher Richards 1999. The Relationship between Organisational Culture, Organisational Climate and Managerial Values. *International Journal of Public Sector Management* 12,7: 548-564.
- Wikipedia.org 2010. Quantitative Research. Available at: http://en.Wikipedia.org/wiki/Quantitative_research.
- Wikipedia.org 2010. Íngrid Betancourt. Available at: http://en.wikipedia.org/wiki/Íngrid_Betancourt.
- Wright, Ray 2001. Qualitative Research. Raynet McMail. Available at: http://www.raynet.mcmail.com/Business&marketingglossaryA.shtml.

Rembrandt Klopper School of Information Systems and Technology University of KwaZulu-Natal Durban, South Africa rklopper@gmail.com