



## Metaphors we feel by: stratal tension

J. R. Martin

Department of Linguistics, University of Sydney, Australia; Martin Centre for Applicable Linguistics, Shanghai Jiao Tong University, China

### ABSTRACT

This paper revisits the traditional concept of lexical metaphor from the perspective of SFL work on grammatical metaphor, exploring its interpretation as inter-stratal tension, and commenting on its rhetorical significance from both ideational and interpersonal points of view. Its goal has been to show how two key parameters of SFL theory, stratification and metafunction, can be deployed to provide an integrated comprehensive perspective on metaphor of all kinds. This involves drawing on SFL work on ideational and interpersonal meaning across strata, by way of clarifying what is meant by inter-stratal tension and outlining some foundations for research towards further formalisation of descriptions of the layers of meaning involved in metaphorical processes.

### ARTICLE HISTORY

Received 29 May 2019

Accepted 20 January 2020

### KEYWORDS

Lexical metaphor;  
grammatical metaphor; SFL;  
stratification

## 1. Metaphor: systemic functional perspectives

Halliday (1985) introduces the term *grammatical metaphor*, by way of consolidating his previous discussions of congruent and incongruent realisations of ideational and interpersonal meaning (Taverniers 2003, 2018). The term draws attention to the parallel between the phenomena he is describing and 'conceptual metaphors'<sup>1</sup> (which I will refer to as *lexical metaphor* in this paper, following Simon-Vandenbergen 2003). Taverniers (2006) explores the parallel from the perspective of systemic functional linguistics (hereafter SFL) and its proposals for a stratified content plane (termed discourse semantics and lexicogrammar here; Martin 1992, 2014, 2018). She notes that for both grammatical and lexical metaphor we can start from lexicogrammar and ask how a particular choice can realise alternative meanings, or we can start from (discourse) semantics and ask how a particular choice can be realised through alternative structures. Drawing on these discussions, for this paper, I will propose that what grammatical and lexical metaphor have in common is the following:

- There are two meanings involved.
- They stand in a figure to ground relation to one another.<sup>2</sup>
- The literal meaning symbolises a related figurative one.

Suppose we write for example that *South African politics erupted in a rebellion in black townships throughout the country* (Nuttal 1998). In doing so, we are saying literally that politics erupted and figuratively that pressure had been building for a long time leading up to the

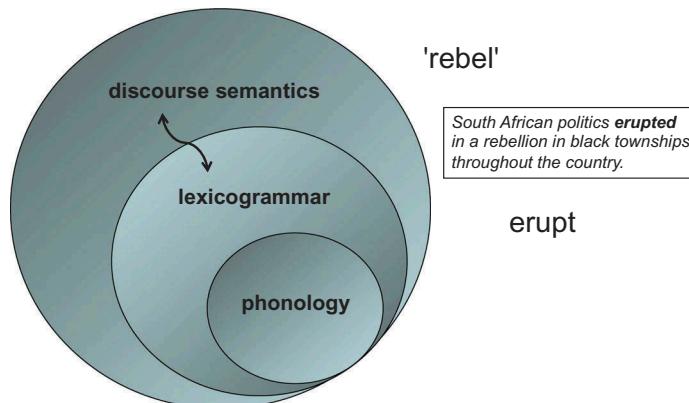
protestations. This can be interpreted in SFL as an inter-stratal relation in which lexicogrammar indirectly realises discourse semantics – by symbolising it rather than encoding it directly. So instead of writing that people in the black townships got more and more angry about discrimination and so rebelled (and so encoding what we mean), we write that politics erupted in a rebellion (thereby symbolising what we mean); in the metaphorical example, what we write can't be taken literally, since politics is not a volcano (though it can be like one). This interpretation of metaphor as inter-stratal tension is outlined in [Figure 1](#), with the curved double-headed arrow representing the symbolic realisational relationship involved.

Examples of this kind are familiar ones and have been explored extensively by scholars working in various traditions. The most relevant synthesis of this work for purposes of this paper is Goatly (1997). What I aim to add to the discussion here is a clearer understanding of what it means to say that there is more than one meaning involved in metaphors and that the meanings involved come from different “domains” (in SFL terms, different fields). To do this I will draw on the model of ideational discourse semantics being developed by Hao (2015, 2018, *forthcoming-a*, *forthcoming-b*) and extensions to Martin's (e.g., 1992) model of field introduced in Doran and Martin (*forthcoming*). I am also interested in revisiting Martin & White's (2005) suggestion that lexical metaphor involves an element of interpersonal evaluation, alongside the ideational similarity between the literal and figurative meanings (as explored in Simon-Vendenbergen 2003 and Mu 2015). Reconciling literal with figurative meaning thus involves both ideational and interpersonal perspectives – since the metaphors we live by are those we feel by too.

To begin, however, I will explore an interpretation of grammatical metaphor which underpins the discussion of lexical metaphor and metaphor in general here. Examples will be taken, where possible, from Mandela's autobiographical *Long walk to freedom* (1995) – a well-known text discussed from an SFL perspective in Martin (1999), Martin and Rose (2003).

## 2. Grammatical metaphor

In this section, I explore grammatical metaphor from the perspectives of ideational and interpersonal meaning and illustrate how four sub-types of grammatical metaphor can be interpreted as involving stratal tension.



**Figure 1.** Lexical metaphor as inter-stratal tension.

## 2.1. Ideational grammatical metaphor

Interpreting grammatical metaphor as stratal tension necessarily involves a clearly articulated model of discourse semantics and lexicogrammar and the possible realisation relationships between them. Here we will draw on Halliday's description of English lexicogrammar (Halliday 1985 and subsequent editions) and an evolving model of ideational discourse semantics (Martin 1992; Halliday and Matthiessen 1999; Hao 2015, 2018, *forthcoming-a*, *forthcoming-b*). The bare bones of this model of ideational meaning are outlined in Figure 2. Therein ideational discourse semantics resources are organised as sequences consisting of one or more figures and figures consisting of one or more elements; and ideational lexicogrammatical resources are organised as clauses consisting of one or more groups/phrases, the latter consisting of one or more words.

Ideational grammatical metaphor is of two types – experiential and logical (with the latter necessarily involving the former, Halliday 1988, Halliday & Martin 1993). We begin with an experiential metaphor. At stake here is the realisation of figures as clauses or as nominal groups. Let's begin with the following example: *Mandela walked for a long time*. The congruent realisation of this figure as a clause is modelled in Table 1, drawing on Hao's notation. The ideational discourse semantics models the figure in orbital terms as involving a central occurrence, nuclear entity, and outer orbit circumscription; this is realised congruently in lexicogrammar as a material clause whose Process realises the occurrence, whose Medium/Actor realises the entity and whose circumstance of Extent realises the circumscribing temporal entity.

This congruent realisation contrasts with a metaphorical one, *Mandela's long walk*, with the figure realised not as a clause but as a nominal group. This time round, as outlined in Table 2, the occurrence is realised as a Thing, the entity as a Deictic and the circumscribing entity as an Epithet. An "iconic" relationship between the ideational discourse semantics and lexicogrammar no longer holds. The lexicogrammar construes the occurrence figure as if it were an entity; the result is a construal of Mandela's life as both a thing and a going on (affording the title of his book, *Long Walk to Freedom*).

