Semogenesis under Scrutiny: Grammatical Metaphor in Science and Modern Prose Fiction

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Abstract
Scientific language, along with media and political discourse, has received adequate and ample attention in research on Grammatical Metaphor (GM) as it is a chief driving force in the discourse of those genres; Modern Prose Fiction (MPF) however has seen spotty and sketchy research at best. This study, thus, aims to bring out how GM is deployed in (MPF), as opposed to such a deployment in the language of science. Drawing mostly upon the conceptualization of GM by Thompson (2004) and Halliday & Matthiessen (1999, 2004), the study shifts the spotlight onto Harry Potter series, which is most representative of MPF discoursally and generically. The works placed under analysis for scientific discourse, selected based on clear and clarified criteria, are equally representative. This study is in a qualitative exploratory mould; it receives, in that spirit, three phases of compensatory sweeping analysis. The findings uncover six categories of GM in MPF and point to the category of Prepositional and Generic GM as the mainstays, underpinning all GM in the genre. The heart of the differential deployment of GM in MPF is found to lie in Semogenesis, the semiotic powerhouse of evolutionary meaning-making in language. The findings promise to broaden the understanding of GM and encourage undertaking analysis of GM in other prose genres, especially under-researched ones.

Key Words: Grammatical Metaphor (GM), Semiotic, Semogenesis, Scientific Discourse, Modern Prose Fiction (MPF), Prepositional GM (PGM), Generic GM

Introduction

Scientific language has been in dominant focus within the discussions of GM. In the extensive research on GM in science, it is a consensus that scientific discourse deploys 'Grammatical Metaphor' as extensively as it does owing to the fact that it is its fundamental textual machinery, due to its discourse and generic purpose and sociolinguistic underpinnings (e.g. Halliday, 2005; Halliday & Matthiessen, 2004; Thompson, 2004; Banks, 2003; Melrose, 2003; O'Halloran, 2003, etc). In fact, the particular sociolinguistic, semantic and discoursal character of scientific text entails issues of sociolinguistic demarcation of expert/non-expert boundaries in the flurried world of science and knowledge development. In this vein, Melrose (2003) believes that GM in science happens to be a powerful device to condense information about the context of situation and context of culture. It can be used as a way of showing that you have mastered a discipline or that the reader and writer belong to the same social group.

Meanwhile, there has been a good deal of research on child language as regards the use and development of GM. The importance of GM is also recognized as a progressive unfolding device in introducing and bringing the native and nonnative reader alike into the schemata and content area of scientific discourse, especially the child science learner in his trajectory (Painter, 2005; Halliday, 2005; Derewinka, 2003; Painter, 1999; Halliday, 1999, etc).

A driving force behind this work has been the recognition on the writers' part that the concept of *'Grammatical Metaphor'* in MPF has received inadequate treatment and its potentials for and contributions to a better understanding of such discourse have not been dealt with as deserved and required. Studies like Simon-Vandenbergen (2003) do touch upon some aspects of the sort of GM which occurs in MPF, but these do not set out to bring out and lay out the whole gamut of such GM; Simon-Vandenbergen (2003), for instance, studies what is, in effect, Generic GM of the second type in this study, and calls it 'Lexicogrammatical Metaphor'. However, in this regard, she argues

along interpersonal lines and her corpus is different from the corpus used in the present study.

Other projects have mostly dealt with GM in scientific discourse, subsuming discourses like history, economics, philosophy, and media under science. Most studies do touch upon what are categorized as Generic GMs in this study and provided us with a good point of departure. Susinskiene (2004), for instance, looks at our Generic type; however, she goes on and mentions our Existential type as well, but not as a type that would appear with higher frequency in MPF. She divides GM into two types irrespective of any specific genre: inherent (obligatory), and non-inherent (non-spatial and spatial), and argues that non-inherent semantic functions are more common in scientific discourse. As her main objective, she concentrates on 'nominalized non-gerundive material processes', that is, the most fundamental and unmarked type of GM identified by Halliday (1985). Her study does not enter into the evolutionary aspect of metaphorical processes in the grammar from the Systemic Functional Grammar (SFG) perspective, i.e., semogenesis. Again, she proclaims her corpus to be 'drawn from different genres of scientific discourse'.

As mentioned before, most of the studies done on GM, focus on scientific and political discourse. Moreover, they are based on either syntactic analysis or systemic-functional one; there is no attempt to introduce requisite simultaneous and hybrid analysis of both syntactic and systemic-functional views into the corpus, along with aspects of semogenesis that constitute an important consideration in modern SFG. This study is a move in that direction. Yet most research on GM does recognize that important as GM is, GM has not been given a comprehensive treatment.

Another compelling motivation to do this study stemmed from teaching an advanced general English class composed of a select and handpicked group of really advanced readers of English who were students of English language and literature in the University of Tabriz.

The strategy widely used in that class lined itself up nicely and subtly with GM; in that, almost all such cases calling for the sort of involved and contextualized paraphrase-making we aimed at occurred when GM of one of the categories of MPF was employed. The paraphrase-making scheme is known altogether to be a good EFL teaching strategy (e.g. Widdowson, 2003; Dudley-Evans & St John, 1998; Ellis, 1994; McCarthy & Carter, 1994, etc) and finds its equivalent in SFL as 'agnation'. Heyvaert (2003) lends support to this line of thinking, coming so far as to look upon 'agnation' as 'the relationship of a nominalization and its non-nominal equivalent'.

It is worthy to mention that to have the study going properly and rewardingly, the researchers also began early on to stay in touch with some foreign scholars and universities, drawing on their experience, feedback, and collaboration, encouraged along by their positive comments to the effect that this is a fruitful yet untapped area of study and had best be followed up by similar ones. Chief among these SFL researchers are Geoff Thompson and Miriam Taverniers. The researchers ended up on this path especially following their lengthy and serious effort showing that there was no explicit research on GM in MPF. All the same, our hopes are that different studies on GM will complement each other and move forward in tandem.

There are two main hypotheses about the use of GM in the language of science. The first well-researched hypothesis is that scientific discourse, as mentioned earlier, is heralded by a fair range of GM use (e.g. Halliday, 2005; Halliday & Matthiessen, 2004; Thompson, 2004; Banks, 2003: Melrose, 2003). This occurs on account of the particular sociolinguistic, semantic and discoursal character of scientific text which involves issues of sociolinguistic separation of expert/non-expert boundaries in the flurried world of science and knowledge development. By default then, we would find heavier deployment of GM when there is a perception on the scientific writer's part that the audience are dominantly composed of adult and expert readers rather than laymen.

