Pinnacles in Long-form Literary Texts: Cross-textual Evidence for the Pervasiveness of Megametaphorical Expression

Daniel C. Strack, The University of Kitakyushu

Abstract
Various scholars have recognized how literary authors use mega-metaphor (scattered metaphorical domain references) to unobtrusively shape their narratives. Corpus analysis proves useful not only in identifying the presence of such metaphorical systems in long-form texts but also in assessing their relative prominence across multiple texts. This article will examine 50 randomly selected literary narratives so as to discern the extent to which the relatively uncommon but metaphorically replete word pinnacle contributes surreptitious metaphorical meaning to the literary texts in which it is found. Results of the study confirm that the word “pinnacle,” when it is used at all, is nearly always placed so as to highlight climactic scenes or emphasize key turning points in protagonist character development. The fact that metaphorical lines of interpretation relating to certain words and phrases may be detected, not only by way of critical intuition but also through the electronic searching of multiple text corpora, demonstrates the value of cross-textual analysis strategies in certain cases. It also hints that megametaphor, rather than being a rare and idiosyncratic type of literary artifice, may be more prevalent than has been previously acknowledged.

Keywords: metaphor; megametaphor; narrative; stylistic foregrounding; corpus linguistics; pinnacle

1. Introduction
While it is certainly possible for non-obvious narrative features to be identified on a case-by-case basis through expert analysis, two problems emerge: First, although valuable in general, extensive experience with a certain variety of text may cause critics to unreflectively categorize new examples so as to make them align with previous findings. In other words, the very experience professional narratologists bring to bear heightens the risk of confirmation bias. And secondly, uncorroborated expert observations, even when seemingly correct, will necessarily carry less weight than when they are accompanied by cross-disciplinary verification. Because anecdotal evidence for or against virtually any

hypothesis can be cherry-picked given a large enough data set to draw from, literary expert opinion is in need of a way to gather evidence and garner support that goes beyond traditional coherentist analytical approaches.

This need for corroborating evidence is particularly urgent with respect to literary metaphor. The main reason is that metaphor itself is such a subjective phenomenon. Corpus linguist Deignan characterizes the problem in this way: “A metaphor by its nature suggests an equation between the metaphorical and literal meanings that does not exist” (Deignan 2005: 23). While her phrasing is no-doubt intentionally provocative, Deignan’s viewpoint is essentially correct. Whether a metaphor is detected by way of explicit simile or results from a more subtle combination of surreptitiously combined metaphorical elements, any meaning that results can only be worked out by the individual reader. Put differently, meaning per se does not exist until the relevant metaphor-producing thought processes have run their course in the mind of an individual. Moreover, because metaphors posit relationships that must be pondered at the individual level, perceived meaning necessarily differs from person to person (cf. Strack 2019: 11-14). For this reason, even simple attempts to confirm the presence of metaphor can prove problematic.

But what if measurable aspects of a specific text point to the semantic efficacy of a particular metaphor? Were such quantifiable evidence available, it might go a long way toward solidifying the study of metaphor and improving the reputation of literary criticism as a discipline. Of course, cognitive linguists, psychologists, and neuroscientists have long been investigating the claims of various theories of metaphor using a variety of empirical tools. With regard to the analysis of metaphor in specific texts, however, an increased level of interdisciplinary cooperation may be necessary. One group that can undoubtedly contribute to the analysis of literary metaphor is corpus linguists. Increasingly, cognitive stylisticians and critical discourse analysts have become aware of the types of verification that corpus linguistics can provide.¹

¹ While corpus stylistics (cf. McIntyre and Walker 2019) has certainly been at the forefront of the movement to analyze literary style, the fact that metaphor tends to be more a semantic issue related to meaning apprehension than a
Not surprisingly, as investigation has proceeded, researchers have encountered a number of problems in their attempts to measure metaphor at the discourse level. The most obvious challenge (mentioned previously) is that the presence or absence of metaphorical meaning seems to vary from individual to individual. While psychological experimentation is useful in determining the percentage of a certain cohort of readers that perceives a given statement as metaphorical (cf. Gibbs 2011), and while some approaches have even taken to defining metaphoricity using a quorum of expert opinion as the explicit standard (Steen 2015), the fact that metaphorical expressions found in literary works are often tailor-made to suit the author’s purposes for the text makes it difficult to bring generalized observations gleaned from non-literary studies to bear on literary works. To the extent that literary works are presumed to be creative and original, their very uniqueness would tend to recommend against a ‘one-size-fits-all’ approach.