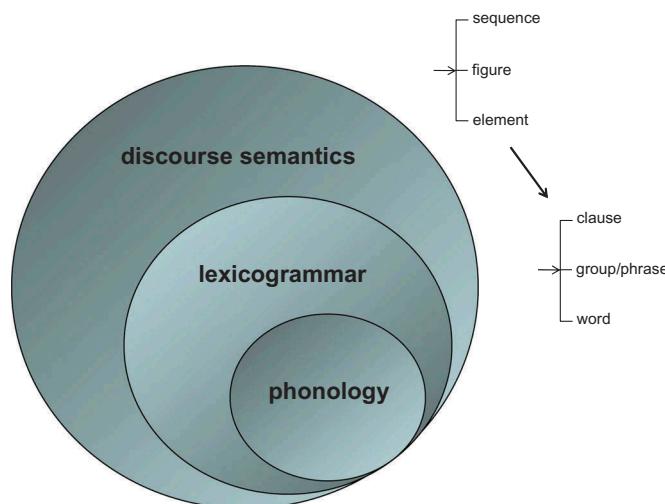


Figure 2. Basic organisation of ideational resources.

**Table 1.** Congruent realisation of experiential ideation.

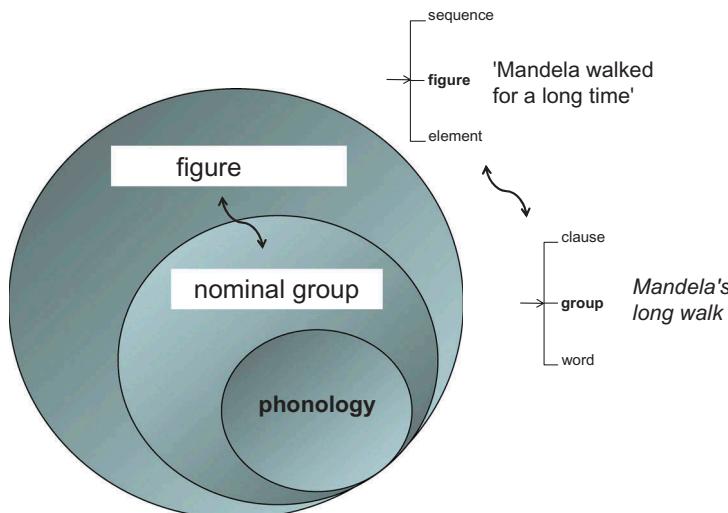
outer orbit			
nucleus			
centre			
discourse semantics	occurrence	+ entity	x entity <sup>3</sup>
lexicogrammar (congruent)	<i>walked</i> Process: material verbal group	<i>Mandela</i> Medium/Actor nominal group	<i>for a long time</i> Extent prepositional phrase

**Table 2.** Metaphorical realisation of experiential ideation.

outer orbit			
nucleus			
centre			
discourse semantics	occurrence	+ entity	x entity
lexicogrammar (congruent)	<i>walked</i> Process: material verbal group	<i>Mandela</i> Medium/Actor nominal group	<i>for a long time</i> Extent prepositional phrase
lexicogrammar (metaphorical)	Deictic <i>Mandela's</i>	nominal group Epithet <i>long</i>	Thing <i>walk</i>

This example of experiential inter-stratal tension is aggregated as an image in [Figure 3](#), highlighting the realisation of a discourse semantic figure as a nominal group.<sup>4</sup>

Turning to logical metaphor, what is at stake is the realisation of sequences as clause complexes or as clauses. Let's continue with the following example: *Mandela desired freedom so the police imprisoned him*. The congruent realisation of this sequence as a clause complex is modelled in [Table 3](#), drawing on Hao's notation. The ideational

**Figure 3.** Experiential grammatical metaphor as stratal tension.

**Table 3.** Congruent realisation of logical ideation.

discourse semantics	inner orbit				inner orbit			
	nucleus		nucleus		nucleus		nucleus	
	centre	centre	centre	centre	centre	centre	centre	centre
discourse semantics	occurrence	occurrence figure =+ entity	+x entity	conx	occurrence	occurrence figure + entity	+x entity	
lexicogr. (cong.)	<i>desire</i>	<i>freedom</i> 1	<i>Mandela</i>	<i>so</i>	<i>imprisoned</i>	<i>Mandela</i> x <sub>2</sub>	<i>police</i>	
	Process v.gr	Range/Phen n.gr	Med/Sen n.gr	conj	Process v.gr	Med/Goal n.gr	Ag/Actor n.gr.	

discourse semantics models the sequence as involving an occurrence figure connected to another occurrence figure (a causal connection not made explicit in the table). This is congruently realised through a clause complex, whose clauses are in a paratactic enhancing relation with one another.

This congruent realisation contrasts with a metaphorical one (Table 4), *Mandela's desire for freedom led to his imprisonment by the police*. In this case, the discourse semantic sequence is realised not as a clause complex but as a clause (a circumstantial identifying one). The occurrence figure responsible for Mandela's imprisonment is realised as Token, and the resulting figure as Value; and the causal connection between these figures is now realised by the Process of the clause. An "iconic" relationship between the ideational discourse semantic sequence and the lexicogrammar no longer holds. The lexicogrammar construes the occurrence sequence as if it were a figure; the result is a construal of the reason for Mandela's imprisonment as both a clausal relationship and an unfolding sequence.

This example of logical inter-stratal tension is aggregated as an image in Figure 4, highlighting the realisation of a discourse semantic sequence as a clause. As we can see logical metaphor entails experiential metaphor, since the sequenced occurrence figures involved have to be realised as clause participants – as Token and Value in the circumstantial identifying example we are working on (***Mandela's desire for freedom led to his imprisonment by the police***) or its intensive identifying (e.g., ***Mandela's desire for freedom was the reason for his imprisonment by the police***) or attributive (e.g., ***Mandela's imprisonment by the police was because of his desire for freedom***) alternatives.<sup>5</sup>

**Table 4.** Metaphorical realisation of logical ideation.

discourse semantics	inner orbit				inner orbit			
	nucleus		nucleus		nucleus		nucleus	
	centre	centre	centre	centre	centre	centre	centre	centre
discourse semantics	occurrence	occurrence figure = + entity	+x entity	conx	occurrence	occurrence figure + entity	+x entity	
lexicogr. (cong.)	<i>desired</i>	<i>freedom</i>	<i>Mandela</i>	<i>so</i>	<i>imprisoned</i>	<i>Mandela</i>	<i>police</i>	
	Process v.gr	Range/Phen n.gr	Med/Sen n.gr	conj	Process v.gr	Med/Goal n.gr	Ag/Actor n.gr.	
lexicogr. (metaphr.)		n.gr Token		v.gr Process		n.gr Value		
		<i>Mandela's desire for freedom</i>		<i>led to</i>		<i>his imprisonment by the police</i>		

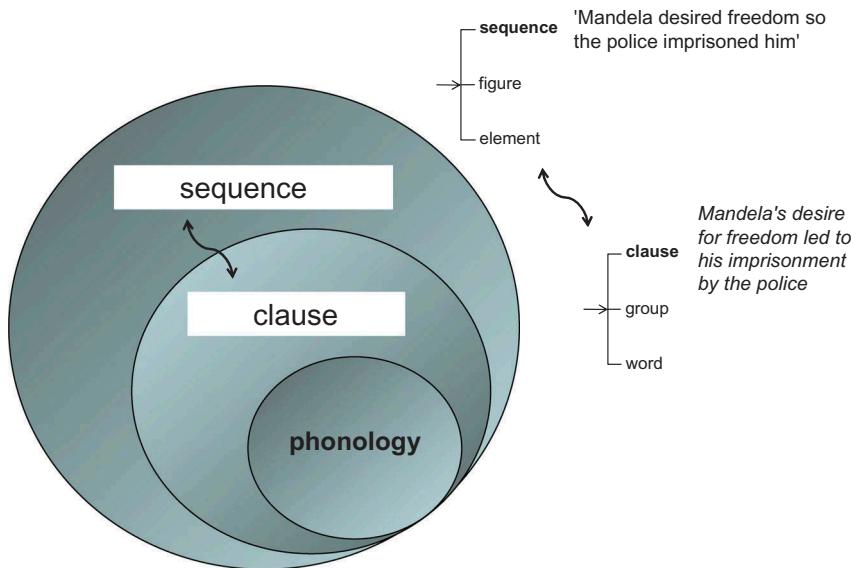


Figure 4. Logical grammatical metaphor as stratal tension.

