In the Mind's Eye: The Role of Conceptual Blending in having Others See What you Mean

Rembrandt Klopper

Only man[1]
while roaming
between present, future and past
stumbles across the crevice to the caves
of reason.
(D.J. Opperman - *Fire Beast*)

On Humanity's Language Capacity

Reduced to its essence language is a neurological process that enables an individual human to give others access to her/ his innermost conscious awarenesses, and to gain access to the innermost conscious awarenesses of others, thereby creating a mental state of shared or communal consciousness known as communication.

Communication is a meeting of minds during which two or more individual participants use extensive sets of symbols in a complex variety of patterns to see eye to eye, to have in mind and exchange concepts about the same aspects of a commonly experienced present, a remembered past an envisaged future or an imagined alternative reality.

Traditional approaches to grammatical description such as Structural Linguistics[2] and most modern approaches such as Generative Grammar[3] assume that

[1] Alleen die mens / tref in sy swerwe / tussen hede, toekoms en verlede / die spleet tot grotte / van die rede. D.J. Opperman in *Vuurbees*.

[2] Sapir ([1921]1949); Jespersen ([1922]1968); Bloomfield ([1935]1953); Harris ([1951]1969) and Gleason ([1955]1970).

[3] There are hundreds of possible references to Generative Grammar, the dominant theory of the twentieth century. Radford (1992) gives a good overview.

literal language is natural language, and that figurative language is a specialised or even deviant adaptation of literal language.

In this paper I will firstly show that figurative language is natural language as much as literal language is, and secondly how conceptual blending, an associative process of cognitive projection, forms the basis of figurative language.

Figurative Language as Natural Language

Forms of figurative language such as metaphor, simile and metonymy are generally assumed to be deviant forms of literal language that are confined to literary styles found in poetry, prose and drama. It is also assumed that the language of everyday communication, as well as the language of science is literal. Even Searle (1984), a prominent exposition of the cognitive basis of speech acts, assumes that literal interpretation is the primary mode, and figurative interpretation the secondary mode of interpretation. By Searle's account people initially attempt to make a literal interpretation of what they hear or read, and failing that, they resort to figurative interpretation.

This view however takes no account of the parallel distributed nature of cognition, and particularly humanity's cognitive capacity to simultaneously interpret lexical (semantic) and syntactic cues as reported by Kutas & Kluender (1991).

I would like to suggest that this anticipatory capacity enables a person to instantly discern between figurative and literal language on the basis of the extent to which two sets of semantic information are neurologically entrenched (habitually associated with one another). Consider for example the Adjective-Noun combination *red pen*. If asked about the meaning of this expression people will unproblematically reply that it can either refer to a pen that is red on the outside, or a pen containing red ink that one uses if one wants to make red markings on a document or drawing. Whatever the predominant interpretation is in this case, will be a matter of subjective preference, not a matter of logical necessity.

Now consider the meaning of the expression *red face*. It can be interpreted as a face that is literally red due to exertion, overexposure to the sun, or having been painted red. It can also be interpreted as a metaphoric reference to embarrassment. *Red face* is predominantly interpreted as referring to embarrassment, in spite of a literal interpretation being possible people have come to associate this combination of adjective and noun with embarrassment.

Knowing then that humanity's anticipatory capacity entails that each of us cognitively provide a framework of semantic information as context for the lexemes to be interpreted, and assuming that this capacity enables one to instantly discern whether an expression is figurative or literal, how do we conceptually make this distinction? There are several competing theories that try and answer this question. The oné that makes the most sense to me is known as conceptual blending.

Conceptual Blending

The theory of conceptual blending (Fauconnier & Turner 1994; Turner & Fauconnier 1995) forms part of the general theory of Cognitive Grammar (Langacker 1987; 1990; 1991; Sweetser 1993; Fauconnier 1985; Cutrer; 1994 and Cognitive Literary Theory (Lakoff & Turner 1989; Turner 1991). Collectively these disciplines are referred to as *Cognitive Rhetoric.*

Conceptual blending accounts for a person's capacity to interrelate and blend concepts extracted from his vast conceptual network of knowledge. It is a momentary process of symbolisation that selectively interrelates concepts from two separate cognitive domains, a target space and a source space to conceptualise a new perceived relationship known as a blended space.

Blending should not be equated to the fusing of information. During blending the various types of information belonging to the target, source and blended spaces are interrelated, but remain conceptually distinct in each space.

Metaphor as Conceptual Blending

When a person not familiar with life in desert circumstances for instance uses or interprets the metaphor *The camel is the ship of the desert*, he uses the ship, a commonly known means of transport as source to explain aspects of the camel, a lesser known means of transport. The ship is used as source to project known concepts onto the camel as target to generate new insights about the camel. By arriving at new insights about the camel he has performed the act of conceptual blending. The process is explained and schematised below.

1 Of all the things that one knows about ships and the sea, and camels and deserts, only those comparable aspects are selected that relate to ships and camels as means of transport.

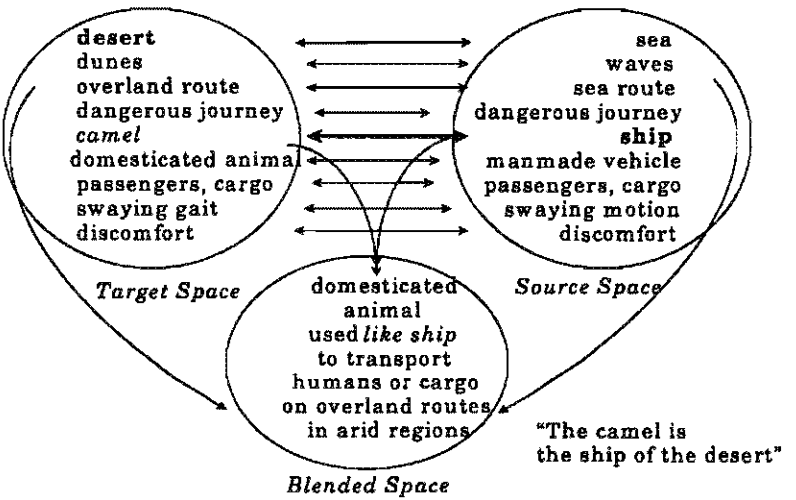
2 Only the lexemes *camel, ship* and *desert* are overtly supplied to the interpreter by the metaphor, with all other elements of meaning in the target and source spaces being covertly drawn from his conceptual network of knowledge.

3 *Ship,* the better known entity in the source space is analogically equated to *camel*, the less known entity in the target space.

4 The interpreter initially conceptualises the differences between the seascape and landscape by contrasting desert and sea, dunes and waves, camel and ship, but subsequently focuses on similarities by noting that a ship as a humanly made vehicle is comparable to a camel as a domesticated animal, by noting that both are used to carry passengers or cargo, that both have a swaying motion that causes discomfort during a journey.