To add one further layer of complication, metaphor theorists have posited the existence of a type of metaphor that influences reader understandings surreptitiously, below the typical reader’s level of awareness. Werth characterized “megametaphors” as “overarching” metaphors that express the “gist” of an extended discourse (1994: 97). For his part, Stockwell (2002: 111) sees megametaphor as the situation in which “conceptual metaphors occur repeatedly throughout a text, often at pivotal moments and often in the form of thematically significant extended metaphors”. Strack (2006: 38; cf. also Deignan 2005: 30-31) has noted how the presence of megametaphor tends to be difficult to confirm in extended discourse because it functions “by way of scattered references rather than overtly through verbally compact comparisons”.

Despite these challenges, there is one important mitigating factor that aids metaphorical analysis: metaphor’s thematic systematicity. Conceptual Metaphor Theory’s proponents have observed that when multiple metaphorical expressions appear in a text, they are often found to display thematic consistency (cf. Lakoff and Johnson 1980: 7-13). While the specific words and phrases used to elaborate a given theme may vary greatly, the theme itself must be presented in a fashion
coherent enough to guide reader expectations and interpretations of the discourse as a whole.

For example, if a text is understood to suggest human development by way of analogy with the idea of PLANT GROWTH, then one would logically expect to find PLANT DEVELOPMENT-related words such as blossom, flower, and wither among the expressions used in that text (cf. Deignan 2005: 182-183). The key steps then are to first recognize thematic consistency of expression and, thereafter, to identify the specific conceptual domain around which such expressions are unified. For example, in a certain four stanza passage referring to European royal lineages in an English translation of “Purgatory” in Dante’s Divine Comedy, the marked phrase “Not often does the sap of virtue rise to all the branches” appears (Alighieri 1995: 234). As the topic royal lineage continues to be addressed, the reader notices a consistent use of plant-related expressions such as seed’s plant, and the bearing of fruit. It quickly becomes apparent that Dante is using the extended metaphor ROYAL FAMILY LINEAGE THROUGH TREE GROWTH as a basis for the critical evaluation of historical European monarchies.

While thematic consistency in the passage mentioned above might prove difficult to corroborate as a stand-alone example, if one were to establish an appropriate baseline for comparison, thematic consistency of phrasing might prove to be empirically verifiable. Such being the case, the initial identification of words or combinations of words that reflect an underlying metaphor will not be the end of analysis; rather it will amount to a crucial first step in the process of confirming whether recognizably consistent surface features represent data points worthy of empirical investigation or not.

After it has been determined that a text does include objectively verifiable lexical features, the pattern of use may be examined so as to make sense of the type of thematic consistency or underlying figurative structure present. Important follow-up questions (cf. Deignan 2005: 124) include: What metaphors are found in the texts? What interpretations do the metaphors entail? And what ideological or stylistic values do they reflect? While the answers to these questions may differ from work to work, the value of corroborating noteworthy textual features before proceeding to the analysis phase should be clear: the successful employment of empirical methods both validates the informed critic’s
literary instincts and lends gravity to subsequent explanations of why the

text was imbued with such features in the first place.

Herein lies the practical value of corpus linguistics. As an empirical
method, it was primarily developed by linguists to corroborate otherwise
subjective theoretical hypotheses in the field of linguistics. Because
literary analysis is even more text-oriented than linguistics, the
contributions it may provide to stylisticians are potentially very great.

Aside from addressing obvious methodological shortcomings, the
corpus approach has two further distinct advantages over traditional
textual analysis methods: first, the use of corpora overcomes the
limitations of human memory and, second, corpus analysis alleviates the
problem of human subjectivity that stems from scholars’ lack of self-
awareness concerning the idiosyncrasies of their own personal language
use (Deignan 2005: 85-87).

It has been observed that the strategic repetition of textual items
often corresponds to the presence of meaningful idiosyncratic features in
literary texts. According to Emmott (2002: 95), “repetition can be used
for many different stylistic purposes”. While stressing that the detection
of consequential themes has traditionally depended on the recognition of
“adjacent repeated words” (101), she mentions that repetitions of a less
noticeable kind may also be detected computationally by way of Latent
Semantic Analysis (co-occurrence of a word with other words showing
strength of conceptual association, in corpus linguistic terms, a type of
“collocation”). As authors often achieve foregrounding effects through
the “repeated use of a particular linguistic form over a stretch of
sentences,” augmenting intuition with an automated method of detecting
repetition seems likely to result in fresh insights and increased scope for
researchers.

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2 Corpus linguists attempt to detect statistically meaningful patterns in textual
information by using special software to identify instances of collocation (“the
adjacency of certain lexical items”) and colligation (“the adjacency of certain
word classes”; Hilpert 2006: 131). The research results of corpus linguistics are
often displayed by listing “concordance lines” (strings of text that reveal
context, an aspect of textual information vitally important to metaphor
interpretation).