The second hypothesis is that the language of science evolves and unfolds in all three aspects of semohistory to become a form of ritual, a way of claiming status and turning science into the prerogative of an elite, a yardstick for conferring the badge of 'insiders' of a speech community or 'outsiders', laying down a stringent 'insider/outsider' distinction, adopting Widdowson's terms (1996, 2003). While scientific discourse is marked and demarcated by these distinguishing features, the language of MPF, in contrast, is marked by an indifference to or an absence of these 'insider/outsider' attributes, deploying GM only for purposes of contributing to the phylogenetic evolution of lexical phrases and chunks in the language, indifferent to the operation of the other two semogenetic forces.

In this study, two hypotheses are put forth about the GM in MPF. According to the first hypothesis, GM is mostly indicative and reflective of the general phylogenetic bent in MPF genre towards chunks and formulaic speech and its tendency to constantly add elements of this character creatively to the lexicon. More specifically, the introduction and use of expressions and lexicogrammatical choices containing GM in MPF is fueled by the inherent phylogenetic need and tendency of the language to add to the stock of 'chunks' ('lexical phrases' or 'prefabricated sequences') in the evolution and history of the lexicon. The heart of the argument advanced here is this dual character of MPF: such text manifests formulaic expressions virtually in the guise of GM; that is, whenever there is deployment of Grammatical Metaphor, it will draw upon either formulaic speech or at least creative speech.

The second and more important hypothesis is that this genre, i.e. MPF, has Prepositional GM as the pivotal mainstay. Prepositional GM is so pervasive that it governs other types of GM in this genre, forcing them to merge together. That is, not only does it give rise to a fundamental structure for adverbials in MPF in its own right, but it also merges and creeps into other types of GM, particularly with Double-barreled GM and S/T Presentation when they are Prepositional GM at the same time. Similarly, it turns up very often in sentences containing

other types of GM. Overall, it comes to act as an underlying force of GM in MPF.

Theoretical Framework

In this study, in large part, the conceptualizations of GM by Thompson (2004) and Halliday & Metthiessen (1999) are drawn upon. GM is an insightful and useful concept put forward within Systemic Functional Linguistics (Halliday & Matthiessen, 2004). For a quick recap, it helps to pose this question: How do systemic functional linguists differ from linguists of other schools? In answer to this question, Martin (2001) holds that, first of all, Systemic functional linguists place considerable emphasis on the idea of *choice.* They view language as a *large network of interrelated items,* from which speakers unconsciously select when speaking. Their focus is on *paradigmatic relations* – on what you say in relation to what you could have said. But, linguists of other schools have much stronger *syntagmatic* perspective – on what you say in relation to what you said before and what you are going to say next. Systemicists formalize choices by means of systems (hence the name of the theory). The way in which the systems bundle together gives systemicists an insight into how language is related to the contexts in which it is used; this takes us to the second distinctive feature of systemic linguistics.

Systemicists have taken a great interest in the relation between language and context. They have always argued, following Malinowski (1923), that you cannot understand the meaning of what someone says or writes unless you know something about the context in which it is embedded. Or, looking at this the other way round, if you understand a text, you can also figure out a great deal about the context in which it occurred.

Transitivity is the grammar of processes: actions and events, mental processes and relations. It is that part of grammar which constitutes a theory of 'goings-on'. The ideational semantic resources construe our experience of the world that is around us and inside us (e.g. Halliday & Matthiessen, 1999, 2004; Martin et al, 1997). One essential task of such

a semantics is that of modeling a particular phenomenon of the meaning potential that is known as *Grammatical Metaphor***.** This is the phenomenon whereby a set of agnate (related) forms is present in the language having different mappings between the semantic and the grammatical categories (Thompson, 2004).

A central thrust of SFG thinking is that the phenomenon of GM is fundamental to adult uses of language. Halliday and Matthiessen (1999) believe that one way to demonstrate the validity and power of the theory is by using it to handle GM, and to show how this pervasive aspect of the lexicogrammar expands the meaning potential. GM comes about when actions, which would usually be described by a sentence such as *we study economics,* are presented in a noun phrase such as *the study of economics.* At its most simple, activities or processes, which would naturally be expressed by verbs, become *things.*

The term *congruent* can be informally glossed as "*closer to the state of affairs in the external world*" along with "*felt to be more natural and basic*" (Thompson, 2004), not to say that 'the congruent mode' has 'semogenetic priority' (Halliday & Matthiessen, 1999). In simple terms, nouns *congruently* encode things, and verbs *congruently* encode happenings. We can therefore give a provisional definition of GM as: the expression of a meaning through a lexicogrammatical form that originally evolved to express a different kind of meaning. The expression of the meaning is metaphorical in relation to a different way of expressing the 'same' meaning, which would be more congruent (Thompson, 2004). Nominalization is the single most powerful resource for creating GM (Knowles & Moon, 2006; Halliday, 2005; Thompson, 2004; Halliday & Matthiessen, 2004; Dudley-Evans & St John, 1998, among others). By this device, processes (congruently worded as verbs) and properties (congruently worded as adjectives) are worded metaphorically as nouns; instead of functioning as Process or Attribute in the clause, they function as Thing in the nominal group. One major advantage of presenting other elements as entities is that things can be described, classified and qualified in ways not available to other

elements. Susinskiene (2004) states that the pragmatic usefulness of the process of metaphorization can be accounted for by the fact that it allows us to make more participants. The use of such participants has the effect of condensing information within the sentence; it contributes to language economy and often serves as a means of cohesion. The transference of functions involved in GM brings about a textual reorganization as well. GM constitutes a powerful resource in the construction of a message and its influence can be perceived in its textual organization. It is one of the 'more sophisticated operations involved in a writer's exploitation of the meaning potential of a language (Halliday & Matthiessen, 1999).