5 Some interpreters may also note that as far as the availability of fresh water is concerned the sea is as arid as a desert.

6 The sets of information in the source and target spaces about the ship and camel form the basis of the projected information in the blended space about the camel being used like a ship to transport humans or cargo on overland routes in arid regions.



The two top circles in the representation contain the essential concepts of the target and source spaces, and the bottom circle the concepts of the blended space.[4] Interrelated concepts in the source and target spaces are indicated by bi-directional horizontal arrows. Concepts projected from the source and target spaces to establish new insights in the blended space are indicated by downward-curving arrows.

A metaphor like *The camel is the ship of the desert* is so powerful because it in quick succession creates and releases psychological tension in the mind of the interpreter. The metaphor initially evokes incredulity by comparing two diametrically opposed regions like a desertscape and a seascape. The tension is subsequently released when a rationale for belief is presented in the form of subtle similarities such as the featurelessness of both topographies, the visual similarities between dunes and waves, the fact that uncomfortable and dangerous journeys are undertaken over both

[4] Fauconnier & Turner have a three space model and a many space model of conceptual blending. I am explaining the three space model.

regions, by comparing the camel with a ship, and lastly by the fact that both traverse regions that are hostile to those who do not have enough fresh water.

The Ubiquity of Metaphor

Metaphor is not merely a literary device, for metaphors are commonly used in all forms of linguistic expression - in spoken as well as written language, and in all genres of written language, whether they be fiction, historiography, scientific formulation or legal discourse. I will use four examples where light and darkness are used metaphorically in diverse fields of knowledge to illustrate this point.

In all religions of the world light is equated to morality and darkness to immorality. Christ for instance called himself *the Light of the world* and called the perceived Source of Evil *the Prince of Darkness*.

Historians equate barbarism with darkness and civilisation with light when they refer to *the Dark Ages* and *the Age of Enlightenment.*

Physicists literally refer to non-visibility and figuratively allude to lack of human understanding of things cosmological when they use the term *black hole* for a super-dense entity in space where matter is so compacted by its gravitational field that it emits no visible light, or for that matter any form of radiation known to humanity.

Jurists equate legality to that which is visible and illegality to that which is concealed or shrouded in darkness when they *reveal* a witness' *concealed* motives, or when they present new evidence that has *come to light*.

Conceptual Metaphors

The pervasiveness of metaphor in everyday language was for the first time highlighted with the publication in 1980 of Lakoff & Johnson's *Metaphors we live by*. Since then research about human cognition has increasingly confirmed the central role of metaphor in our conceptual system, in our perception of things around us, in how we interact with the physical world, and particularly with our fellow human beings. Such basic, concept-structuring metaphors have become known as conceptual metaphors.

Lakoff and Johnson (1980a) and (1980b) discuss scores of conceptual metaphors. I will for the purposes of illustration just refer to two conceptual metaphors, namely firstly the metaphor based on humanity's view of things around him resulting from his vertical / upright orientation, and secondly the metaphor based on humanity's awareness of his own self.

The vertical dimension enables us to perceive that which is nearer to the ground as being less than that which is further from the ground. We structure our concepts of more and less in terms of the conceptual metaphor HIGHER IS MORE,

LOWER IS LESS. Prices and the value of shares go *up* or *down*, they can be *sky high* or *rock bottom*. The economy can be in an *upward* or *downward* phase.

We also structure our concepts of better and worse in terms higher and lower by means of the conceptual metaphor HIGHER IS BETTER, LOWER IS WORSE. One can be *upbeat* about something, or *downcast*. We consider people to be of *high* or *low* intelligence. We have a *high* or *low* regard for them, depending on whether or not they have *high* or *low* moral standards. People can be of *high* or *low* upbringing, and have *high* or *low* self esteem.

Man's self-awareness essentially is self-centredness as expressed in the conceptual metaphor WHERE THE SELF IS, IS GOOD; AWAY FROM THE SELF IS BAD. An unacceptable person can be a *scatterbrain*, can *go to pieces, fall apart, go to the dogs, go crazy, go off his head* or *go to hell*. A person that one approves of on the other hand can *have his act together, be coherent* in relation to his own self, or in relation to your-self can *come to his senses, come right, come to power, come to a conclusion*, or be an *up and coming* young lawyer. If one is trying to convince someone of your point of view, you can say: *Come, let's think about it, Are you with me so far?, You're way behind me*, or *We're miles apart on this issue*.

What Metaphors Reveal about Domains of Knowledge

Persons associated with particular domains of knowledge, such as physicists or lawyers for instance, invariably engage in ongoing metatheoretic discussions of their chosen discipline or profession. The thematic patterns of metaphors used in such a profession clearly reveal how such participants view themselves and their discipline or profession.

The adversarial nature of legal proceedings for instance is based on the conceptual metaphor ARGUMENTATION IS WARFARE. *Opposing* council are *engaged in a battle of wits*. If council for *the defence* has *a strong case* he will present *unassailable arguments* and will *outmanoeuvre* or *outflank* opposing council. Council may in the end *concede defeat*. One can *sink* your opponent's defence, or an argument can *blow up in your face*.

If we say that a witness who changes his testimony *beats a hasty retreat* we are invoking another battle field image of yesteryear, namely that of the drummer who instructed his comrades by means of the drum-beat to attack if things went well, or to retreat as the tide of battle turned against them.

When we say that *someone is upholding the law* or that he has *high moral standards* both these metaphors simultaneously obtain their power of persuasion from two independent conceptual metaphors, namely HIGHER IS BETTER and ARGUMENTATION IS WARFARE. We liken the law or morals to the medieval standards which were held aloft for encouragement and unity over columns of foot soldiers, thereby signalling to them that the battle was going well.

Conclusion

In this paper I demonstrated that figurative language is natural language as much as literal language is, and I showed how metaphor as an instance of conceptual blending contributes to the process of interpretation by allowing the interpreter to conceptualise new interrelationships in terms of that which he already knows.

Language structure is a neurologically stabilised cognitive process of symbolisation that allows human beings to habitually use lexemes in predictable sequences and patterns of combination. Conceptual blending is an extremely powerful momentary cognitive process of selectively associating apparently unrelated concepts that are in fact significant and contribute to a new understanding of some aspect of reality. Blending not only plays a key role in the process of creating new insights by interrelating concepts in one's mind, it also is the almost invisible doorway through which each individual passes in the meeting of minds.

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Untangling the Web: Inferential Links in a Narrative of Deceit, Repentance and Forgiveness

Rembrandt Klopper

> The regions of the mind remain uncharted[1].
> (D.J. Opperman - Night vigil at the old man's side)

Motivation

In this paper I analyse the parable that Nathan told to King David about a rich man who slaughtered a poor man's lamb to feed a visitor. As analytical procedure I utilise the theory of conceptual blending that was first formulated in Fauconnier (1985) as a theory of mental spaces, but which has subsequently been expanded and refined by Fauconnier & Turner and others, and renamed the theory of *conceptual blending*.