3 Foregrounding is a type of linguistic highlighting that draws attention to the
medium of expression so as to increase the likelihood that a certain stylistic,
semantic, or other kind of feature will be noticed and remembered.
One type of foregrounding Emmott (2002: 92) mentions is stylistic foregrounding. This occurs “when the language is sufficiently unusual to draw a reader’s attention towards the linguistic medium itself, thereby having a highlighting effect…”. The key issue is discerning the point at which the high frequency of a grammatical or lexical item becomes stylistically marked (101). Emmott gives the following example: “Repeated references using a particular linguistic form can sustain a theme over a stretch of text, integrating a particular attitude towards a character into the plot in a way that is quite different from other methods such as the occasional explicit statement of a theme” (104).

While Emmott’s analysis refers to foregrounding induced by way of high-frequency effects, Louwerse and van Peer (2002: 12) note the need to examine low-frequency or “rarity” effects, as well. They echo Fortier (2002) in asserting that authors often give importance to a theme by way of such rarity effects and go on to mention that as quantitative analysis is used to determine whether high- or low-frequency effects dominate the discourse, clues regarding the themes present are likely to become available.

One of the starting assumptions that Louwerse and van Peer (2002: 6) rely on to justify their view of the importance of rarity effects is that narratives are structured in logically coherent ways and that “[i]n the production of text, language users thus apply both global and local themes to make the text globally and locally coherent”. In their view, “[n]arrative structures are apparently structured according to the theme of the text.” Moreover, they note how such global themes tend to be expressed most clearly in a narrative work’s introduction, climax, and conclusion.

Emmott’s two-stage literary corpus analysis technique (2002: 113) seems likely to prove useful when attempting to detect recurring thematic elements in a literary text. Her approach begins as the narratologist uses intuition to identify meaningful narrative features and proceeds to use corpus data to explain psycholinguistic processes that may account for an informed interpretation of those features (113). Put simply, Emmott begins by letting intuition lead judgments concerning “which items to count and how to count them”, followed by quantitative and then critical analysis. In the end, however, this involves “suggesting a plausible interpretation and leaving it for other researchers to challenge this
interpretation if it fails to match their own intuitions about the text” (104).

2. Method
Following Emmott (2002), the method used in this study began with researcher intuitions which were first tested through small corpus analysis⁴ and then verified by way of corpus analysis proper⁵ using larger extended literary and non-literary corpora. The specific steps that were taken are explained in detail below.

Investigation began with intuitive judgments. The author of this paper, in the course of doing extensive reading relating to his main area of research,⁶ noticed that the word pinnacle, although infrequently encountered in literary works, happened to appear during a certain climactic scene (Dostoevsky 2004: 468) in Magarshack’s 1953 translation of Dostoevsky’s novel, The Devils (1872; a.k.a. The Possessed). Due to the fact that the word’s location in the text precisely correlated with this highly dramatic scene, it was posited that the word would be unlikely to appear anywhere else in the narrative.

In fact, this supposition proved incorrect, at least with respect to a digital version of a separate translation: an electronic search of The Possessed, another translation of the same work by Dostoevsky, revealed that the word pinnacle appears twice. The first pinnacle token is found in an extended section of narrator commentary at the beginning of the story. The second occurs near the end of the book during an incident in which the perfect contentment of the protagonist is suddenly taken away. Nevertheless, closer inspection of the two passages revealed that the first mention of the word pinnacle was in fact used to foreshadow the second usage. That is to say, while the word pinnacle appeared twice in the story, both tokens seemed to refer to the same climactic event.

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⁴ After an initial stage of what might be called “manual analysis” (the physical marking of hard copies of texts during close reading), preliminary intuitions were provisionally confirmed using technologically augmented manual analysis (the searching of digital versions of the text in question using word-processing and document-viewing software to confirm initial suspicions).

⁵ Using corpus analysis software such as Wordsmith Tools 7.0.

⁶ The metaphorical depiction of bridge metaphor in literary texts; cf. Strack 2004.
From this single anecdotal (and somewhat subjectively interpreted) data point, one might naturally infer that the presence of the word *pinnacle* in the story offers hints to readers as to how the story as a whole has been structured. Narratologists have often noted that skilled storytellers typically build to a climax near the end of the story so as to hold the interest of listeners and readers. For example, Longacre (1985: 84) notes that narrative discourses often feature a “peak” that tends to be found “toward the end of the discourse”. Indicated by way of structure-related surface features evident in the language of the text, the climax “corresponds to the point of maximum tension and confrontation in the story” and also tends to represent a “decisive event which makes the resolution of the plot possible.”