Semogenesis, the creation of meaning, as a 'guiding principle' in the presentation of a systemic-functional theory of language, means that language has within itself the resources by which people can create new meanings. As the text unfolds, patterns emerge some of which acquire added value through 'resonating with' other patterns in the text or in the context of situation. The text itself is an instance; the resonance is possible because behind it lies the potential which informs every choice made by the speaker or writer, and in terms of which these choices are interpreted by listeners and readers. Halliday & Matthiessen (1999) provide the perception of Semogenesis we draw upon. They believe that since semogenic processes take place through time, one needs to identify the time frames, of which there are three. These are the three major processes of semohistory, through which meanings are continually created, transmitted, recreated, extended and changed (Halliday & Matthiessen, 1999,p.17):

> a) First, there is the ***evolution*** of human language (and of particular languages as manifestations of this). Known histories represent a small fraction of the total time scale of this evolution, perhaps 0.1 %; they become relevant only where particular aspects of this evolutionary change have taken place very recently, e.g.

> the evolution of scientific discourse. This is the **phylogenetic** time frame.
> b) Secondly, there is the ***development*** of the individual speaker. This is the **ontogenetic** time frame.
> c) Thirdly, there is the ***unfolding*** of the act of meaning itself: the instantial construction of meaning in the form of a text. This is a stochastic process in which the potential for creating meaning is continually modified in the light of what has gone before; certain options are restricted or disfavored, while others are emprobabled or opened up. This is the **logogenetic** time frame.

Last but not least, one must note that GM is a rather recent discoursal phenomenon of modern Systemic Functional Linguistics; such outlook, in Halliay and Matthiessen's (1999) words, starts not from the overt categories and markers of the grammar, like case and case inflections, but from the often covert, cryptogrammatical relations that are less immediately accessible to conscious reflection yet constitute the real foundation on which the grammar construes the world of our experience.

Method

The Corpus

An appropriate and good selection in this study involved finding a common justifiable trait across both instances of the two genres compared. This would iron out all potential doubts as to skewed comparison and, consequently, an unsatisfactory and misguided analysis and ensuing conclusion. We pinpointed this trait to be the relative textual and generic status attaching to both works under analysis, along with the obvious requisite consideration that both of them be modern. A truly accredited work of MPF is J.K. Rowling's 'Harry Potter and the Prisoner of Azkaban'. In fine, our criterion involved the fact that J.K. Rowling, on the one hand has reaped many coveted awards, one of which is certainly the Pulitzer Prize for Literature. Matched to this greatness in scientific text on the other hand is 'Computational

Neuroscience of Vision' by Edmund. T. Rolls and Gustavo Deco, published in 2002 by the Oxford University Press. The authors enjoy renown in their field and their work is a seminal one.

Furthermore, these two happen to span the same volume and number of words, i.e., 400 pages. The similarity of size was considered to be also contributing to the analysis and comparison.

Procedure

Corpus-based discourse analysis with the help of computer now being possible, SFL scholars welcome the notion of conducting computerized corpus-based systemic analyses. Yet, broadly speaking, it is not able to handle full-fledged systemic functional analysis of clauses, and semantic analysis is also beyond its reach (Halliday & Matthiessen, 2004). Thus, there is a trade-off between volume and richness of analysis. In fact, low-level analysis can be automated to handle large volumes of text, but high-level analysis dealing with more delicate (i.e. of more detail, depth, and complexity) systems has to be carried out by hand for small samples of text. So to round it off, more delicacy involves and echoes less volume but richer analysis. This approach constituted the mainstay of the current work so that it could come up with sound and constructive insights.

The language of science is not delved into deeply in this study as it has received a lot of attention and its deployment of Grammatical Metaphor is rather an established, taken-for-granted and already researched and elucidated notion. It just acted as a yardstick, a criterion for how GM has been formed and used by default in adult language, so much so that it is regarded by SFG researchers as a pivotal force. The significance of GM in MPF and the interesting differences therein, then, stand out all the more favorably.

We did not locate all occurrences of GM in the scientific text and the frequency, since – building upon previous research and our own analysis – the language of science mostly deploys a type of GM whose macro-

semantic, discoursal and generic motivations are understood. The instances brought out in this study are only an indication of the semogenic properties of this genre. Our focus is to tabulate as sharply as possible all instances of GM in the MPF text, and pinpoint the frequency. We did this in stages. First, we located all nominalizations. Then, we specified which of these could be considered an a priori candidate for a GM. Only then could we tease out qualified candidates of GM, using Knowles and Moon's (2006) characterization in terms of what can measure up to a full-fledged GM versus what has got integrated into the language so deeply that it is no longer a case of GM. It's beyond the scope here to bring out these points in full. We cross-checked the analysis three times; this involved hard work, concerted effort, and a long time, but we had to go that extra mile to lend the necessary power to our findings, especially as our objective was to pinpoint the frequency of GM in MPF as precisely as possible, and get a firm handle on the classifications emerging.

Since this is a qualitative project, the hypotheses that emerge after the analysis may add to or conflict the initial hypotheses, or new ones may emerge altogether. The full range of hypotheses in the introduction is touched upon. What emerged upon completion of analysis interested both the researchers and the overseas colleagues quite a bit.

Analysis and Discussion

Grammatical Metaphor in Scientific Discourse

Scientific discourse is marked by frequent deployment of GM. This occurs due to the particular sociolinguistic, semantic and discoursal character of scientific text which leads to issues of sociolinguistic demarcation of expert/non-expert boundaries in the flurried world of science and knowledge development. By default then, we would find heavier deployment of GM when there is a perception on the scientific writer's part that the audience are dominantly composed of adult and expert readers rather than laymen or the semi-educated youth. Consider an example from the text under investigation. It includes five GM

devices in a sentence of 19 words in total but with rather high lexical density, i.e. 9 lexical words. The GMs are underlined:

- *This failure to notice an otherwise conspicuous change because of the diversion of attention is known as change blindness.*

If we attempt to postulate a congruent version, we will come up with a series of sentences which correspond closely to the stages of linguistic, semiotic and cognitive development put forth by, e.g. Painter (2005, 1999). These will resemble very closely how one would go about introducing a lay or child learner, progressively and systematically, into the content area and schemata involved. Consider hypothetical stages of unpacking the metaphorical:

- *The viewer fails to notice the image changing > but the image is in all other respects perfectly conspicuous > this is because the viewer is not attending and he is diverted > this is known as ……..*

In the last part, no sooner do we intend to introduce *is known as* than we make a very marked and conspicuous semiotic move to draw sociolinguistically colored boundaries in terms of communities of insider/outsider forms or expert/non-expert ones. Immediately following this sentence comes this one, which has every useful bearing on our point. The GMs are underlined:

- *It's just one of several perceptual phenomena showing inattentional blindness: an impairment in perceiving the appearance of, or changes to, unattended objects.*

We can now draw further examples from the same text and the same discoursal event as the text unfolds, bearing in mind the specifications of the potential readers at every step. Coulthard (1994) makes the similar and relevant point that every writer would necessarily have the characteristics of the Imagined Reader in mind, and THAT is indispensable. Emmot's (1994) notion of 'primed frames' is relevant here, similar to Coulthard's. In this connection, she argues that some form of mental representation of the text so far, the state of the text, must be building up in the mind of a competent reader, and must be

available for interpreting the text at any particular point. By the same token, Lamb (2002) maintains that there is no such thing as the meaning of a text apart from an interpreter, and meaning is not conveyed by a text, as the usual metaphor would have us believe. Rather, elements of the text activate meanings in the minds of interpreters. More examples:

- *The stripes' attributes – thickness, length, orientation and the space separating adjacent bars – varied randomly.*

Most GM in science is driven by intrinsic sociolinguistic and discoursal characteristics of the genre, triggering the unmarked use of *thickness* instead of *how thick they are*, *length* instead of *how long they are, orientation* instead of *where they face*. The apparently marked alternative congruent versions, are mind you, what would have been used if one were at an earlier stage of literacy for the child or non-native leaner, or somehow an earlier stage of semogenic operations (at all three levels of semohistory). To a predictably large extent, as mentioned above, all three semogenic operations of semohistory are involved in science in tandem. More examples:

a) Metaphorical: *Inattentional blindness implies that the clarity and completeness of the appearance of objects within our visual environment are, in fact, illusory.*
Congruent: *Being inattentively blind implies that it is illusory how clear and how complete, objects around us appear to our eyes.*

b) Metaphorical: *Odd as it may sound, we seem to confuse visual reality with visual imagination.*
Congruent: *Odd as it may sound, we seem to confuse what is real to our eyes with what our eyes imagine to be real.*

In example (b), which comes right at the wake of sentence (a) in text, we find that not only a lot of expert information related to this particular text (logogenesis) but also a lot of expert information taken for granted in the reader (ontogenesis), is packed into the actual metaphorically instantiated sentence. So much so that, curiously enough, we had to consult and probe the expertise of an informed neuroscience scholar at length before we could come out with the congruent version; that is, the

science writer could not have ventured to take for granted those operations of semohistory in our case. As we travel down this route, we find that similar uses of GM are legion in science. GM is the dominant strongest machinery propelling scientific text forward and building its ecologically requisite scaffolding along discoursal, sociolinguistic and semogenetic dimensions. The point here is to shift the spotlight on MPF which has not received the taken-for-granted default attention bestowed upon scientific discourse.

This study argues that the language of science evolves in all three aspects of semohistory to become a way of claiming status and turning science into the prerogative of an elite, form of ritual, a yardstick for conferring the badge of 'insiders' of a speech community or 'outsiders', laying down a 'insider/outsider' distinction, adopting Widdowson's terms (Widdowson, 1996, 2003). Learners who complain that their science texts are unnecessarily difficult to read may sometimes be entirely justified. And we are all familiar with those who, not being scientists, have borrowed the trappings of scientific language and are using it purely as a language of prestige and power. These uses serve to create distance between writer and reader, to depersonalize the discourse and give it a spurious air of being rational and objective (Halliday, 2003; Fairclough, 2000). In this spirit, we reckon that there might be very interesting and insightful avenues of research in attempting to understand further the place of GM in an EFL curriculum. As indicated, this is a position on which there is a rather broad consensus (Halliday, 2005; Derewinka, 2003; Taverniers, 2003, etc).

While scientific discourse is marked by these distinguishing features, the language of MPF, in contrast, is marked by an indifference to or an absence of these 'insider/outsider' attributes, deploying GM only for purposes of contributing to the phylogenetic evolution of lexical phrases and chunks in the language, indifferent to the operation of the other two semogenetic forces. In other words, MPF seems to follow this governing principle more profoundly than science (Sinclair, 2004, p.12):

> Text is often described as a long string of sentences, and this encourages the practice of drawing links from one bit of the text to another. I would like to suggest, as an alternative, that the most important thing is what is happening in the current sentence. The meaning of any word is obtained from the state of the discourse and not from where it came from. The reader should find a value for it in the previous text unless the text is problematic at that point. The state of the discourse is identified with the sentence which is currently being processed. The text is the sentence that is in front of us when an act of reading is in progress. Each sentence then is a new beginning to the text. Each sentence organizes language and the world for that particular location in the text, not dependent on anything else.

Grammatical Metaphor in Modern Prose Fiction (MPF)

The GM dominating MPF is mostly indicative and reflective of the general phylogenetic bent in this genre towards chunks and formulaic speech, and its tendency to constantly add elements of this character creatively to the lexicon. Consider this example, deploying GM in context:

- *Harry broke into a run and ahead, he heard hooves gathering speed.*

Now the point here is, given a semogenic perspective shadowed and influenced by scientific discourse, whenever the author intends to mean this sentence – if, supposedly, she were at an earlier stage of ontogenesis, phylogenesis, and logogenesis – she would have otherwise come up with a semantics of the clause and then worded her lexicogrammar that would have been along these lines:

- *Harry started running instantly and ahead, he heard hooves speeding up.*

That is, instead of *Harry broke into a run,* we'd have had *Harry started running instantly,* not to say that instead of *he heard hooves*

gathering speed, she'd have used *he heard hooves speeding up*; this is so if one or more of these conditions hold: 1) she had been speaking to a child or simplifying her language addressed to a non-native learner or non-expert reader (ontogenesis), 2) she had been writing in an earlier stage of the history of the evolution and growth of the language as a whole (phylogenesis) and 3) she had been writing at the initial stage of the development of the unfolding discourse and the text itself (logogenesis). In other words, the writer seems to have a certain eventual anchor and peg in mind, towards which she's moving purposefully and consistently, on which to hang the whole text, such that – in our particular case – the beginning stages of semohistory are more congruent and the later ones inclined to the metaphorical. This seems to marry up to an underlying governing principle leading discourse analysts like Sinclair (2004), Emmot (1994) and Lamb (2002) have in mind.