## 2.2. *Interpersonal grammatical metaphor*

Interpersonal grammatical metaphor is of two types – metaphors of mood and metaphors of modality. We begin with mood metaphor (Halliday 1984, Martin, 1995). At stake here is congruent or metaphorical realisation of the discourse semantic system of SPEECH FUNCTION in the lexicogrammatical system of MOOD. The following phase of interaction from a well-known crime novel exemplifies this alternation. Harry Hole, the senior policeman, first requests a service from a junior officer metaphorically, using a modalised polar interrogative: *Would you check that out, Skarre?* Then, encountering resistance, he switches to the direct congruent realisation, using an imperative: *Check it out, Skarre.*

Skarre puckered his lips and shook his head. 'Sounds too weird. Anyway, where did he get hold of this loop gizmo? If it isn't approved, I mean?'

'We can start looking there,' Harry said. '**Would you check that out, Skarre?**'

'I said I don't believe all that stuff.'

'Sorry, I didn't make myself clear. I meant to say: **Check it out, Skarre.** Anything else Holm?' (Nesbo 2010, 130)

In his follow-up command, Hole says what he means, asserting the authority he masked in his initial request where he dressed his command up as a question about his junior officer's inclination to perform a service. This metaphorical relation between speech function and mood is outlined in Figure 5.

Turning to modality metaphor, what is at stake is congruent or metaphorical realisation of the discourse semantic system of ENGAGEMENT (Martin and White 2005) in lexicogrammar. The following phase of interaction from an episode of a well-known crime series exemplifies the alternation (Sherlock Holmes, Series 1, "The Great Game").<sup>6</sup> In the opening exchange,

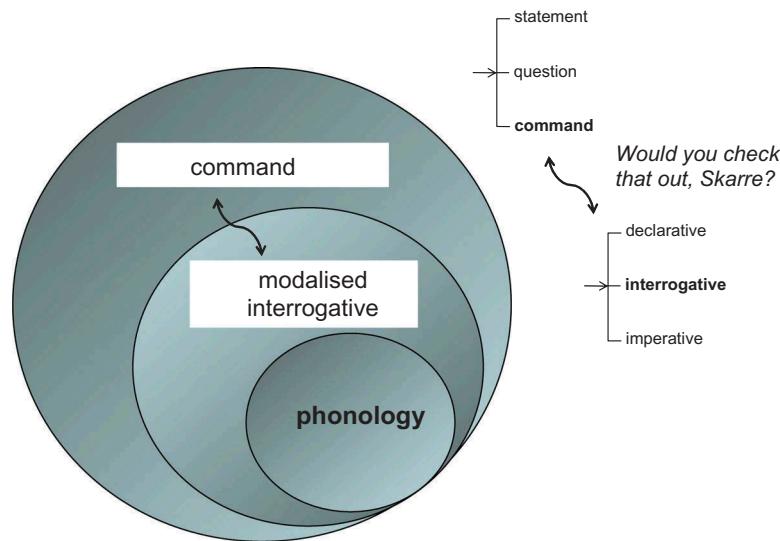


Figure 5. Mood metaphor as stratal tension.

Holmes sarcastically interprets Watson's *Has it occurred to you* – as a question about his thought processes, and answers congruently with a modal adverb that it probably has.

Watson: You realize we've only stopped for breath since this thing started. **Has it occurred to you** –

Sherlock: **Probably**.

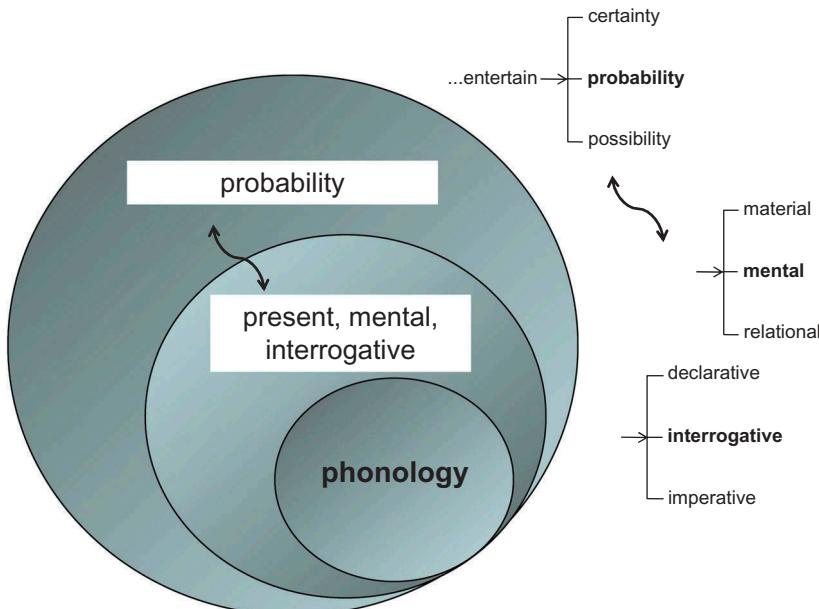


Figure 6. Modality metaphor as stratal tension.

But asking about Holmes' thought processes was not of course Watson's intention. What he was trying to do was dress his modalisation up in suitably deferential clothes – knowing full well from experience that his chances of knowing more than Holmes were slight indeed. So instead of saying *The bomber's probably playing a game with you*, and making room for Holmes' opinion with a modal adverb, he addresses Holmes with a "past in present" mental process of cognition in a polar interrogative clause projecting his own speculation – thereby literally requesting Holmes' opinion. This time round Holmes cooperates, and answers *Yes, I know* (using a comparable metaphor of modality to register his certainty).

Watson: No, **has it occurred to you that the bomber's playing a game with you**. The envelope. Breaking into the other flat. The dead kid's shoes. It's all meant for you.

Sherlock: **Yes, I know.**

This metaphorical relation between the discourse semantics of modality and lexicogrammar is outlined in [Figure 6](#).

### 3. Lexical metaphor

In this section, I will introduce three further examples of lexical metaphor, supplementing the "rebellion as eruption" metaphor from [Section 1](#) (highlighted in bold below). The first two are taken from the following excerpt from Mandela ([1995](#), 750).

It was this desire for the freedom of my people to live their lives with dignity and self-respect that animated my life, that transformed a frightened young man into a bold one, that drove a law-abiding attorney to become a criminal, that turned a family-loving husband into a man without a home, **that forced a life-loving man to live like a monk**. I am no more virtuous or self-sacrificing than the next man, but I found that I could not even enjoy the poor and limited freedoms I was allowed when I knew my people were not free. Freedom is indivisible; **the chains on any one of my people were the chains on all of them, the chains on all of my people were the chains on me.**

The first symbolises Mandela's life as a prisoner as the life of a cloistered monk. This is configured as inter-stratal tension in [Figure 7](#).