Why would Dostoevsky use a word like *pinnacle* to subtly reflect his narrative’s “peak” in a potentially noticeable way? Obviously, in such a situation, the word *pinnacle* (used metaphorically) serves first to foreshadow the climactic scene and then to highlight the fact that the scene in question is an important plot point in the story’s narrative arc. Having said this, making sweeping claims about the structure of a narrative based solely on the observation that an unusual word is used in a certain passage might easily be written off by skeptical non-practitioners as an example of how unsubstantiated pronouncements unwittingly reveal literary criticism to be a rather flimsy pseudoscientific pursuit.

Both to test the viability of observations about how the word *pinnacle* reveals structure in Dostoevsky’s novel and also to assess whether the word’s stylistic application might be evident in literature

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7 It should be emphasized here that the original intuition concerning how instances of the word *pinnacle* subtly hinted at the story’s overall structure were arrived at while reading the story in translation. That is to say, structural clues in the original text were prominent enough for them to survive translation.

8 Admittedly, the specific word choice in this case was made by Garnett, the English translator. Having said this, both English translations of Dostoevsky’s novel include the word *pinnacle* in the climactic scene in question.

9 In addition to the basic literal definition it provides for *pinnacle* (“an upright architectural member”), *Merriam-Webster’s Collegiate Dictionary*, 10th ed., also offers two metaphorical definitions: “a structure or formation suggesting a pinnacle” and “the highest point of development or achievement.” (s.v. *pinnacle*).
more generally, a corpus of 50 digital texts\textsuperscript{10} was assembled so as to
discover how often the word \textit{pinnacle} appears in each individual work
and in the corpus as a whole.\textsuperscript{11} This corpus consisted of digitally
formatted (mostly public domain) narrative works previously identified
as having some type of thematic metaphorical content (in many but not
all cases, a figuratively freighted use of the lexical item \textit{bridge}).

The key research questions for the purpose of this study were the
following: First, do the texts include use of the token \textit{pinnacle} in them or
not? And second, if so, did use of the token \textit{pinnacle} suggest either high-
frequency or rarity effects?

Once the presence of likely rarity effects had been confirmed, a
follow-up corpus study was conducted to verify whether the 10 examples
displaying markedly infrequent use of the word \textit{pinnacle} (see Appendix
\textit{I}) were anomalous or not. First, using the 40 works that failed to include
the token \textit{pinnacle} (see Appendix \textit{2}) and standard multi-purpose
corpora\textsuperscript{12} as baselines for comparison, the frequencies of the words
\textit{pinnacle} and \textit{bridge} in the 10 pinnacle texts were compared with
frequencies in the 40 non-pinnacle texts and the 4 general use corpora.
Finally, extended context was evaluated to determine how the word
\textit{pinnacle} was used in each of the 10 works (see the concordance lines in
Appendix \textit{3}). Specifically, did the word’s use in context seem incidental
or rather did it appear to be related to some larger structural aspect of the
plot or particular arc of narrative development?

\textsuperscript{10} The literary corpus assembled includes 34 English language works and 16
works translated into English (including 7 from Russian, 3 from Serbo-Croatian,
2 from French, 2 from German, and 1 each from Spanish, Swedish, and ancient
Greek). While all 50 works are narratives, 42 are fictional, 3 are non-fiction, 3
are long-form poetry, and 2 are dramas. Although most of these works were
originally released between 1850 and 1920 A.D., the earliest work dates back to
cia. 371 B.C. and the latest to 2011 A.D.

\textsuperscript{11} Due to the fact that the original intuitions concerning the word \textit{pinnacle}
occurred while reading a work of Russian literature in English translation, a
decision was made to include a certain number of English translations of foreign
language literary works in the corpus.

\textsuperscript{12} BROWN1 (Brown University Standard Corpus of Present-Day American
English), CEEC (Corpora of Early English Correspondence), FLOB (The
Freiburg-Brown Corpus), and HELSINKI (Helsinki Corpus of English Texts)
are all one-million-word English language corpora.
3. Results
An initial digital search of each work in the 50-work corpus revealed that 10 works contained at least one pinnacle token while the remaining 40 works did not. When the 10 works that did were further analyzed, 9 out of 10 works were discovered to include only 1 pinnacle token. The remaining work was found to include 2 tokens (The Possessed, in which both tokens refer to the same scene).

For purposes of comparison, the same type of digital searches were performed to check the frequency of bridge tokens in the same collection of literary texts. While the token bridge was mentioned an average of 52.4 times per work within the 10 works, pinnacle was mentioned an average of 1.1 times. The 10 works in which the token pinnacle was found (along with each work’s word count and the number of pinnacle and bridge tokens) are listed in Table 1.