When I first came across a reference to Nathan's parable in Turner (1996) I decided that it would be the ideal narrative to test Fauconnier and Turner's theory of conceptual blending. Reading the events before and after Nathan's visit to King David along with the parable, we have a surprisingly frank account of how David lusted after the wife of one of his subjects, how he made her pregnant, how he had the hapless man assassinated so that he could take her as one of his wives, and finally how he repented and accepted his punishment when confronted with his deceit. It is a compact but powerful tale of deceit, repentance and forgiveness. Precisely the elements required to demonstrate how we blend a variety of mental spaces while interpreting narratives.

Finally, I chose the parable because its small event stories and small action stories reflect traces of somatic marking[2], a neurological process described by Damasio (1994).

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[1] Die streke van die gees bly ongekaart - D.J. Opperman: Nagwaak by die ou man.

[2] The theory of somatic marking states that all of our memories of past events are co-indexed with the emotions that we experienced at the time when the memories were formed.

The Great Mind-Body Divide

The humanities in general and language studies in particular are being marginalised across the globe at the end of the twentieth century. The beginnings of this process can in my view be traced to the distinction that the seventeenth century French Philosopher Rene Descartes drew between the human body and the human mind as separate entities, and his subsequent linking of mind and metaphysics.

The Cartesian dilemma, as it has come to be known, is also a problem of the first order for the philosophy of science[3], for it reflects present-day uncertainty about the relationship between the metaphysical and the physical. Three centuries after his death Descartes is known as 'the father of the mind-body problem'[4]. A number of twentieth century philosophical approaches[5] have proven inadequate to resolve this intractable problem, among them structuralism, phenomenology, existentialism and behaviourism.

The Cartesian dichotomy is having a negative impact on all types of qualitative human endeavour. By this I do not mean that Descartes caused the problem, merely that his formulation exposed a flaw in how man perceives his inner self in relation to the physical world.

Due to this same flaw the technocratic forces that shape the course of the twentieth century systematically value the quantitative over the qualitative. All material things are fair game. That which can be seen, touched, counted, measured, weighed and calculated can be bartered, traded, bought and sold, and is therefore considered more valuable than things metaphysical, things that can be merely understood.

The humanities have been seriously damaged by the way in which the Cartesian dichotomy has been applied to relegate the non-saleable to the realm of metaphysics, the twentieth century limbo destined for all that is considered to be non-scientific, non-technological, non-useful and imprecise.

Most texts evoke implicit subtexts in the human mind[6], and subtexts are easily used as pretexts to marginalise that which is not immediately serviceable. Consequently we have during the latter half of the twentieth century also witnessed the steady marginalisation of Linguistics and Literature because they too are perceived as being metaphysical and without real practical merit.

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[3] See Putnam (1985; 1990) and Lakoff (1986, chapters 15 and 16).

[4] See New Grolier Multimedia Encyclopedia Release 6 (1993) Grolier Electronic Publishing, Inc. and Popper (1972:253-311).

5 In order not to reinvent the wheel I merely mention these fields here without summarising or discussing them.

[6] The exclamation *There is no bread in the house again!* can for instance have the subtext *You should have bought bread* or *You have again forgotten to buy bread*, etc.

Is there any escape for Linguistics and Literature from the horns of the Cartesian dilemma? Happily there is. Going back to the principles established in classical rhetoric two millennia ago four interrelated disciplines - *Cognitive Semantics*[7], *Cognitive Grammar*[8], *Construction Grammar*[9] and *Cognitive Literary Theory*[10] - have since the nineteen eighties found common ground by studying man's language capacity as a general cognitive process, and by increasingly studying cognition as an actual neurological processes with physical manifestations. These disciplines are consequently converging by studying semantics, syntax, phonology, prosody, metaphor, narrative, figurative language, literature and persuasion as interrelated aspects of cognition. Following Turner (1991) I will use the term *Cognitive Rhetoric* to refer to these converging disciplines.

Stated briefly, the solution conceived in *Cognitive Rhetoric* entails negating the Cartesian mind-and-body divide by rediscovering the essential nature of man's language capacity, namely that it is *embodied consciousness*, a specific symbolic manifestations of general cognitive processes that all human beings use to *make sense* of that which they perceive of reality by means of their senses. The concept *embodied consciousness* does not merely entail being aware through all of one's senses. Within *Cognitive Rhetoric* it furthermore entails that the merging of sensual awarenesses forms the basis of conceptualisation, which in turn forms the basis of language structure and interpretation.

By studying language structure and interpretation as part of the general process of cognition, one can mediate the body-mind divide, one can put the whole human being in focus again, true to the original meaning of the term *Humanities*.

Our objects of investigation and the theories that we construct to analyse them are not objects *out there* at all. They are *subjects in the mind*.

Keeping Language in Mind

Remembering the Present

Generalising from neurophysiological references such as Stein & Meredeth (1993), Edelman (1989, 1992) Calvin (1996a, 1996b) and Damasio (1994) one can give the following brief characterisation of the neurological basis for perceiving, conceptualising and language expression: When one or more of our senses are

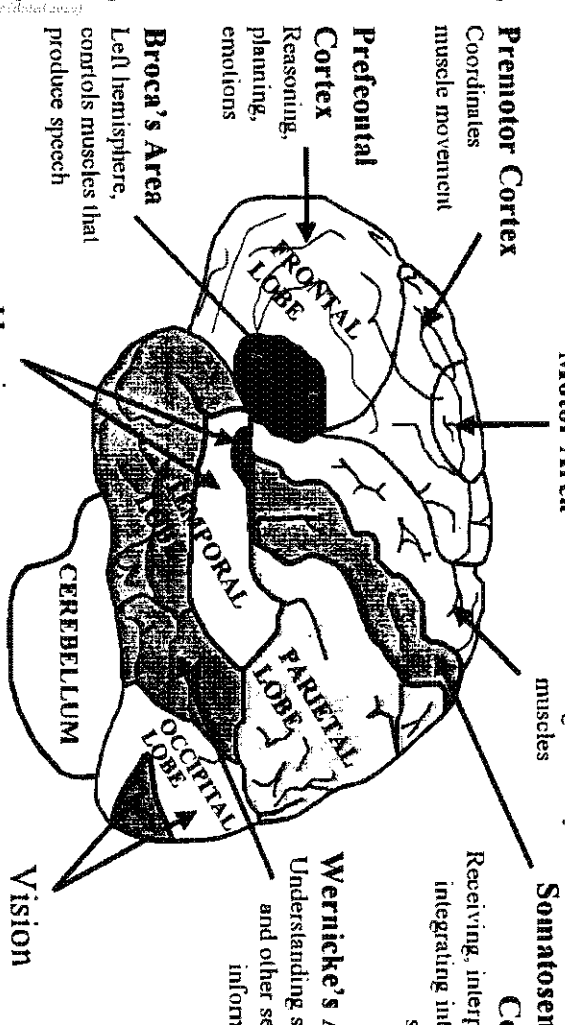
[7] Lakoff & Johnson (1980a; 1980b); Fauconnier (1985); Lakoff (1987); Lakoff & Turner (1989); Johnson (1987) and Sweetser (1993).