However, what we are arguing here is a totally different scheme of things for MPF. Unlike scientific discourse where the three layers of semohistory and the three operations of semogenesis are at work simultaneously, this is not the case with MPF. It is mostly phylogenesis operating for MPF rather than ontogenesis or logogenesis, but in a quite different sense from that of science. Thus, it is seen that patterns of GM do appear in the initial stages of the discourse even when directed at an uninitiated illiterate or half-literate child, and in any given text unfolding in real-life context from its outset. Therefore, the operation of ontogenesis and logogenesis, respectively, is ruled out.

To recapitulate, the deployment of GM in MPF is not fueled by forces of logogenesis or ontogenesis, but by a particular mark of phylogenesis. More specifically, the primary hypothesis suggested here is that the introduction and use of expressions and lexicogrammatical choices containing GM in MPF is fueled by the inherent phylogenetic need and tendency of the language to add to the stock of 'chunks' ('lexical phrases' or 'prefabricated sequences') in the evolution and history of the lexicon. For a good account of prefabricated elements,

chunks or lexical phrases, see Ellis (1994) and Ellis (2003). SLA researchers note that it is not easy to make a clear distinction between 'formulaic' and 'creative' speech and suggest that we should move beyond misleading dichotomies such as prefabricated formulas versus creative constructions, since in many instances, such speech has both formulaic and creative elements. The interesting point here is this dual character of MPF: such text manifests formulaic expressions virtually in the guise of GM; that is, whenever there is deployment of Grammatical Metaphor, it will draw upon either formulaic speech or at least creative speech.

Quite often some examples merge into two categories at once. In *There was a great shout of laughter* and *There was a roar of laughter,* the GM involved is both 'EGM' and 'DBGM' (see below). In *They burst into an explosion of complaints about Snape's behavior,* the first GM is both DBGM and Generic GM, not to say that the second GM is a PGM. We will refer below to the true ubiquity of PGM in this genre, such that it emerges as the mainstay of GM in MPF. In *He and Hermione had finally forgotten their squabble in the face of Harry's disappointment*, the sentence virtually revolves around one Generic GM and one PGM. Such sentences, where the constituents are mostly GM being used to the best, are a hallmark of MPF: *Harry took a bite and, to his great surprise, felt warmth spread to the tips of his fingers and toes*. Sentences like *The train came to a stop with a jolt*, where there are multiple GMs are a salient feature of this genre. One has to remember that GM generally allows for very innovative and transcendental discourse, not otherwise available for semiosis. On easily the majority of cases, it is GM which makes the shift in the underlying macrosemantic proposition take effect; note *It took a few seconds for the absurdity of this statement to sink in*, and, *Tangled together in a many-armed hug, the team sank back to earth*, and, *He was standing watching with an air of vindictive pleasure.*

Generic GM in MPF

Here examples called Generic are provided. They are named Generic since at the reader/researcher's first encounter with the genre, they appear to be more noticeably indicative of GM for MPF and lay a better groundwork by way of its understanding. The hallmark of Generic GM is that it is either of two types: 1) it is one of the two major participant roles of the clause (the two nominals on either side of the process as subject and object); 2) or more strongly and representatively, it is one which uses chunks (formulaic speech) and creative constructions very extensively. We had to tell these two subcategories of Generic GM apart because we found that they are different in their implications for textuality and GM deployment. *A reckless rage had come over Harry, I have very little patience with it, A very tense silence followed this pronouncement* are examples of the first type and *They burst into applause, He kept shooting suspicious looks at him, We are playing host to some of them* are examples of the second type. For reasons of space, we lump them together in some examples below:

1. *He gave a superior sort of chuckle at the blank look on Harry's face.*
2. *Harry's stomach gave a funny jolt.*
3. *Errol opened one bleary eye, gave a feeble hoot of thanks, and began to gulp some water.*
4. *He shot a nasty look sideways at Harry.*
5. *She took a huge swig of brandy and wiped her chin on her sleeve.*
6. *She took a large gulp of tea.*
7. *She took huge pleasure in buying Dudley expensive presents.*
8. *The memory of this incident still brought tears of laughter to Dudley's eyes.*
9. *Dudley smirked and withdrew his gaze from the television.*
10. *She kept throwing out dark hints about what made Harry such an unsatisfactory person.*
11. *Harry would face expulsion from Hogwarts.*
12. *Harry had difficulty hiding his glee as he handed the note to Ron to read.*

13. *Each new owner said there was a nasty feeling about the place, which, in the absence of inhabitants, started to fall into disrepair.*
14. *Harry's new resolution not to interfere in anything that didn't concern him was put to an unexpected test.*
15. *The whole hall burst into applause as the hat finished its song.*

The inherent phylogenetic bent towards GMs containing chunks is manifested in the sentences 13 (*fall into disrepair*), 14 and 15 (in 14, the first GM is of the first type but the second is of the second). A congruent unpacked version for 14 will be, as always, both longer and at a higher rank, and, might look something like *what he had resolved to do was tested unexpectedly*. From a systemic perspective, when a writer or speaker goes for a choice deploying GM somewhere in the system, the metaphorical must have been an unrivaled best choice; or the writer wouldn't have demonstrated such a marked linguistic tendency as it was. The underlying principle is the same typical one for GM: there is a re-ordering and overhaul of lexicogrammatical functions. *test* is used as if it were a nominal while it should be a process, for it carries such a lexicogrammatical and transitivity function at the higher stratum of semantics.

The point is to take stock of the absence of the type of ontogenesis and logogenesis which is at work in science. Semohistory boils down to phylogenesis; an inherent phylogenetic tendency towards teasing processes out from their default unmarked and congruent functions as processes and inserting them into innovative and colorful combinations of nominal collocations deploying GM and lexical phrases simultaneously. That's how *It was difficult for Harry to hide how very happy he was* is put aside in favor of *Harry had difficulty hiding his glee* (Example 12). In 11, the process of *expelling* and the attendant clause with participant roles is avoided in favor of *Harry would face expulsion from Hogwarts* (congruent: *they would expel Harry from Hogwarts*: the first type of Generic GM*)*. In 15, going for virtually any other systemic choice would easily shatter the intended semantics; the original process

involved is *applauding*, and a congruent version might be *The whole hall began to applaud abruptly and loudly.* But it is not difficult at all to see that this is remote from the cognitive and textual effect intended by the writer.