Table 1. pinnacle and bridge token frequency in 10 literary works

<table>
<thead>
<tr>
<th>Title (alphabetical order)</th>
<th>Total words</th>
<th>pinnacle tokens</th>
<th>bridge tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Anabasis</td>
<td>411,431</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>2 Anne of Green Gables</td>
<td>103,158</td>
<td>1</td>
<td>43</td>
</tr>
<tr>
<td>3 Confessions</td>
<td>271,939</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>4 Don Quixote</td>
<td>407,483</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>5 The Five Wonders of the Danube</td>
<td>72,100</td>
<td>1</td>
<td>358</td>
</tr>
<tr>
<td>6 Little Women</td>
<td>186,291</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7 Main Street</td>
<td>168,203</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>8 “The Legend of Sleepy Hollow”</td>
<td>11,830</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>9 The Possessed</td>
<td>258,141</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>10 Waverley</td>
<td>185,728</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

(40 non-pinnacle texts) 2,402,112 0 497

Close reading of the 10 texts that included the word pinnacle confirmed the following: Each of the 10 works used pinnacle in the context of

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The word bridge was selected because it is a word that tends to be used repeatedly when it appears in literary texts and therefore seemed likely to strike a contrast with pinnacle, a word which tends to appear only once. See Table 1 to verify that this did indeed turn out to be the case.
narrator observations or depictions that indicate major character, minor character, group, or cultural ‘aspirations’ (hopes, desires, expectations); this ‘aspirational’ depiction was generally accompanied by a heightened emotional intensity of depiction (with the single exception of Confessions; see Appendix 3 for details). The quantitative results of analysis are found in Table 2.

Table 2. Corpus data\textsuperscript{14} for PINNACL* and *BRIDG*

<table>
<thead>
<tr>
<th></th>
<th>PINNACL*</th>
<th>N/10,000</th>
<th><em>BRIDG</em></th>
<th>N/10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 PINNACLE texts</td>
<td>11</td>
<td>0.053</td>
<td>524</td>
<td>2.52</td>
</tr>
<tr>
<td>40 non-PINNACLE texts</td>
<td>0</td>
<td>0.0</td>
<td>497</td>
<td>2.07</td>
</tr>
<tr>
<td>BROWN1</td>
<td>2</td>
<td>0.02</td>
<td>177</td>
<td>1.77</td>
</tr>
<tr>
<td>CEEC</td>
<td>0</td>
<td>0.0</td>
<td>25</td>
<td>0.25</td>
</tr>
<tr>
<td>FLOB</td>
<td>0</td>
<td>0.0</td>
<td>114</td>
<td>1.14</td>
</tr>
<tr>
<td>HELSINKI</td>
<td>0</td>
<td>0.0</td>
<td>84</td>
<td>0.84</td>
</tr>
</tbody>
</table>

A subsequent examination of how each pinnacle was used in context produced the following results: 4 instances were appraised as megametaphorical\textsuperscript{15} (Don Quixote, Main Street, “The Legend of Sleepy Hollow,” and Waverley), 5 works were found to use the word pinnacle to mark climactic scenes (Anne of Green Gables, Don Quixote, Little Women, The Five Wonders of the Danube, and The Possessed), and in 3 works, the token pinnacle foreshadowed a coming disappointment (Anabasis, “The Legend of Sleepy Hollow,” and The Possessed). In the end, all of the pinnacle tokens examined were judged to be metaphorical,

\textsuperscript{14} While the token counts for *bridg* do not include words normally thought to be unrelated to bridges such as abridged, place names that include -bridge were included in most cases. Exceptions were made for references to Cambridge and Cambridge University Press in the CEEC, FLOB, and HELSINKI corpora because it was determined that an inordinate number of these tokens was skewing the data away from authentic, non-region-specific language production.

\textsuperscript{15} That is to say, these 4 pinnacles were not embedded in overtly metaphorical narrator comments, but rather referred to physically existing pinnacles as part of a scenic depiction that corresponded to a climactic story point in the overall plot.
either locally (e.g., *Confessions*) or as part of an overarching global thematic structure, which was the case in the remaining 9 texts.

Incidentally, only two *pinnacle* tokens were found among the four standard corpora examined. Both of these occurred in the BROWN1 corpus. When these two tokens were inspected in context, they were both discovered to be parts of narratives that had been incorporated into the BROWN1 corpus.

In summary, whenever the word *pinnacle* was used, it carried metaphorical implications with respect to the narrative context in which it was embedded. Moreover, in every case but one (*Confessions*), the word appeared to function as part of a greater extended metaphor system to express waxing aspirations or signal reversals of fortune connected with disappointment.