The second symbolises South African segregation during apartheid regime as Africans in chains ([Figure 8](#)).

The third deploys the familiar trope of life as a journey ([Figure 9](#)).

When I walked out of prison, that was my mission, to liberate the oppressed and the oppressor both. Some say that has now been achieved. But I know that this is not the case. The truth is that we are not yet free; we have merely achieved the freedom to be free, the right not to be oppressed. **We have not taken the final step of our journey, but the first step on a longer and even more difficult road.** For to be free is not merely to cast off one's chains, but to live in a way that respects and enhances the freedom of others. The true test of our devotion to freedom is just beginning. (Mandela [1995](#), 751)

At this point, we can usefully compare the rhetorical potential of grammatical and lexical metaphor, drawing in SFL's model of register (i.e., field, tenor and mode). With grammatical metaphor, a single field of discourse encompasses both the alternative congruent and metaphorical realisations. For ideational grammatical metaphor, it is the

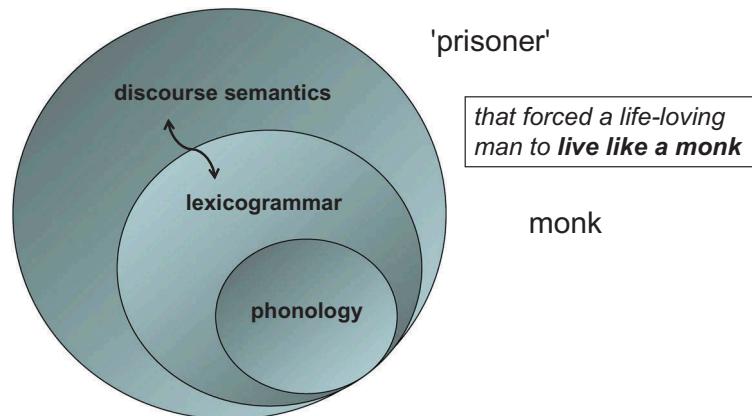


Figure 7. "Prisoner as monk" lexical metaphor.

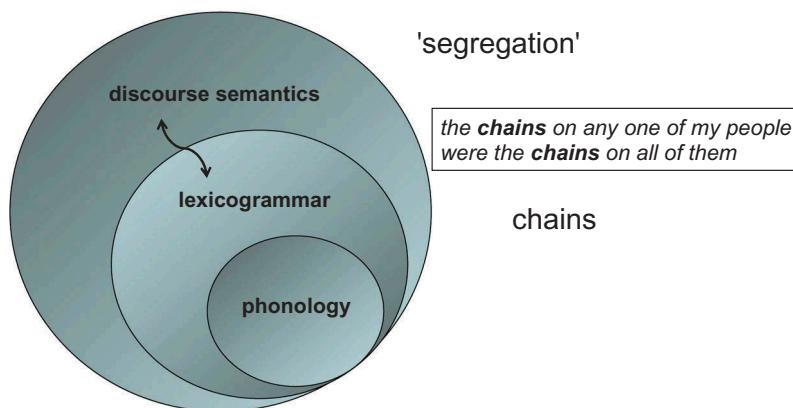


Figure 8. "Segregation as chains" lexical metaphor.

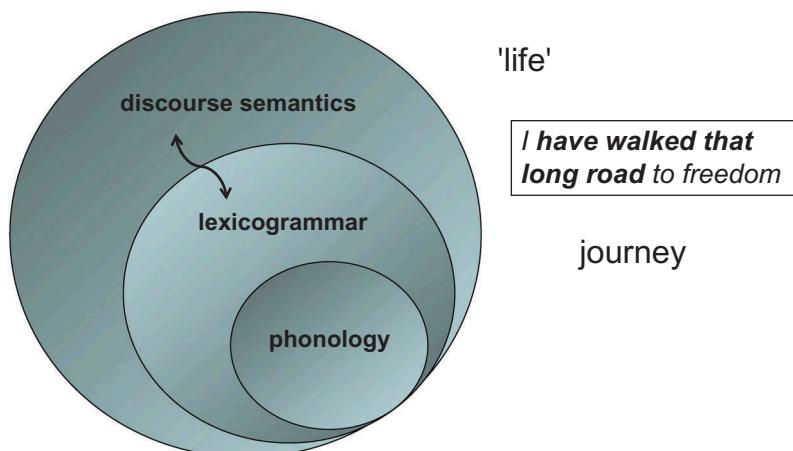


Figure 9. "Life as a journey" lexical metaphor.

mode that varies from spoken congruent realisations to more written metaphorical ones. For interpersonal grammatical metaphor, it is the tenor that varies from solidary congruent realisations to power negotiating metaphorical ones. With lexical metaphor, however, it is a field that varies – as a literal domain is deployed to symbolise an alternative figurative one.<sup>7</sup> This means that before lexical metaphors are discussed in more detail, the model of field informing our discussion needs to be introduced.

#### 4. Field

Doran and Martin (forthcoming) develop Martin's (1992) articulation of field as a resource for construing phenomena. In terms of this resource, a specific domain involves a set of activities oriented to some global institutional purpose, alongside the taxonomies of items involved in these activities (organised by both classification and composition), including associated properties. The basic systems involved are outlined in Figure 10. The network allows for a dynamic or static construal of phenomena (as activity or item), and within the static perspective it allows for classification (class/subclass relations) or composition (part/whole relations); the optional PROPERTY system allows for the association of gradable qualitative or spatio-temporal characterisations with activities or items. Although not formalised in Figure 10, this resource has to be understood as a recursive one, allowing for the development of the complexity of a particular domain (including, for example, a number of activities and associated taxonomies of items). A field like linguistics, for example, would involve various activities (data gathering, analysis, publishing, editing, training, marking, administration, etc.) and taxonomies of the items involved in these activities (e.g., the paradigms and syntagms of language arising from analysis).

Drawing on this model in relation to the “prisoner as monk” metaphor we would have to take advantage of field recursion to construe two relatively distinct domains (classifying

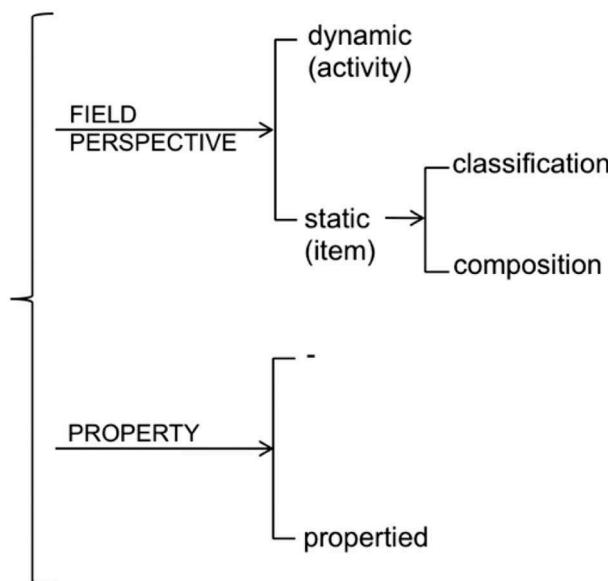


Figure 10. Basic field systems.