Along with all that, GM in MPF lends itself to interesting verbal collocations of the second Generic type; examples with *give*, *take, shoot*, etc. are in abundance (examples 1-7). Our analysis of this particular work brought out 52 instances of collocations with *give* as peg verb, 31 with *halt* as the GM, 11 with *shoot* as verb, 9 with *let out,* 13 with *take*, etc. Evidently, the *give* type and the like could constitute a major category of GM in their own right, given their high frequency of occurrence in MPF. See Table 1 below.

Table 1
Some Interesting Generic GMs, of the second type

Instances of GM using *give*	**Instances of *halt* as GM**	**Instances of GM with *shoot***	**Instances of GM with *let out***	**Instances of GM with *take***
52 (*give a hug, a shudder, a turn, a lurch, a short bow, a false sigh, a warning look, etc)*	**31** (*come to a halt, skid to a halt, screech to a halt, sway to a halt, canter to a halt, etc)*	**12** (*he kept shooting suspicious looks at him, he shot her a look of resentment)*	**14** (*let out a shriek, a scream, a muffled cry, etc)*	**16** (*he took no notice of Harry, she took offense (she was offended), etc*)

GM in Thought and Speech Presentation

There is an interesting type of GM deployed in MPF which turns out to be typical of 'modern' prose-fiction genres rather than 19th and 18th century ones. As the following examples illuminate, the form of this GM deployment seems to be characterized by direct speech and thought presentation being interspersed with these Grammatical Metaphors in MPF text. The rule of thumb seems to be the same: contributing to the general evolutionary trend of the language to add lexical phrases and chunks to the stock of the lexicon.

16. *'What was there to be gained by fighting the most evil wizard who has ever existed?' said Black, with a terrible fury in his face.*
17. *'Get out of it, Potter!' Malfoy yelled in frustration, as he tried to turn.*
18. *'That's your lookout, isn't it?' said Filch, his voice cracking with glee.*
19. *He spoke in barely more than a whisper.*
20. *The second man spoke once more, in a whisper that was almost a hiss.*
21. *'I need you to sign the permission form,' said Harry in a rush.*
22. *In fact, the report continued, in a tone of unmistakable bewilderment, the Riddles all appeared to be in perfect health – apart from the fact that they were all dead.*
23. *'I am a faithful servant,' said Wormtail, the merest trace of sullenness in his voice.*
24. *'He – didn't work,' said Uncle Vernon, with half a glance at Harry. 'Unemployed.'*
25. *'Horrible, eh? And you know what Black did then?' Stan continued in a dramatic whisper.*
26. *'My Lord, I must speak!' said Wormtail, panic in his voice now.*
27. *'You aren't going to see you nephew till next summer,' he said to Uncle Vernon in mild indignation. 'Surely you're going to say goodbye?'*
28. *At half past, he heard Uncle Vernon and Aunt Petunia conversing in terse mutters in the living room.*
29. *'Done it,' Fred said in a triumphant whisper to Harry, Ron and Hermione. 'Just taken it.'*
30. *'One drop each,' Said George, rubbing his hands together in glee. 'We only need to be a few months older.'*

As is in evidence, most of the time, these are not much different in essence from either Prepositional GM or Generic GM; or at least this is so in terms of surface form and structure. What distinguishes these is the

inherent tendency in MPF to interpose and introduce GM in thought and speech presentation in the neighborhood of what Short (1996) terms Narrative Representation of Speech Acts (NRSA) and Narrative Representation of Thought Acts (NRTA). Short (1996) has a continuum of speech and thought presentation, each of which consists of five categories. It is very interesting and insightful that whenever GM is used in the proximity of indirect or direct speech/thought presentation, it is used to reflect either NRSA or NRSA; Narrative Representation of Action (NRA) is also involved every so often.

What these do is bestowal of incredible creativity and expanse of meaning-making upon the writer and audience. This re-construal of participant roles and thus condensing so much information into what is an adverbial comes as an alternative systemic choice to a hypotactic or paratactic clause complex, assuming that it should be doing the same job as the NRSA and NRTA in question. For example, in example 23, we would have to produce a systemic alternative like *and he sounded (*or *while he sounded) very slightly sullen* instead of the adverbial GM *the merest trace of sullenness in his voice*. Plainly, the clausal alternative would be far from conveying the same intended effect. Any such effect can only come about using GM and turning – in this case – an epithet *sullen* into a nominal group *sullenness*, and thus following up with a whole range of other makeovers rippling out from the GM.

Existential Clauses and Grammatical Metaphor (EGM)

Another pattern of GM that enlisted our effort yet again in a pursuit of locating the agnation was an existential pattern which, upon frequent recurrence, was found to utilize GM quite often in MPF. An agnate for 41 would read as *Everyone was completely silent*; for 33, it would be *Everyone rushed to buy the cook drinks*; for 39, *Everyone murmured as they were so interested.* Note how remote the unpacked congruent version – which points up an alternative systemic choice that could have been made – is from the actual metaphorical existential clauses. Some examples, like 37 to 40, 44 and 45 are at the same time DBGM as well. Yet again, semogenesis here boils down to a certain phylogenetic

tendency and the operation of ontogenesis and logogenesis is ruled out; such existential GMs do appear in the language addressed to children early on in their exchanges; and such GMs do also appear early on in the text, and anywhere deemed necessary and effective, without 'prospection': they are not 'prospected' by anything (Sinclair, 2004).

31. *There was a howl and a rumbling growl.*
32. *There was just one, very small improvement.*
33. *There was a rush to buy the cook drinks, and hear more details.*
34. *Each new owner said there was a nasty feeling about the place, which, in the absence of inhabitants, started to fall into disrepair.*
35. *There was a pause, and then the man called Wormtail spoke again.*
36. *There was sweat on Frank's forehead now and his hand was trembling.*
37. *There was a note of menace in his voice now.*
38. *There was a flash of green light, a rushing sound, and Frank Bryce crumpled.*
39. *There was a murmur of interest. They had never worked in Greenhouse One before.*
40. *There was a lot of muttering about cruelty to animals from the surrounding crowd.*
41. *For a few seconds, there was complete silence.*
42. *There can be no change of heart once you've become a champion.*
43. *There was a long silence.*
44. *There was a look of suppressed triumph about him.*
45. *There was an eruption of cheers from the Slytherin end.*

Double-barreled Grammatical Metaphor (DBGM)

A good number of the examples in this category are recognizable as PGM as well. This happens quite often, as with S/T Presentation (see Table 2), although with Thought/Speech Presentation, PGM is used in 63% of the cases, while in DBGM, 42% of the cases is PGM.