Of course, the most remarkable finding was that *pinnacles* nearly always received only one mention. How can we interpret this strange one-or-zero binary result? It seems evident that the oddness of this outcome lends credence to the idea that the word *pinnacle* is predominantly used as a stylistic marker through which an author can foreground metaphorical structure. As such, its use is limited to situations in which “the language is sufficiently unusual to draw a reader’s attention towards the linguistic medium itself, thereby having a highlighting effect…” (Emmott 2002: 92).

Is this an example of what Louwerse and van Peer (2002: 12) term a “rarity effect”? Due to the nearly perfect correlation of the rare token *pinnacle* with identifiable peaks in narrative discourse, such would appear to be the case. Can the word *pinnacle* always be expected to include an underlying metaphorical meaning? While exceptions are certainly possible, there is a strong likelihood that the word *pinnacle* will be used metaphorically to heighten reader awareness of protagonist aspirations and note the presence of climactic scenes when it is found in a literary work.

4. Discussion
After recognizing the fact that, across 50 randomly chosen texts, the word *pinnacle* is almost exclusively used to highlight climactic scenes by way of rarity effects, the analyst has a difficult question to answer: What
are the necessary preconditions that allow such a statistically significant result to occur?

Upon reflection, it would seem that the following two criteria would both need to be met. First, each author (or literary translator) that uses the word *pinnacle* would need to be aware that the very use of the word introduces metaphorical structure into their text. (Such awareness could be either vaguely understood or consciously premeditated.) Second, having acknowledged the fact that authors tend to be aware of the way the word *pinnacle* structures a text, they must also be aware that their text has a macrostructure in need of shaping by way of lexical decision-making. Let us discuss the implications of these two hypotheses in order.

As to whether narrative authors might be somehow aware of the macrostructure of the texts they create, cognitive stylistics proponents have long asserted as much. For example, Louwarse and van Peer (2002: 7) have characterized “macrostructure” in the following terms:

(1) The macrostructure is the global structure of the text, a hierarchically ordered net of propositions. The theme of the text is (a part of) its macrostructure that is formed by four macrorules: (1) deletion of irrelevant and unrelated information, (2) selection of the most relevant and related information, (3) generalization of selected propositions, (4) construction or integration of propositions.

They further note, “[i]n the production of text, language users thus apply both global and local themes to make the text globally and locally coherent” and posit “global themes” to exert the strongest influence “in the introduction, climax and conclusion” (6). Similarly, Shen (2002: 79-80) argues that a “story point” (involving “conflict” in the context of some kind of goal-oriented “structure”) is the raison d’être for story and that such goal-oriented story points are crucial in producing dramatic human situations. Longacre (1985: 83) notes that in many cases “the structure of the language in which a text is written permits more to be distinguished than simply foregrounded versus backgrounded material. Thus, in a narrative we may have pivotal events versus routine events, or significant events versus secondary/preparatory/resultant events”. In fact,

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16 In fact, the word *pinnacle* was occasionally chosen not by the original author but rather by the work’s English language translator. Nevertheless, for brevity’s sake, the word author will hereafter be understood to extend to instances in which a translator rather than an author made the lexical decision in question.
literary scholars have long claimed that narratives tend to cohere precisely because they have been organized according to such macrostructural characteristics and, to the extent they are not, writing not only ceases to seem literary, but ceases to be readily intelligible.

With regard to the question of whether authors are aware of the structural implications of their lexical decision-making, many literary scholars have asserted that a certain amount of recognition should be taken for granted. For example, Emmott (2002: 111) observes that “writers tend regularly to repeat a name or other designation at intervals in a cohesive chain[.] One possibility is that this may be for the purpose of regularly refreshing the reader’s memory about which character is being referred to”. She goes on to explain the issue of “referential choice” as the author’s understanding of the fact that the “significance of every linguistic item used” must ultimately be judged “in relation to the other choices that are available in the language system as a whole and at particular points in the text” (100). So as to properly regulate the coherent flow of narrative, the author will necessarily be cognizant of how “the repeated use of a particular type of referring expression in part of a text” contributes to the production of certain foregrounding effects in that section (92). In Emmott’s view, such highlighting might be accomplished either by way of high frequency-induced cohesive-chaining or “stylistically-marked cohesion breaks” in cases when such pervasive consistency of expression suddenly stops (101). In either case, however, “[w]hen the language is sufficiently unusual to draw a reader’s attention towards the linguistic medium itself,” highlighting effects exert their influence (92).