[8] Langacker (1987; 1990; 1991) and Deane (1992).

[9] Goldberg (1995); Brugman (1988); Fillmore, Kay & O'Conner (1988); Koenig (1993) and Lambrecht (1994).

[10] Turner (1991; 1996) and Fauconnier & Turner (1994).

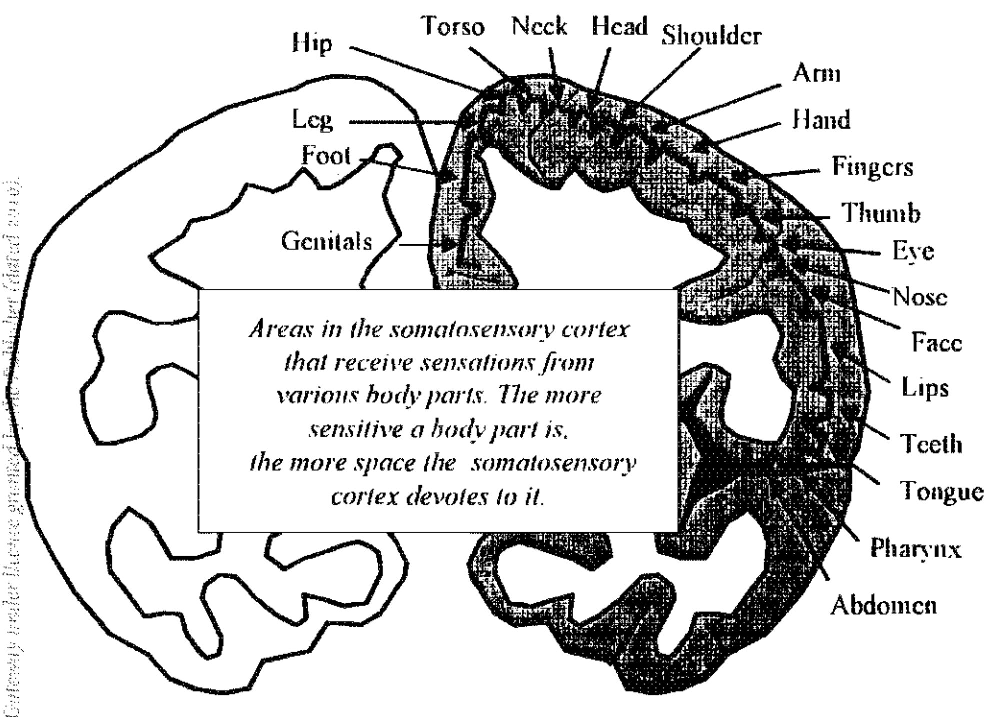
stimulated by a source or multiple sources outside the human body the resultant sensory impulses are transmitted along synaptic pathways to regions of the cerebral cortex such as the occipital lobe, the temporal lobe, the adjacent motor and somatosensory cortices, the premotor cortex and the prefrontal cortex. These areas are indicated on the graphical representation of the different brain regions below:



Side view of the four functionally specialised, but interdependent lobes of the left hemisphere of the human brain

I am providing the representation for orientation purposes only. Discussing language areas like Broca's area and Wernicke's area will detract from the focus of the paper, namely how mental spaces are formed when one reads and interprets a literary text.

In the somatosensory cortex impulses from individual senses activate sets of neurons that are coherently organised into sensory maps (for example visuotopic and tonotopic maps). These sensory maps are inter-linked to create an inter-sensory awareness of an object that is being observed. In this way an object like a cat for instance, and the sound that it makes, are associated in memory. These impulses are then transmitted to motor maps in the adjacent motor cortex for the purpose of co-ordinating the muscles that control the sensory organs. The locations of the sensory maps for the different body parts in the somatosensory cortex are schematised below:



Cross-section of the somatosensory cortex of the human brain
showing the locations of the sensory maps for only one half of the body

The more sensitive the body part, the greater the proportion of the somatosensory cortex devoted to it. It is worth noting the extraordinary proportion of body maps, from shoulder to thumb, that are devoted to the parts of the body that are involved when one manipulates things.

When the synaptic potentials in the somatosensory and motor maps are repeatedly activated by a particular type of incoming sensation, like the image of a blue vase that one sees, the synapses are encoded to remember the vase. In this way memories are created of objects and events. Such stored impulses form part of one's long-term memory if they have become neurologically entrenched. Because particular sets of neurons in the motor maps are however used consecutively to process the impulses of different objects, the memories of prior objects often fade under the influence of impulses of the subsequent objects.

If a person has neurologically encoded the impulses representing an object like the blue vase, and he sees the vase again at a later stage the incoming impulses will activate the stored memories, allowing the experiencer to determine whether he is encountering a known or an unknown scenario. In other words, we do not merely *observe* the present. To paraphrase Damasio (1994), *we remember the present* by matching incoming sensations against remembered previous experiences.

Emotion-soaked Memories

All memories are emotion-soaked, or somatically marked, according to Damasio (1994). Somatic marking entails that every memory of an event or object is co-indexed in the somatosensory cortex for the emotive body state that pertained at the time when that memory was formed. If a person experienced joy, anger or lust at the time when he last saw someone, and if that event became neurologically entrenched, he is bound to experience the same emotions the next time he sees the person.

Humans experience three basic types of body-state emotive marking, namely unpleasant emotions, neutral emotions, and pleasant emotions. Because unpleasant and pleasant emotions are intimately linked to the human drive for survival they readily spring to the foreground in our consciousness. You immediately know (remember) whether you like or detest a person every time you come across him.

Memories that are formed of everyday events are somatically marked with a subtle, neutral emotive body state. Such memories usually operate in the background. Upon remembering such an event one will experience a hardly noticeable feeling of wellbeing, a feeling that all is OK.