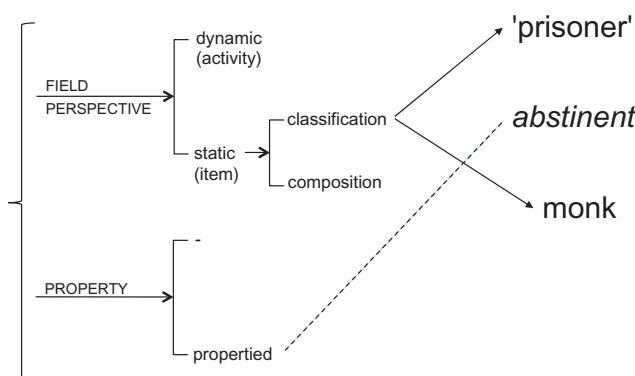
Mandela as a prisoner and also as a monk), along with the property of abstinence affording the link between the two – as outlined in simple terms in [Figure 11](#).

As far as stratal tension is concerned this implies that the realisation of the two domains would then be distributed across strata, with lexicogrammar literally construing the “source” domain (Mandela the monk) and discourse semantics figuratively construing the “target” domain (Mandela the prisoner); our example does not itself make explicit the property linking the two domains (abstinence), which would have to be abduced from the contrast set up between *a life-loving man* and *live like a monk*. This skewed distribution of the realisation of the two domains across strata is outlined in [Figure 12](#).

It may be useful at this point to compare this modelling with that we might develop for analogies – since analogy also involves two different domains, comparable to one another because of some shared property. Suppose we suggest (misleadingly experts would say) that the structure of an atom is like the structure of our solar system, with the two domains sharing the property of orbitality (i.e., circular motion, possibly layered, around a nucleus). Analogy is not metaphor. We are simply making an ideational comparison between two domains; one domain is not symbolising another as with lexical metaphor. This suggests that for analogy we have field recursion proposing two domains, each of which is construed in discourse semantics and realised in lexicogrammar. This even distribution of the realisation of the two domains across strata is outlined in [Figure 13](#).

## 5. Lexical metaphor and attitude

In our interpretation of the “prisoner as monk” metaphor discussed above, we suggested that from the perspective of field, a lexical metaphor positions readers to reconcile the literal and figurative meanings of the metaphor by recognising some ideational property linking one to the other (which may be explicit in the co-text or have to be abduced). We need to ask however whether this ideational similarity exhausts the rhetorical affordances of a lexical metaphor. Simon-Vandenbergen (2003) argues persuasively that this is not the case. And Martin and White (2005) suggest that from the perspective of interpersonal meaning, APPRAISAL, in particular, lexical metaphors “provoke” an attitudinal response – a position elaborated in detail in Mu (2015). To fully reconcile the “prisoner as monk” metaphor, in other words, we would have to transfer



**Figure 11.** The “prisoner as monk” metaphor in relation to field.

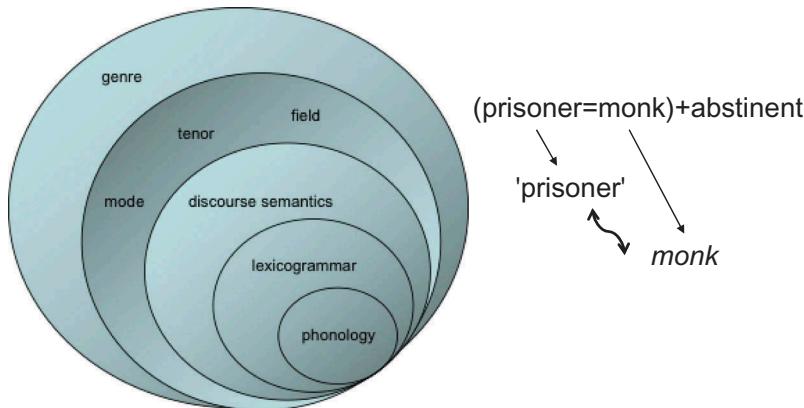


Figure 12. Skewed distribution of the realisation of “prisoner as monk” lexical metaphor.

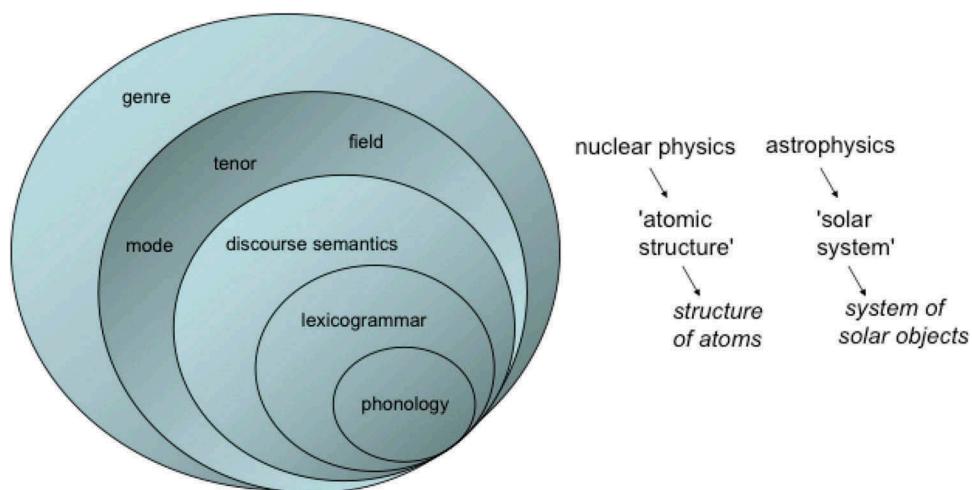
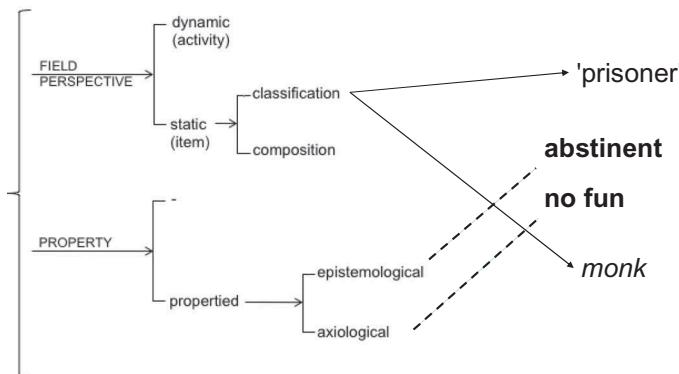


Figure 13. Even distribution of the realisation of “atomic structure like solar system” analogy.

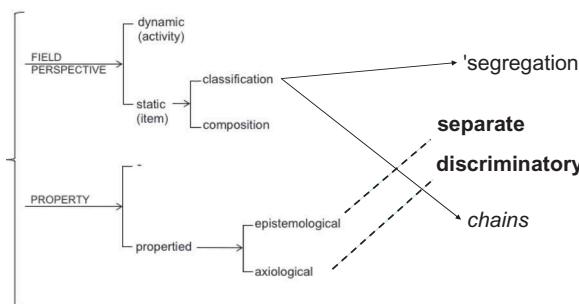
interpersonal as well as ideational meaning from the source domain to the target one. Thus for Mandela, living like a prisoner didn't only involve material deprivation; it also meant not having fun. This fuller reading of the “prisoner as monk” metaphor is outlined in Figure 14. To simplify the presentation we have subclassified properties as epistemological or axiological. Strictly speaking, we should not be including interpersonal meaning in an ideational network, but rather model the interaction between tenor and field at the level of register (and between APPRAISAL and IDEATION at the level of discourse semantics).

The “segregation as chains” metaphor is interpreted along similar lines in Figure 15. At stake here is the issue of whether apartheid regimes are negatively judged as discriminatory. The metaphor clearly provokes a judgement of this kind as evaluation is transferred from the source to target domain.