In literature, foregrounded textual effects are those that are noticed because they stand out from the surrounding text which represents a baseline understanding from which the foregrounded element is observed to deviate. This being the definition of foregrounding, low frequency-related effects are difficult to term foregrounding, strictly speaking. Because the baseline that low-frequency words deviate from may be linguistic use in general rather than language specific to the text itself, the noticing of such effects will go beyond a simple understanding of the flow of the text to include metalinguistic understanding of expectations regarding language use in general. Having said this, both high- and low-frequency textual effects lend themselves to corpus analysis because the corpora used for comparison with the narrative in question provides a
baseline that crudely mimics the totality of an individual’s linguistic understanding (which is, after all, the baseline of understanding in individual cognition).

While the presence of high- or low-frequency words certainly reveals characteristics unique to the text itself, when analyzed in a cross-textual manner using corpora (as has been done in this study of pinnacles) we find that previously difficult to corroborate ideas such as authorial awareness of narrative structure are revealed to be objectively verifiable phenomena. Because cross-textual analysis can lead to intertextually transferable critical hypotheses concerning literary texts in general, the presence of the word pinnacle in a single work (a trivial fact when understood in isolation), has served to reveal not only a structural aspect of the few particular stories it contributes to, but also exposes the fact that narrative authors in general compose their works while keeping such structural details in mind.

Of course, there is one possible objection that could be raised to the above line of reasoning. Perhaps only authors who have a natural proclivity for metaphor would be aware that they are inserting a macrostructural marker into their text by using the word pinnacle. After all, while the 50 texts examined were randomly chosen with respect to their use or lack of use of the relatively infrequent word pinnacle, the digital texts were all available to be chosen precisely because they had been stocked in the files of a scholar interested in metaphor. Perhaps if the corpus had included narrative authors that failed to demonstrate interest in metaphorical modes of expression, the results might have been different. The new question then becomes, are all long-form narrative authors conscious of metaphor to the extent that they exhibit an awareness that lexical choices influence the macrostructure of a narrative? This will be a question for future study.

An objection might be made that the number of texts in the corpora (50) was less than ideal and so provides less than conclusive results. While it certainly would have been possible to examine a much larger corpus that included many more texts, the fact that the narrative structure of each work in its entirety had to be taken into account before judgments concerning the structural utility of the word pinnacle could be rendered would have made such a task prohibitively difficult. On the other hand, the fact that the 50 works included in this study had already
been read before examination of the word *pinnacle* had been undertaken greatly facilitated the analysis.

The observation that long narratives have (or at least tend to have) global thematic macrostructures that authors are aware of amounts to provisional confirmation for the idea that metaphors function not only at the phrase- and sentence-levels but also by way of subtle cues surreptitiously embedded in extended discourse. The fact that the inclusion of the word *pinnacle* metaphorically structures most any narrative it finds itself in argues strongly for the pervasive presence of megametaphor in long-form literary works generally.

Such a provisional conclusion presents a great problem for those wishing to annotate metaphor in literary and other kinds of texts (e.g., Steen 2015). Corpus linguists have long sought to operationalize the corpora they carry out research on by adding metatextual markup language to the digital texts of pre-assembled corpora. In particular, the annotation of corpus texts to reflect grammatical parts of speech has been revealing of how various grammatical forms interact with one another. Regarding the criteria for adding such useful annotation, Stefanowitsch (2006: 10) observes, “An appropriate annotation scheme must define (i) a reliable procedure for discovering instances of the phenomenon in question, (ii) the attributes that are considered relevant […] and (iii) an annotation format”. It is crucial here to note that annotation can be neither broadly multipurpose nor comprehensive. Because annotation is always highly task-specific with respect to both perceived relevance and details of markup formatting, annotation must be tailor-made to accomplish a specific purpose to the potential detriment of all other purposes.

While annotation is certainly a worthwhile endeavor generally speaking, the largely surreptitious function of megametaphor presents a problem for those who would attempt to add figurative sense-specifying metatextual markup language to a corpus that includes literary texts. Because metaphor can function on multiple levels of discourse simultaneously and because it relies on subjective meaning apprehension to determine which level is of maximum relevance, the precise level at which semantic annotation is to be performed must be carefully delineated before any such annotation can proceed.

Moreover, the process of metaphor interpretation takes place in the human mind and not inside a text. For this reason, while corpus
linguistics and other metaphor detection efforts can certainly lead to valid general observations about metaphor as a noticed phenomenon, attempts to precisely determine the semantic efficacy of metaphors in particular cases seem destined to fail. Because metaphor is a mental response that occurs as the perceptions received when reading a text reverberate through complex cognitive structures inaccessible to conscious awareness (cf. Strack 2019: 23-34), metaphors do not need to be “discourse features” detectable at the phrase- or sentence-level to have an impact on gradually unfolding linguistic comprehension. This fact virtually precludes the possibility of making firm and final judgments about metaphorical associations in a case-by-case manner at the sentence level. Because the implications of metaphorical associations are sometimes not apparent immediately, real-time reader decisions about what kind of metaphor is most relevant in a particular text will be made only provisionally, and old information that did not seem relevant at all may turn out to be maximally relevant by the end of the story.