Conceptual equivalents of somatically marked memory can be clearly seen in both language structure and narration. The particular lexeme that a person selects from a range of lexemes reflects somatic marking. One can *make an error, make a mistake; foul something up, screw something up* or *fuck something up.* A female

human being can be *a goddess, an angel, a lady, a woman, a tart* or *a bitch.* Food can taste *divine, like manna, delicious, scrumptious, nice, alright, bland, funny, bad, horrible* or *like shit.*

Positive or negative somatic marking is also reflected in the degrees of comparison of adjectives as in *friendly, friendlier, the friendliest, bad, worse, worst,* or by using adjective intensifiers as in *very nice* or *absolutely fantastic.* Emotive adjectives and intensifiers that contain more than one syllable as in *un-like-ly* or *ab-so-lute-ly* can be coded for even stronger negative or positive emotions if an expletive is inserted after the first or second syllable of the word as in *This is an un-fucken-like-ly story* or as in *That's ab-so-bloody-lute-ly fantastic!*

Narratives generally recount extraordinary, often dramatic events full of passion, anger, love, lust, hatred, joy, sadness, gratitude and euphoria – the pleasant and unpleasant somatic states. Neutral somatic states on the other hand would mainly be found in those sections of narratives where the scene is set for immanent dramatic events that are to follow.

Events, dramatic or mundane, do not consist of pure emotions suspended in limbo, but of human figures who do exceptional, emotion-filled things to one another. To mentally construct the figures and events of everyday life, or of fiction, we use image-schemas.

Image-schematic Elements in Language

Johnson (1987) describes image-schemas as "nonpropositional structures of imagination" (p. 19), "...structures that organize our mental representations at a level more general and abstract than that at which we form particular mental images." (pp. 23-24). Because image-schemas "exist at a level of generality and abstraction" particular image-schemas can be used repeatedly "as identifying patterns in an indefinitely large number of experiences, perceptions, and image formations for objects or events that are similarly structured in the relevant ways." (p.28).

A very basic visual image-schema like a square for instance can form part of the rich visual images that we observe of two dimensional objects like a handkerchief, a page, a school quad, or as part of three dimensional objects like a box, a table, a suitcase, a wardrobe, a building, etc.

On the neurocognitive level both Edelman (1989 & 1992) and Calvin (1996b) relate human concept formation and language to the theories of image-schemas and metaphor that have been developed in Cognitive Rhetoric[11] to account for the symbolic nature of human thought. I quote three paragraphs from the account

[11] Johnson (1985); Lakoff & Turner (1989); Turner (1991); Turner & Fauconnier (1995); Turner (1996) and Robert (1997).

given by neurophysiologist William H. 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...
>
> Schemas are often about one thing relative to another. They include the little words of grammar – only a few dozen in number – that position things or events relative to each other on a mental map: relative location (*above, below, in, on, at by, next to*), relative direction (*to, from, through, left, right, up, down*), relative time (*before, after, while*, and the various indicators of tense such as *–ed*), relative number (*many, few, some*, the *–s* of plurality), relative possibility (*can, may, might*), relative contingency (*unless, although, until, because*), possession (*of*, the possessive version of *–s, have*), agency (*by*), purpose (*for*), necessity (*must, have to*), obligation (*should, ought to*), existence (*be*), nonexistence (*no, none, not, un-*), and more.
>
> Other common schemas are blockage, center-periphery, full-empty, 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 *structures* 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 1996a: Chapter 10).

Because I focus on narration in this paper it is not my intention to give a systematic account of how grammar is formulated in Cognitive Linguistics. It is however worth noting in passing Calvin's first paragraph: "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..." Calvin's formulation implies that grammatical structures essentially are based on schematic (very general) as well as metaphoric elements of meaning.

According to the theory of image-schemas proposed in Cognitive Rhetoric the event structure of sentences can be understood in terms of basic concepts (image-schemas) like AGENT & PATIENT, EXPERIENCER & STIMULUS[12], BE, MOVE, REST,

[12] The Agent is the active party and the Patient the passive party in any event. The Experiencer feels sensations formed from the image of a Stimulus.

CAUSE, SOURCE, PATH, DESTINATION and CONTAINER. Particular image-schemas are combined to structure sentences on generic level. Certain sentences are perceived to be similar because they share image-schematic structure at the generic level. By this account sentences like *The baby crawled into the closet, The car drove into the garage, The students sauntered into the lecture hall* and *The snake slithered into the crevice* all share a common dynamic event structure at generic level in the form of an image-schematic story AN AGENT VOLITIONALLY MOVES ALONG A PATH INTO A CONTAINER.

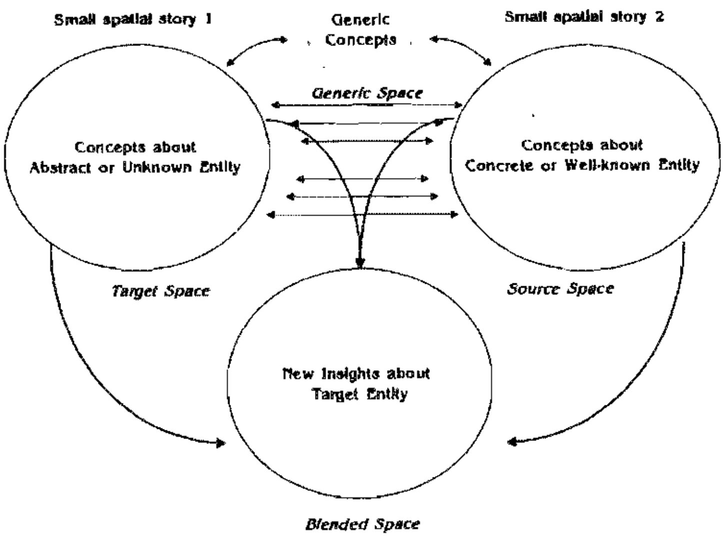
The theory of image-schemas enables us to formulate grammars that show an intimate relationship between general cognitive operations and man's special gift of using language to reveal (or hide) his innermost feelings to others during communication. It allows each sentence to narrate its own little story. Narration becomes the nursemaid of language learning and language maintenance.

Conceptual Blending

Mental Spaces

An important aspect of language use and interpretation is a process termed conceptual integration, or conceptual blending as it is known in Cognitive Rhetoric.

During blending apparently unrelated sets of concepts are equated by simultaneously extracting them from one's broad domains of knowledge to at least four types of smaller mental spaces, a generic space, a source space, a target space and a blended space.



The term "space" as opposed to "domain" implies that only a limited number of concepts are extracted from one's overall world knowledge to these mental spaces. Such extracted concepts are considered to be organised into tightly integrated scenes that are equated to form inferences in the fourth space, the blended space as shown above.

The general purpose of conceptual blending is to understand that which is new or abstract in terms of that which is known or concrete. The act of blending entails that we analogically equate entities that we generally consider to be different in significant respects by focusing on unexpected similarities between them. It is the unexpected similarities that enable us to project the features of the concrete entity onto the abstract entity, thereby arriving at a new understanding or blend of the abstract entity.