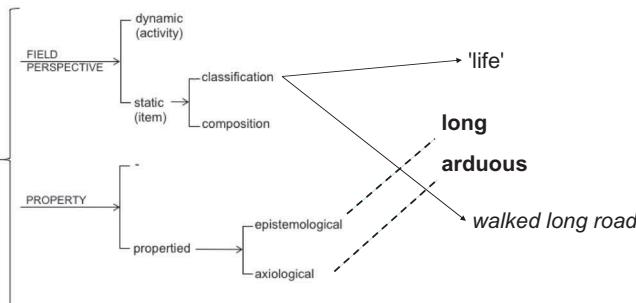
A reading of Mandela's “life as a journey” metaphor is modelled in Figure 16. I write “a reading” because alternative interpretations are possible (as for Figures 14 and 15 above).



**Figure 14.** The “prisoner as monk” metaphor: shared epistemological and axiological “properties”.



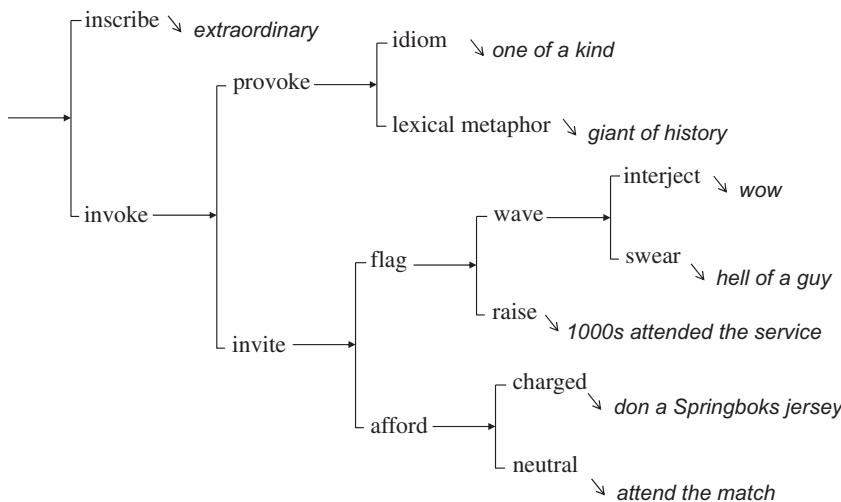
**Figure 15.** The “segregation as chains” metaphor: shared epistemological and axiological “properties”.



**Figure 16.** The “life as a journey” metaphor: shared epistemological and axiological “properties”.

Lexical metaphors are deployed to provoke a reaction; but unlike inscribed attitude involving explicitly attitudinal lexis, they do not specify the precise attitude involved – leaving this for a reader to abduce based on their reading of the lexical metaphor in relation to its co-text.

This underspecification of attitudinal meaning positions lexical metaphors on a scale of inscribed and invoked attitude – scaled according to how specifically evaluation is instantiated in a text and thus how much latitude readers are offered in interpretation (Martin 2010).



**Figure 17.** Inscribing and invoking attitude: degrees of commitment.

A scale of evaluations of Mandela is presented in Figure 17. Idioms (e.g., *one of a kind*), which often involve “dead” metaphors (Chang 2004), are positioned between explicit inscriptions (extraordinary) and lexical metaphors (e.g., *giant of history*); further down the scale we have interjections (e.g., *wow*), swearing (e.g., *hell of a guy*) and graduation (e.g., *1000s attended the service*); and towards the implicit end we have ideational meaning which affords evaluation, relatively neutral (e.g., *attending the match*) or relatively iconised (*don a Springboks jersey*). The further down the scale we go, the more interpretation depends on reading position. Appreciating the significance of Mandela attending the 2010 World Cup rugby final and donning the Springboks team jersey depends on some familiarity with the politics of South African sport before and after the apartheid regime.

## 6. More meaning

The meaning potential of any non-endangered language is indefinitely large, elastic, and unbounded – adding meaning as needs arise. Whether trained as linguists or not, speakers are aware of this as vocabulary grows, with new lexical items coined (*hangry*) or borrowed (*hijab*). And all languages have transategorisation processes to work with, deriving one word class from another, sometimes involving morphological change and sometimes not.<sup>8</sup> In my lifetime verbalisations of what I once considered nouns have entered common usage (*text, goal, podium, medal, progress* etc. as in *A convoy of high-ranking Australian and Cambodian officials have arrived in Nauru to secretly progress the controversial deal to resettle refugees in Cambodia*). And early on in my career, I proposed a nominalisation of my own (*phoricity*, from *anaphoric, cataphoric, exophoric* etc.), which my colleagues thought sounded terrible at the time (though not as bad as Halliday’s *Verbiage* to my ears).

These phylogenetic processes of semogenesis are complemented by logogenetic ones – namely metaphor.<sup>9</sup> As texts unfold the relationship between discourse semantics and lexicogrammar may be congruent or skewed. Where grammar and lexis symbolise discourse semantics rather than realising it directly, the meaning potential of a language

is thereby indefinitely expanded. Inter-stratal tension affords an array of meaning far beyond what can be construed, enacted, and composed in congruent terms.

In this paper, we have re-visited the traditional concept of lexical metaphor from the perspective of SFL work on grammatical metaphor, exploring its interpretation as inter-stratal tension, and commenting on its rhetorical significance from both ideational and interpersonal points of view. My goal has been to show how two key parameters of SFL theory, stratification and metafunction, can be deployed to provide an integrated comprehensive perspective on metaphor of all kinds. This involved drawing on SFL work on ideational and interpersonal meaning across strata, by way of clarifying what we mean by inter-stratal tension and outlining some foundations for research towards further formalisation of descriptions of the layers of meaning involved in metaphorical processes.

One dimension of SFL we have not focused on is axis, and SFL's conception of lexis as delicate grammar (Hasan 1987). This suggests that the distinction between grammatical and lexical metaphor assumed for this paper should not be overplayed, but rather reconsidered as a cline. Simon-Vendenbergen (2003, 250) comments on this issue as follows:

The dichotomy between GM and LM is artificial ... The former involves the realisation of meaning by means of a noncongruent grammatical category, the latter by means of a noncongruent lexical item ...

However, changes of one type necessarily involve changes of another type, so that in a real text, i.e., on the level of the clause, it makes more sense to talk about lexicogrammatical metaphor. In isolation it is useful to refer to say nominalisation of *analyse* into *analysis* as grammatical metaphor, and to refer to *fruit* as a lexical metaphor for the congruent *result*. In practice, i.e., when these forms are used in larger configurations, they (each JRM) will cause all sorts of other shifts to take place.

In simple terms, the lexical item *monk* is not a metaphor until Mandela writes *that forced a life-loving man to live like a monk*. He needs the clause. Similarly, the nominalisation *administration* is not a grammatical metaphor until we write ... *their administration of the program was flawless* (cf. *The administration performed flawlessly* where *administration* congruently realises an institutional entity not an occurrence). We might be better off perhaps to speak of "lexicogrammatical" metaphors such as *that forced a life-loving man to live like a monk* and "grammaticolexical" ones such as *their administration of the program was flawless*.

We also need to take the interaction of lexical metaphor with grammatical metaphor into account. To illustrate this let's return to the lexical metaphor we began with, which also involves a grammatical metaphor – this time with respect to a Spanish translation that prompted considerable discussion when I first introduced it to an audience of Spanish speakers in Chile. What exercised the audience was the implications of translating *erupted* as *estalló* "exploded", thereby shifting the source domain of the metaphor (from "rebellion as a volcano erupting" to "rebellion as a bomb exploding"). The stratal tension involved in this particular translation is outlined in Figure 18.