Nonetheless, both scenarios definitely point to PGM being a pivotal mainstay in MPF GM.

Table 2
Prepositional GM in S/T presentation and DBGM

Number of GM in Speech and Thought Presentation using Prepositional GM	**Number of Double-barreled GM using Prepositional GM**
49 (out of a total of 77 instances of S/T presentation GM; 63% of S/T GM is Prepositional GM)	43 (out of a total of 102 instances of Double- barreled GM; 42% of DBGM is Prepositional GM)

DBGM is marked by a nominal group within which there is one Head Noun governing another nominal. The Head may not involve GM in a few cases but the combination giving rise to a 'complex nominal group' is very productive for purposes of GM. This sets it off from PGM which consists of a simple nominal group with the Head as the only nominal element, modified perhaps by pre-modifiers and post-modifiers. Most of the time, the meaning rendered possible through GM doesn't easily align itself with an alternative congruent systemic choice. For instance, in example 57, the nominal group *thrill of terror* deploys a GM with two sides, two nouns that are both originally indicative of processes, a DBGM. Yet the meaning conveyed gets switched, towards the intended manifested meaning, halfway through the journey from the congruent to the metaphorical. In other words, *thrill* is used in a sense at some removes from its meaning in the lexicon, its conceptual meaning. The result is a very vivid expressive adverbial along the lines of *rush of terror* or *stab of terror.* The bottom-line is that such substantial stratal leaps in instantiation, which produce otherwise unattainable meanings and worlds in MPF, are rendered possible through the operation of GM. Note, for instance, *Faking a look of sudden concentration, Harry pulled his Firebolt round.*

Similarly, *a spasm of horror* uses the same system to arrive at an otherwise intricate meaning (example 58). Typically again, a process, or rather two processes undergo *condensing, compacting* and *codification*. For 55, we would have been left with *Harry wouldn't soon forget how*

terrified Hagrid looked as an alternative systemic choice for an unpacked congruent version. By the same token, in 59, the writer could have resorted to *when he was looking at Harry's broom, he looked as though he was fervently admiring it* as an alternative, but all the congruent versions fall far short of the textual effect brought off by the GM. Attempts at further unpacking don't produce congruent versions that would fare any better. Even the Given/New system is overhauled from the congruent to the metaphorical, and that deserves a separate dedicated work in its own right.

46. *Ron was sitting up in bed, a look of the utmost terror on his face.*
47. *But Dumbledore held up his hand to stem the flood of explanations.*
48. *He was fighting not to laugh at the look of horror on Malfoy's face.*
49. *Dudley stumbled backwards at once, a look of panic on his face.*
50. *A feeling of great gloom in his stomach, Harry pulled the door open.*
51. *She could boom out suggestions for his improvement.*
52. *They heard Hermione's shriek of surprise.*
53. *He threw it to Harry with a mixture of jealousy and spite on his face.*
54. *Make it clear that you approve the use of extreme force in this boy's case.*
55. *Harry wouldn't soon forget the look of terror on Hagrid's face.*
56. *He felt his way towards it, his nostrils full of the smell of decay.*
57. *He realized with a thrill of terror that it was a gigantic snake.*
58. *He had felt a spasm of horror which had awoken him.*
59. *He gave Harry's broom a look of fervent admiration.*
60. *He let out a yell of triumph and leapt after Fred.*

Prepositional Grammatical Metaphor (PGM)

Finally, the most frequent type of GM in MPF is PGM. If we take this to be the pivotal force, the mainstay of GM in MPF, we haven't made a

vacuous claim. If the GM does not occur as Head Noun in a nominal group designating the participant roles (subject or object) of the clause, it is a PGM acting as circumstantial elements in the clause. It is so pervasive that it governs other types of GM in this genre. In *Lupin smiled at the look of indignation on every face,* the GM is both Prepositional and Double-barreled. In sentences like *Malfoy was almost beside himself with glee at Gryffindor's defeat,* the writer makes liberal use of the device, with two consecutive PGMs. Coordination comes in as well to spark off further creativity: *With many btiter sidelong looks and some sullen muttering, the class opened their books.* It is intriguing how MPF writers break the mould and make use of GMs which grow into two or more types at once, thus attaining multiple cognitive effects and discoursal imprints at one go. Examples of this in the work of MPF analyzed in this study were legion. Even when there was a multiple instance of some other type of GM, PGM easily squeezes itself in. In the following sentence, for instance, there is multiple use of EGM, with a PGM one interposed. It is underlined differently with double lines:

- *There was a jumble of indistinct male voices, a silence and then, without warning, the unmistakable swish and thud of an axe.*

Same story with the following sentence which uses three types at once; but the Prepositional one is never too far:

- *Each new owner said there was a nasty feeling about the place, which, in the absence of inhabitants, started to fall into disrepair.*

These seem to come in very useful for writers of the genre to devise circumstantial elements and adverbials, by way of achieving stronger textual and cognitive effects. Yet again, alternative systemic choices for congruent versions fall far short of the intended textual effect; unpacking the GMs in:

- *his teeth were bared in a grin*;
- *he stopped abruptly at the sight of their faces*;
- *Harry stood there in a panic*;
- *his jaw had gone rigid with anger*

Would leave us with:

- *his teeth were bared since he was grinning;*

- *he stopped abruptly when he saw them;*
- *Harry stood there because he'd panicked a lot;*
- *he was so angry that his jaw had gone rigid.*

A fundamental consideration is that there is inherent ambiguity in the metaphoric shift; since the relaters, cohesive ties and logical elements are lost in the metaphorical version, it is not clear if the unpacking should include *his teeth were bared since he was grinning* or *he was grinning so his teeth were bared.* Furthermore, it is crucial to realize that some meanings do not lend themselves to any lexicogrammatical realization other than GM. In *he was watching with an air of vindictive pleasure*, it is difficult to arrive at any unpacked congruent alternative that would properly achieve the semantic and textual load of the metaphorical. The metaphoric shifts are also multi-tiered; from Epithets to Things, from Logical elements to Things, from Processes to Things, Relaters to Things, etc.