Knowledge that is less well understood is the target of well understood knowledge during conceptual blending. I will briefly Illustrate the process by referring to metaphor, which is one of the manifestations of conceptual blending. If one is for instance irritated by the behaviour of a fellow driver, of which one after all knows very little (target space), one's knowledge of the general behaviour patterns of pigs (generic space) will serve as basis for small action story *A pig pushes other pigs away from the trough* (source space). This small action story, along one's general precepts of what constitutes fair road behaviour (generic tautological space), will enable one to metaphorically address the offending driver with any of the pejorative appellations: "*Road Hog*!", *"Pig!"* or *"Swine!"* (blended space).

The Scope of Conceptual Blending

According to Fauconnier & Turner (1994) conceptual blending is not limited to the interpretation of figurative language. It is used in the perception of all kinds of symbolic interrelationships that involve comparing things. Types of interrelationships that Fauconnier & Turner mention are: the integration of events into coherent scenes, problem solving, conceiving novel actions and designs, scientific innovation, discerning humour, interpreting forms of figurative language such as parable, fable, metaphor and metonymy, interrelating paradigmatic (semantic) and syntagmatic (syntactic) concepts to give content to grammatical constructions such as noun phrase, verb phrase, prepositional phrase adjectival phrase and adjunct, hypothesis formation, invention, discovery and mathematical calculations.

Fauconnier and Turner consider conceptual blending to be a fundamental aspect of human cognition. Their view coincides with that of the neurophysicist William H. Calvin who considers various types of comparing - the essence of conceptual blending - to be a central aspect of human intelligence:

> Not only can many species learn abstract symbols and a simple language, but some clearly can learn categories... Closer to intelligence are the power of analogies, metaphors, similes, parables, and mental models. They involve the comparing of relationships ... (Calvin 1996a: Chapter 10).

Multiple Blends in Narratives

The process of blending need not only entail a simple pattern where concepts from generic and source spaces are mapped onto a target space to obtain a blend. During narration concepts from multiple input spaces are usually involved. Any narrative has coherence because the mental spaces containing the various elements of meaning that constitute the narrative are *inferentially* linked to certain other mental spaces.

Propositional Links and Image-schematic Story Links in Narratives

Before I proceed to show how blending works in an actual narrative I want to briefly discuss the nature of inferential linking by contrasting two forms of this phenomenon, namely propositional linking and image-schematic linking.

Propositional Links

In Cognitive Rhetoric propositional links are accorded great significance, because it is considered to be more than the necessary and sufficient logical operators used to establish the truth values of statements. Propositional links are accorded a fundamental role in the process of concept formation because propositional knowledge is considered to be grounded in the recurrent concept-structuring image-schemas that emerge from our bodily experience. According to Lakoff & Johnson (1980), Johnson (1987), Lakoff (1987) and Deane (1992) propositional image-schematic links form an intimate part of the processes of conceptualisation and conceptual integration.

Deane (1992) points out that sentences derive their coherence and stability from the fact that there always are at least two types of conceptual linkage between the elements that make up a sentence. One of these links invariably is a propositional link.

One of the functions of propositional links therefore is that they help us determine whether a statement is true or false. The sentence *The angry dinner guest strangled the waiter* partly derives its structural coherence from the fact that there are four propositional links that bind it together:

1 Someone strangled the waiter. (*If true*: He isn't alive any more, and he did not die in any other way. *If false*: He wasn't strangled, or he is still alive, or he died in another way).

2 Someone strangled the waiter. (*If true:* He is dead, and it isn't another person who was strangled. *If false*: he is alive, or it is another person who was strangled).

3 The dinner guest strangled the waiter (*If true:* It wasn't someone else who strangled the waiter. *If false*: Another person strangled the waiter).

4 The dinner guest was angry (*If true:* He wasn't in another state of mind. *If false*: he was in another state of mind).

Propositional links directly structure small spatial stories like *The angry dinner guest strangled the waiter* as indicated in the above-mentioned four statements. They however also indirectly structure the image-schematic stories that are associated with each small spatial story. This claim means that the small spatial story *The angry dinner guest strangled the waiter* and its image-schematic equivalent *An angry Agent harms a Patient* are structured by the same set of propositional inferences.

From the brief account and examples presented above it is clear that propositional links operate on concept formation level as well as sentence formation level to give coherence to concepts and to help define the structural integrity and coherence of sentences.

Image-schematic Story Links

Image-schematic stories impart image-schematic roles to small spatial stories and link different narrative lines (themes) to give overall narratives cohesion and momentum. Image-schematic stories are the narrative equivalents of the event frames that I outlined in chapter 4. I will explain the role of image-schematic story links in narratives by analysing their role in the parable found in 2nd Samuel 12:1-14. It is the parable that the prophet Nathan told to King David during a confrontation between them sometime after David had made the wife of one of his soldiers pregnant, and then had the hapless man assassinated so that he could take her as one of his wives:

> [1] The LORD sent Nathan to David. When he came to him, he said, "There were two men in a certain town, one rich and the other poor. [2]The rich man had a very large number of sheep and cattle, [3]but the poor man had nothing except one little ewe lamb that he had bought. He raised it, and it grew up with him and his children. It shared his food, drank from his cup and even slept in his arms. It was like a daughter to him.

[4]"Now a traveler came to the rich man, but the rich man refrained from taking one of his own sheep or cattle to prepare a meal for the traveler who had come to him. Instead he took the ewe lamb that belonged to the poor man and prepared it for the one who had come to him."

[5]David burned with anger against the man and said to Nathan, "As surely as the LORD lives, the man who did this deserves to die!

[6]He must pay for that lamb four times over, because he did such a thing and had no pity."

[7]Then Nathan said to David, "You are that man! This is what the LORD, the God of Israel, says: 'I anointed you king over Israel, and I delivered you from the hand of Saul. [8]I gave your master's house to you, and your master's wives into your arms. I gave you the house of Israel and Judah. And if all this had been too little, I would have given you even more. [9]Why did you despise the word of the LORD by doing what is evil in his eyes? You struck Uriah the Hittite with the sword and took his wife to be your own. You killed him with the sword of the Ammonites. [10]Now, therefore, the sword shall never depart from your house, because you despised me and took the wife of Uriah the Hittite to be your own.'

[11]"This is what the LORD says: 'Out of your own household I am going to bring calamity upon you. Before your very eyes I will take your wives and give them to one who is close to you, and he will lie with your wives in broad daylight. [12]You did it in secret, but I will do this thing in broad daylight before all Israel.'"

[13]Then David said to Nathan, "I have sinned against the LORD."

Nathan replied, "The LORD has taken away your sin. You are not going to die. [14]But because by doing this you have made the enemies of the LORD show utter contempt, the son born to you will die." (*The Holy Bible, II Samuel* 12, verses 1 - 14.)