*La política sudafricana estalló en una rebelión en los pueblos negros a través de todo al país.*

South African politics **exploded** in a rebellion in the black townships across the whole country.

Issues arising from the translation shift aside the critical point that needs to be made here is that in both the source and target text the lexical metaphor is enabled by a grammatical

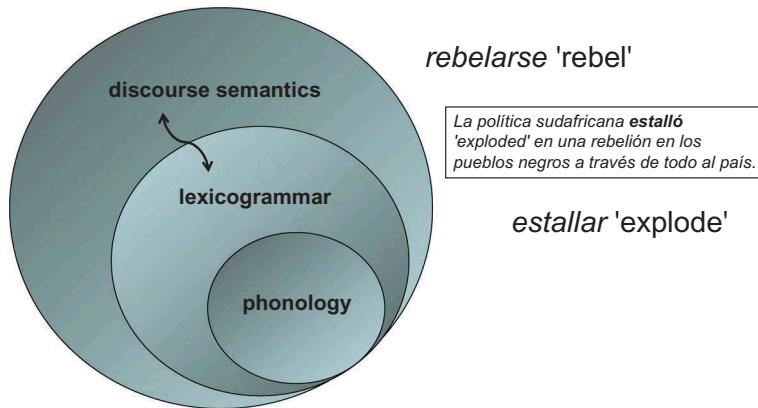


Figure 18. "Rebellion as bomb" lexical metaphor.

one (encoded as *in a rebellion*, *en una rebelión* "in a rebellion"). The experiential metaphor allows both texts to position what went on as a Manner circumstance qualifying the Process construing the metaphor (*erupted*, *estalló* "exploded"); an alternative employing the same grammatical metaphor might have been *a rebellion erupted ...*, with *a rebellion* as Medium/Actor for the same Process. Without the experiential metaphor, it is unclear how the lexical metaphor could have been elegantly construed.

The facilitating affordances of grammatical metaphor in relation to lexical metaphor are stronger still when extended metaphors are considered. The final paragraph of Mandela's (1995, 751) autobiography developed the "life as a journey" metaphor introduced above. Its grammatical metaphors are highlighted in bold below. Without them, it is hard to see how freedom could be fluently positioned as a destination, mistakes as false steps, views as spoils, and responsibilities as a companion – on a journey that has not reached its end.

I have walked that long road **to freedom**. I have tried not to falter; I **have made missteps** along the way. But I have discovered the secret that after climbing the great hill, one only finds that there are many more hills to climb. I have taken a moment here to rest, **to steal a view** of the glorious vista that surrounds me, to look back on the distance I have come. But I can only rest for a moment, for **with freedom come responsibilities**, and I dare not linger, for **my long walk** is not yet ended.

Interactions of this kind create challenges across many fields of application (e.g., translation and interpreting, educational linguistics, clinical linguistics, forensic linguistics). There are not only two layers of meaning to unpack (lexicogrammar symbolising discourse semantics) – but in addition two domains and their relation to one another to be interpreted. And small translation shifts, such as the *erupted* to *estalló* "exploded" one exemplified above, have significant implications for the meaning of a text.<sup>10</sup> These have to be sensitively managed by translators and interpreters, just as they have to be carefully explained for apprentice readers. Hopefully, the design of the figures introduced above will prove helpful as far as supporting experts in say translation studies or educational linguistics is concerned. But they will surely have to be adjusted for practical purposes for end users such as translators or students advancing their literacy resources. Rose's carefully designed reading interactions illustrate one way of managing the complexity involved in educational contexts

(Rose and Martin 2012, 197). An example is given in Table 5 below. Advice about strategies for managing grammatical and lexical metaphor in other fields is more than welcome.

**Table 5.** Detailed reading and lexical metaphor (based on Rose & Martin 2012).

Teacher	Prepare sentence	Now the first sentence tells us that the trouble blew up in the townships, and that the people were rebelling against the government. Look at the sentence as I read it. "In the mid-1980s South African politics erupted in a rebellion in black townships throughout the country."
Students	Prepare	Now that sentence starts by telling us when they rebelling.
Teacher	Focus	Who can see the words that tell us when?
Students	Identify	In the 1980s.
Teacher	Affirm	Is she right? OK!
Students	Direct	Let's all do mid-1980s.
Teacher	Prepare	Then it tells us that South African politics blew up.
Students	Focus	Can you see the word that tells us South African politics blew up? South African politics ... ?
Teacher	Identify	Erupted.
Students	Affirm	Erupted! Is he right?
Teacher	Direct	Yes
Students	Prepare	Let's do that one.
Teacher	Focus	The reason they use the word erupted is because that's what volcanoes do.
Students	Propose	Have you heard that before? A volcano erupts?
Teacher	Focus	Yes.
Students	Propose	So what were the townships like? They were like ... ?
Teacher	Affirm	Volcanoes.
Students	Elaborate	Exactly right.
Teacher	Elaborate	They were like a volcano, and there was all this pressure inside, waiting to blow up and erupt, with all this anger the people were feeling about the government's repression.

## Notes

1. The term *conceptual metaphor* is widely used in work inspired by Lakoff and Johnson (1980) in their strand of “cognitive” linguistics.
2. In Richards's (1936) terms a *vehicle* to *tenor* relation; in Lakoff and Johnson's (1980) terms a *source* to *target* relation.
3. Circumstances of Extent might be better treated as grading an occurrence; I will not develop this alternative perspective here.
4. It is important to distinguish inter-stratal tension of this kind from embedding, where a figure is realised as a Participant in clause structure without being recoded as a thing (i.e., as a nominal group). Congruent embedded clauses are often deployed as Qualifiers inside nominal groups (e.g., *the prison* [[**where Mandela was incarcerated**]]), or as acts or facts in mental clauses (e.g., *they saw* [[**Mandela being arrested**]], *it upset them* [[**that Mandela was arrested**]]). Embedded clauses of this kind congruently encode the figures they realise; there is no stratal tension involving figures construed as if they were a thing.
5. It is important to distinguish logical metaphors from experiential metaphors involving instigated figures (Hao 2018). The congruent realisation of *rain caused their cancellation* is *rain made them cancel*; the causal meaning in these examples has to do with agency, not a logical connection between figures.
6. Downloaded from <https://www.planetclaire.tv/quotes/sherlock/series-one/the-great-game/>
7. There are degrees of field variation. With metonymy and synecdoche, for example, we have symbolisation within a domain (*the pen is mightier than the sword*; *Canberra denounced the proposals*). With lexical metaphors such as *politics erupted*, on the other hand, we have two distinct domains (politics and vulcanology).