PGM category was the very first type of GM that presented itself in MPF and soon stood out as the hallmark marking the genre off from science in tell-tale ways, providing the very first inspiration for the project. This phenomenon, undoubtedly, merits further extensive and thorough treatment. Some further examples follow; it is unfortunate that the full array of the involved use of these GM patterns in this genre can't be brought out here. The findings and the exact frequency of the six categories of GM in this particular work of MPF are laid out below in Table 3.

Table 3
Instances of Six categories of GM in MPF at one glimpse

Generic GM: as Subject or Object	Generic GM: as Formulaic /Creative Speech	Prepositional GM	Double-barreled GM	Existential GM	Speech and Thought Presentation	Total GMs in this work of MPF
197 (17 %)	304 (27%)	368 (33%)	102 (9%)	84 (7.4%)	77 (6.6%)	1132

61. *Harry swallowed his mouthful of chocolate with great difficulty.*
62. *With a yell, he rolled back onto the pavement, just in time.*
63. *Ron, going still paler with pain, wrenched his broken leg out of Pettigrew's reach.*
64. *Crookshanks was still in the lead.*
65. *Harry could see them edging awkwardly along the tunnel in single file.*
66. *He was forced to do his homework in secret, in the dead of night.*
67. *He was the only living creature in this house who didn't flinch at the sight of him.*
68. *Harry, who had been sitting in a kind of horrified trance, had a sudden idea.*
69. *She seized Dudley in a tight one-armed hug and planted a large kiss on his cheek.*
70. *To everyone's surprise, and amidst a cloud of suspicion, Frank Bryce returned to his cottage in the grounds of the riddle House.*
71. *He merely assumed that they had gone one step further in their attempts to punish him.*
72. *To their fury, they had been unsuccessful, and now lived in terror of anyone finding out.*
73. *They got all the way through the meal without a single mention of Harry's faults.*
74. *They left the Hall quickly, wanting to unwrap the broomstick in private.*
75. *Snape had the gift of keeping a class silent without effort.*

Conclusions

The findings support the fact that all the categories of MPF GM follow the same phylogenetic bent towards chunks and formulaic/creative constructions as discussed. Also, GM in MPF has PGM as the pivotal mainstay, operating alongside Generic GM to predominate MPF GM. PGM is so pervasive that not only does it give rise to a fundamental

structure for adverbials in MPF in its own right, but it also merges and creeps into other types of GM, particularly with DBGM and S/T Presentation when they are PGM at the same time. Overall, it comes to act as an underlying force of GM.

The ubiquitous phenomenon of 'Hybrid GM' in MPF was not brought about in this study since it was way beyond the scope. But, it can be of far-reaching contributions to the understanding of GM in MPF and to accounting for the otherwise intrinsic and vast creativity and semiotic potential in the genre, opened up by such 'hybridity'. This is being explored in detail in other studies. It has huge implications for pedagogy and discourse analysis and is thereby fertile grounds for research.

Generic GM together with PGM constitute an overwhelming part of the MPF text, in the true sense of the word; so much so that we strongly recommend interested researchers to give thoughts to frameworks in the area of 'narrative/prose comprehension' that integrate and highlight an appropriate syllabus whereby the advanced EFL learner will master the texts in MPF with more facility. We believe no advanced EFL syllabus can do without such frameworks. Far more importantly though, not to mention challenging, is the stage of production for advanced learners**.** This is a neglected area. It is important to probe to what extent advanced EFL learners grasp and use these patterns and textual devices in their narrative discourse writings, and to what extent hands-on instruction takes these into account. It seems that writing narrative and prose fiction would be unthinkable without a proper and extensive mastery of these GMs on the part of the EFL learner/writer, and the whole array of macrosemantic systemic possibilities they open up, in light of a considerable part of MPF discourse basically consisting of GM.

Meanwhile, Halliday's claim that "the metaphorical mode has come to be associated with prestige discourses of power and authority" may not be applicable to MPF discourse. The logic is simple. The power struggle involved, the issues of power and authority, and the attendant

intention of creating ideological, discoursal, and scientific yardsticks to filter out 'insiders' from 'outsiders' and confer status to a select elite are poles apart across the two genres. The introduction and use of expressions and lexicogrammatical choices containing GM in MPF are fueled by the inherent phylogenetic need and tendency of the language to add to the stock of 'chunks' ('lexical phrases' or 'prefabricated sequences'), i.e. formulaic speech, in the evolution and history of the lexicon. This genre manifests formulaic expressions virtually in the guise of GM; that is, whenever there is deployment of GM, it will draw upon either formulaic speech or at least creative speech.

As to GM in T/S presentation, the MPF writers may have found that the vivid depiction and imagery they aim at in prose fiction is facilitated further by inventively coming out with these types of GM. Further research had best be undertaken to lend support to our claim that these GMs are typically evidenced in MPF rather than in the 18th and 19th century prose fiction. It is in an a priori fashion that the writers build on their rather extensive exposure to both types of prose fiction text to make a tentative claim.

Finally, we do steer clear of claiming that Ontogenesis is not at work in MPF; it is not possible to rule out any layer of semohistory in any text or genre. The point is that, ontogenetically, the gradual emergence of MPF GM is not seen to be the case, since children at their earliest ages of using language do use such GM. In other words, with regard to MPF GM, there is not developmental evolution in the ontogenetic sense of scientific discourse. This is indirectly alluded to by Painter (1999) in a passing nod although we don't know if she would agree entirely. Interested researchers are also recommended to undertake analyses of prose fiction prior to the 20th century to see if, and to what extent, there are similarities with MPF, and what other patterns of GM are at work. We are also interested to tap into each of the six categories of MPF in more depth, to try to further fathom their nature and, in that spirit, recommend other researchers to take it up if interested.

Last but not least, we should reiterate that unless a given teacher of an advanced class makes a move to clarify and exploit GM, he can't stress the occurrence and incidence of GM in native speaker talk and writing. That is, a clarification of GM within MPF and other genres proves to be essential in getting any teaching off the ground for an elite oriented group of learners, resolved and on course to getting a good grip on reading challenging texts with facility and depth, not to say lasting mastery. There is, at any rate, a strong case in favor of dwelling on GM in general, in the EFL class and curriculum (Halliday, 2005; Lemke, 2002; Melrose, 2003; Ravelli, 2003, etc). To say this is fertile grounds for research would be an understatement.

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