King David's Initial Blend

Conceptually the above-mentioned narrative sets up two event frames consisting of an outer and an inner frame. The outer frame sets the background for the crucial events narrated in the inner parabolic frame. The outer frame contains the figures and events relating to Nathan's visit as God's envoy to King David. The main figures of this event frame are a SUPREME BEING who is portrayed as the source of a message, His MESSENGER to one of his UNDERLINGS, and of course the MESSAGE that is being delivered. The message is in the form of a parable, a type of narrative that is constructed with the potential of rendering sequentially dual interpretations during the processes of interpretation and reinterpretation. The inner event frame needed for

the initial reading of the parable contains three independent small spatial stories that are schematised below in *Nathan's Ruse against King David I* at the end of the article. In my analysis I will use the numbers assigned to the conceptual spaces in the schema.

For reasons of economy I paraphrase the small stories that I identify in the biblical narrative. Following Turner (1996) I differentiate between event stories and action stories. Event stories recount everyday mundane scene setting events that are somatically marked neutral. Action stories on the other hand recount dramatic events that are somatically marked either for pleasant of unpleasant emotions.

A non-parabolic initial interpretation of Nathan's narrative renders three distinct small stories: (3) A poor man cares for his only ewe lamb like for one of his own children, (4) A rich man with several flocks of sheep slaughters a poor man's lamb to feed a visitor, and (5) A judge sentences an accused in a property dispute case between two neighbours.

Space (3), which recounts how the poor man cares for his only ewe lamb, is clearly a scene setting event not meant to elicit strong emotions from King David. Spaces (4) and (5) recount two action stories that intend to elicit strong emotions from King David, namely a feeling of outrage at the crime and satisfaction in giving the right verdict.

Image-schematic stories are generic spaces that impart image-schematic roles to small event stories and small action stories, while generic causal tautologies imbue such stories with moral sense.

The small story in space (3) *A poor man cares for his only ewe lamb like for one of his own children* receives its thematic roles and sense of event from the image-schematic story in space (1) *An Agent protects a Patient.* The story in space (4) *A rich man with several flocks of sheep slaughters a poor man's lamb to feed a visitor* receives its thematic roles and sense of event from the image-schematic story in space (2) *An Agent harms a Patient.* The story in space (5) *A judge sentences an accused in a property dispute case between two neighbours* receives its thematic roles and sense of event from the image-schematic story in space (3) *A major Agent controls a minor Agent.* In turn the image-schematic stories are structured by the event frames of the small spatial stories.

The first small event story in space (3) *A poor man cares for his only ewe lamb like for one of his own children* is imbued with moral sense by a generic causal tautology in space (6) *Love causes loving behaviour.* The second story in space (4) *A rich man with several flocks of sheep slaughters a poor man's lamb to feed a visitor* is imbued with moral sense by the generic causal tautology in space (7) *Greed causes greedy behaviour.* The third story in space (5) *A judge sentences an accused in a property dispute case between two neighbours* is also imbued with moral sense by the generic causal tautology in space (7) *Greed causes greedy behaviour.*

By virtue of his royal status King David assumes that he is the judge who has to give a verdict and blends these seven mental spaces without realising that he is dealing with a parable. He declares the accused guilty and stipulates what reparations the perpetrator must pay to his victim.

The Generic and Tautological Nature of Norms and Values

The precepts that we term values, norms and laws are intrinsically generic and tautological. They are generic because they state requirements that must remain valid for all comparable events regardless of time and place. These precepts are at the same time tautological because human beings at a very basic level perceive states of mind to be the driving force for norm-related behaviour. Stated in neurological terms, when a person's synaptic potential is activated in a configuration that will cause feelings of lust, he will be eager to engage in lustful behaviour.

King David's Subsequent Blend

After King David's verdict Nathan confronts him and accuses him of being the guilty one. This precipitates King David's second blend, which is also schematised in *Nathan's Ruse Against King David II*, also at the end of the article.

A further five mental spaces have been added to the first schema. They enable the interpreter to make the same inferences that King David would have made after he realised that he was dealing with a parable.

The five additional spaces are: Space (8) A husband loves his wife, space (9) A powerful man takes a defenceless man's wife, space (10) Lust causes lustful behaviour, space (11) A messenger from a Supreme Commander arrives at his commander with bad news, and space (12) A king has one of his soldiers assassinated on the battlefield.

The small event story in space (8) *A husband loves his wife* is inferentially linked to the generic causal tautology in (6) *Love causes loving behaviour*. It is also linked to the small action story in space (9) *A powerful man takes a defenceless man's wife*, and indirectly via space (9) to the generic causal tautology in space (7) *Greed causes greedy behaviour*. The new causal relationships inferred from such inter-linked mental spaces gives the narrative its parabolic power of persuasion.

The story in space (9) similarly obtains it dual parabolic value because it is inferentially linked to the small action story in space (4) *A rich man with various flocks of sheep slaughters a poor man's lamb to feed a visitor*.

The generic causal tautology in space (10) *Lust causes lustful behaviour*, is inferentially linked to the small action story in space (9) *A powerful man takes a defenceless man's wife* and to the small action story in space (12) *A king has one of*

his soldiers assassinated on the battlefield. It is also linked to the generic causal tautology in space (7) *Greed causes greedy behaviour*, establishing a powerful link between lust and greed as drives in immoral behaviour.

By blending the new contents of mental spaces (8) to (12) with one another and with the spaces of the initial blend the second meaning of the parable becomes clear. By making the correct parabolic equations King David realises:

1 I am the accused, not the judge.
2 God is the judge.
3 Nathan is God's messenger.
4 Uriah is the poor man who lost the ewe lamb that he cared for.
5 Uriah's wife is the stolen lamb.
6 Uriah can't be compensated, for I secretly took his life.
7 I am a thief and a murderer.
8 Someone close to me will openly sleep with my wives and my unborn son will die.