8. Confusion over the difference between transcategorisation, especially nominalisation, and ideational grammatical metaphor has been a recurring problem in and around SFL research inspired by Halliday (1985) (partially addressed in Martin 2008; Hao 2018). Focusing on inter-stratal tension is crucial. A clause like *players texted their management* has three transcategorisations (two nominalisations, *players* and *management*, and one verbalisation *texted*); but there is no stratal tension (*players* and *management* both congruently realise entities, and *texted* congruently realises an occurrence).
9. Over time metaphors are themselves subject to processes neutralising stratal tension. Lexical metaphors such as *cool as a cucumber* may be “lexicalised” as idioms (Chang 2004); and ideational grammatical metaphors such as those introducing explanations of the water cycle are subsequently technicalised as phases of the activity (*evaporation, condensation, precipitation*, etc.) – as activity entities in Hao’s (2018) terms (cf. Halliday 1998 on “dead” metaphors; Taverniers 2018 on “domesticated” ones).
10. Discussion in Chile focused among other things on the fact that the translation was less effective in ascribing responsibility for the uprising to decades of repression under the apartheid regime, shifting agency to the people of the townships.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Notes on contributor

**J R Martin** is Professor of Linguistics at the University of Sydney, where he is also Deputy Director of the LCT Centre for Knowledge-Building. His research interests include systemic theory, functional grammar, discourse semantics, register, genre, multimodality and critical discourse analysis, focusing on English, Tagalog, Korean and Spanish—with special reference to the transdisciplinary fields of educational linguistics, forensic linguistics and social semiotics. Professor Martin was elected a fellow of the Australian Academy of the Humanities in 1998, and was Head of its Linguistics Section from 2010–2012; he was awarded a Centenary Medal for his services to Linguistics and Philology in 2003. In April 2014 Shanghai Jiao Tong University opened its Martin Centre for Applicable Linguistics, appointing Professor Martin as Director.

## References

Chang, C. 2004. *English Idioms and Interpersonal Meaning*. Guangzhou: Sun Yat Sen University Press.

Doran, Y. J., and J. R. Martin. *forthcoming*. “Field Relations: Understanding Scientific Explanations.” In *Studying Science: Knowledge, Language and Pedagogy*, edited by K. Maton, J. R. Martin, and Y. J. Doran, xx–xx. London: Routledge.

Goatly, A. 1997. *The Language of Metaphors*. London: Routledge.

Halliday, M. A. K. 1984. “Language as Code and Language as Behaviour: A Systemic-functional Interpretation of the Nature and Ontogenesis of Dialogue.” In *The Semiotics of Culture and Language Vol.1: Language as Social Semiotic*, edited by R. P. Fawcett, M. A. K. Halliday, S. M. Lamb, and A. Makkai, 3–35. London: Frances Pinter.

Halliday, M. A. K. 1985. *An Introduction to Functional Grammar*. London: Arnold.

Halliday, M. A. K. 1988. “On the Language of Physical Science.” In *Registers of Written English: Situational Factors and Linguistic Features*, edited by M. Ghadessy, 162–178. London: Pinter (Open Linguistics Series).

Halliday, M. A. K. 1998. “Things and Relations: Regrammaticising Experience as Technical Knowledge.” In *Reading Science: Critical and Functional Perspectives on Discourses of Science*, edited by J. R. Martin and R. Veel, 185–235. London: Routledge.

Halliday, M. A. K., and J. R. Martin. 1993. *Writing Science: Literacy and Discursive Power. (Critical Perspectives on Literacy and Education)*. London: Falmer.

Halliday, M. A. K., and C. M. I. M. Matthiessen. 1999. *Construing Experience through Meaning: A Language-based Approach to Cognition*. London: Cassell (Open Linguistics Series).

Hao, J. 2015. "Construing Biology: An Ideational Perspective." Unpublished PhD thesis, University of Sydney.

Hao, J. 2018. "Reconsidering "Cause inside the Clause" in Scientific Discourse – From a Discourse Semantic Perspective in Systemic Functional Linguistics." *Text & Talk* 38 (5): 525–550. doi:10.1515/text-2018-0013.

Hao, J. forthcoming-a. *Analysing Scientific Discourse from A Systemic Functional Linguistic Perspective: A Framework for Exploring Knowledge Building in Biology*. London: Routledge.

Hao, J. forthcoming-b. "Nominalisations in Scientific English: A Tristratal Perspective." *Functions of Language* xx (x): xx–xx.

Hasan, R. 1987. "The Grammarian's Dream: Lexis as Most Delicate Grammar." In *New Developments in Systemic Linguistics Vol. 1: Theory and Description*, edited by M. A. K. Halliday and R. P. Fawcett, 184–211. London: Pinter.

Lakoff, G., and M. Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.

Mandela, N. 1995. *Long Walk to Freedom: The Autobiography of Nelson Mandela*. London: Abacus.

Martin, J. R. 1992. *English Text: System and Structure*. Amsterdam: Benjamins.

Martin, J. R. 1995. "Interpersonal Meaning, Persuasion and Public Discourse: Packing Semiotic Punch." *Australian Journal of Linguistics* 15: 33–67. doi:10.1080/07268609508599515.

Martin, J. R. 1999. "Grace: The Logogenesis of Freedom." *Discourse Studies* 1 (1): 31–58. doi:10.1177/1461445699001001003.

Martin, J. R. 2008. "Incongruent and Proud: De/vilifying 'Nominalisation'." *Discourse & Society* 19 (6): 801–810. doi:10.1177/0957926508095895.

Martin, J. R. 2010. "Semantic Variation: Modelling System, Text and Affiliation in Social Semiosis." In *New Discourse on Language: Functional Perspectives on Multimodality, Identity and Affiliation*, edited by M. Bednarek and J. R. Martin, 1–34. London: Continuum.

Martin, J. R. 2014. "Evolving Systemic Functional Linguistics: Beyond the Clause." *Functional Linguistics* 1: 3. doi:10.1186/2196-419X-1-3.

Martin, J. R. 2018. "Discourse Semantics." In *The Cambridge Handbook of Systemic Functional Linguistics*, edited by G. Thompson, W. Boucher, L. Fontaine, and D. Schönthal, 358–381. Cambridge: Cambridge University Press.

Martin, J. R., and D. Rose. 2003. *Working with Discourse: Meaning beyond the Clause*. 2nd Revised ed. London: Continuum. [2nd revised edition 2007].

Martin, J. R., and P. R. R. White. 2005. *The Language of Evaluation: Appraisal in English*. London: Palgrave.

Mu, X. 2015. *Attitudinal Meanings of Metaphors: A Systemic Study Based on English Poetry*. Chengdu: Sichuan University Press.

Nesbo, J. 2010. *The Snowman*. Translated by Don Bartlett. London: Vintage.

Nuttal, T. 1998. *From Apartheid to Democracy: South Africa, 1948–*. Pietermaritzburg: Shuter & Shooter.

Richards, I. A. 1936. *The Philosophy of Rhetoric*. Oxford: Oxford University Press.

Rose, D., and J. R. Martin. 2012. *Learning to Write, Reading to Learn: Genre, Knowledge and Pedagogy in the Sydney School*. London: Equinox.

Simon-Vandenbergen, A.-M. 2003. "Lexical Metaphor and Interpersonal Meaning." In *Grammatical Metaphor: Views from Systemic Functional Linguistics*, edited by A.-M. Simon-Vandenbergen, M. Taverniers, and L. Ravelli, 223–255. Amsterdam: Benjamins.

Taverniers, M. 2003. "Grammatical Metaphor in SFL: A Historiography of the Introduction and Initial Study of the Concept." In *Grammatical Metaphor: Views from Systemic Functional Linguistics*, edited by A.-M. Simon-Vandenbergen, M. Taverniers, and L. Ravelli, 5–33. Amsterdam: Benjamins. (Current Issues in Linguistic Theory, 236).

Taverniers, M. 2006. "Grammatical Metaphor and Lexical Metaphor: Different Perspectives on Semantic Variation." *Neophilologus* 90 (2): 321–332. doi:10.1007/s11061-005-0531-y.

Taverniers, M. 2018. "Grammatical Metaphor." In *The Routledge Handbook of Systemic Functional Linguistics*, edited by T. Bartlett and G. O'Grady, 354–371. London: Routledge.