Summary

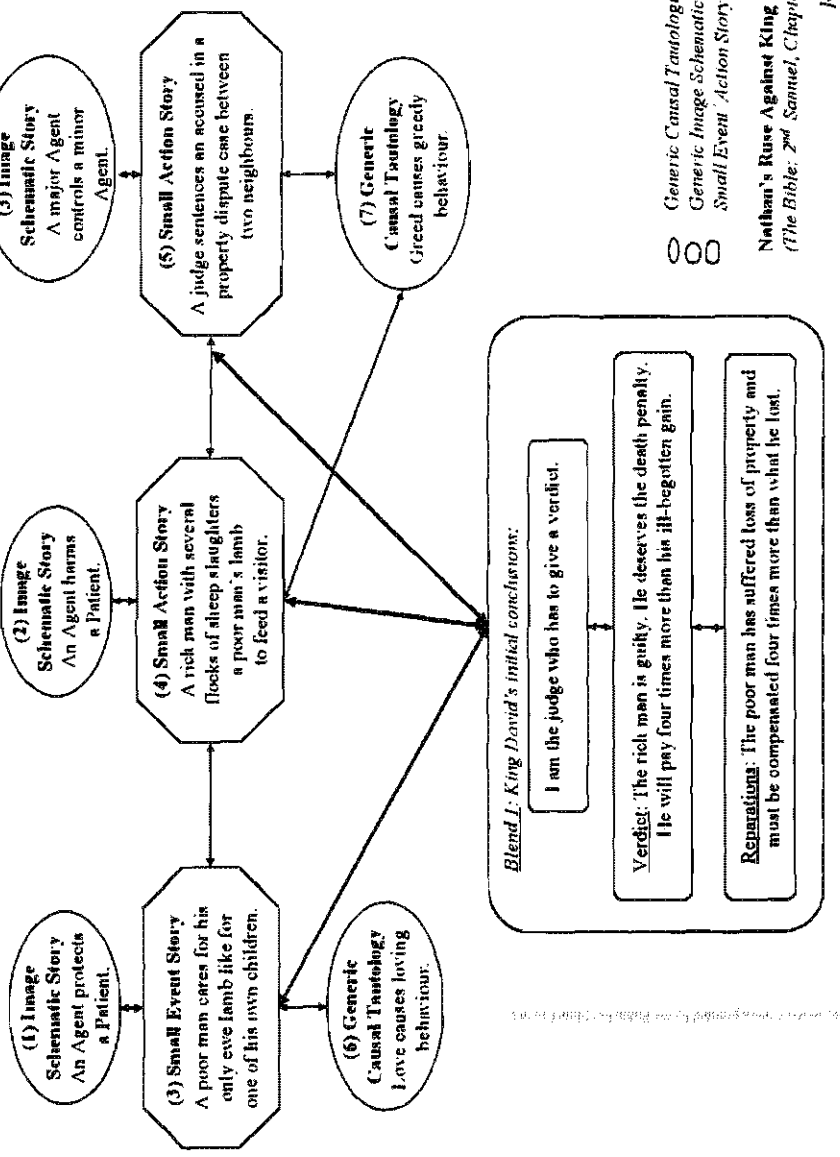
I began this paper by pointing out that the study of language and literature is being marginalised because these disciplines are not perceived as having utilitarian value. I have traced the root cause of the problem to the three century old Cartesian dichotomy that differentiates between the human body and the human mind, and which relegates mental matters to the realm of metaphysics. I have shown how the Cartesian dilemma is being resolved in Cognitive Rhetoric, which treats all mental processes, including language structure and narration, as products of actual physical cognitive operations in the brain.

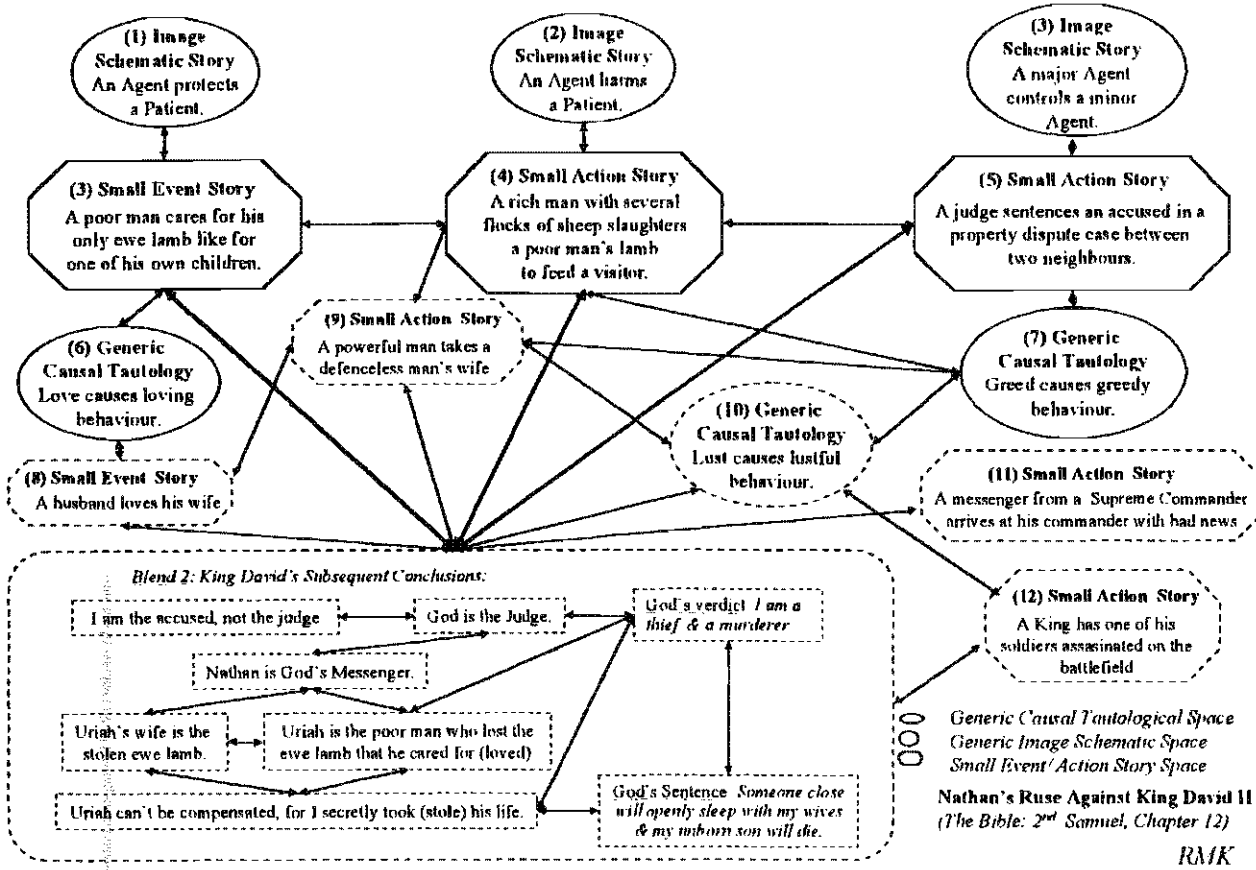
I have briefly outlined the theory of mental spaces, which was initially developed by Fauconnier, and is subsequently being refined by Fauconnier & Turner and others. I showed how a variety of mental spaces interact in the process of interpreting a the parable that Nathan told to David.

Conclusion

I began this paper with a quote from the Afrikaans poet D.J. Opperman, which can be narrowly translated into English as *The regions of the mind remain uncharted.* I want to end the paper by saying that we have now begun exploring and charting the inner world residing in the mind of man, with its inner spaces that contain all our images

and concepts of the outer world, and the symbolic systems that we use *in here* to express our concepts and precepts about everything *out there*.





Nathan's Ruse Against King David II
(The Bible: 2nd Samuel, Chapter 12)

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