For this reason, corpus linguistic attempts to detect and analyze megametaphor at the extended discourse level may actually be impeded by well-meaning efforts to provide concrete semantic annotation. Precisely because they represent “features that are marked in some fashion in the structure of the language itself” (Longacre 1985: 83), even when stylistically foregrounded metaphorical features are present, the hidden structures they illuminate will only be comprehensible when coupled with an understanding of the macrostructures active in the narrative as a whole. Scholars will no doubt continue to debate whether readers actually “notice” such high- and low-frequency effects or are simply subconsciously influenced by them (cf. Emmott 2002: 92). Nevertheless, once the presence of such impartially identified data points has been confirmed, the necessity to determine whether the authors were actually aware of the big-picture metaphorical implications of their lexical choices may finally be put to rest.

5. Conclusion
From the above corpus survey and discussion, a number of provisional conclusions may be drawn. First, whenever it is found in a literary context, there is a high probability that the word pinnacle has been placed there for the purpose of stylistic foregrounding. Such
foregrounding is likely to reveal a “peak” in the narrative’s structure, or draw attention to a character’s aspirations, or accentuate the depiction of a heightened emotional state, or all three simultaneously.

More generally, however, the cross-textual analysis detailed in this article has provided evidence for patterns that would be impossible to detect if analysis were confined to a single text. It is for just this reason that corpus linguistics may prove crucial in the examination of both global thematic structures and megametaphor. Although the specific forms of expression used to convey both themes and metaphors will appear unique within the context of the specific works they are embedded in, when examined across multiple works, illuminating consistencies of expression reveal surprisingly unified trends in the way humans produce and make sense of literary narratives.

References


Appendix 1: Literary narratives with at least one pinnacle token

Cervantes Saavedra, Miguel de. *Don Quixote*. 1615. (Trans. John Ormsby, 1885.)
Rousseau, Jean Jacques. *Confessions*. 1782. (Trans. unknown, 1883.)

Appendix 2: Literary narratives without pinnacle tokens

Hardy, Thomas. The Mayor of Castorbridge. 1885.
James, Henry. “Flickerbridge.” 1902.
Kipling, Rudyard. Kim. 1901.
Arthur G. Morrison. Tales of Mean Streets. 1894.
Nietzsche, Friedrich. Thus Spake Zarathustra. 1885. (Trans. Thomas Common, 1909.)
Poe, Edgar Allan. “Never Bet the Devil Your Head.” 1850.
Shakespeare, William. The Merchant of Venice. 1597.
Stoker, Bram. Dracula. 1897.
Thoreau, Henry David. Walden. 1854.
Tolstoy, Leo. Father Sergius. 1911. (Trans. Louise & Aylmer Maude, ca. 1928.)
Tolstoy, Leo. “Ivan the Fool.” 1886. (Trans. Count Norraikow, 1891.)
Turgenev, Ivan. A Sportsman’s Sketches 2. 1852. (Trans. Constance Garnett, 1895.)
Wiggin, Kate Douglas Smith. Rebecca of Sunnybrook Farm. 1903.
Wiggin, Kate Douglas Smith. Rose o’ the River. 1905.
Zola, Émile. Nana. 1880. (Trans. John Sterling, ca. 1880.)
Appendix 3: KWIEC (Key Word in Extended Context) by text: Pinnacle

Anabasis: rulers of the territory which he subjected, and afterwards honoured them with other gifts. So that, if the good and brave were set on a pinnacle of fortune, cowards were recognised as their natural slaves; and so it befell that Cyrus never had lack of volunteers in any service of danger.

Anne of Green Gables: heart beat more quickly, and the horizons of her ambition shifted and broadened as if by magic. Before Josie had told the news Anne’s highest pinnacle of aspiration had been a teacher’s provincial license, First Class, at the end of the year, and perhaps the medal! But now in one moment.

Confessions: haughtiness to spend almost as much money as he had wished to give me. The peace ratified, I thought as he was at the highest pinnacle of military and political fame, he would think of acquiring that of another nature, by reanimating his states, encouraging in them commerce and agriculture, creating.

Don Quixote: of what he read of, the moment he saw the inn he pictured it to himself as a castle with its four turrets and pinnacles of shining silver, not forgetting the drawbridge and moat and all the belongings usually ascribed to castles of the sort. To this inn, which to

Little Women: all for the boys? Then on hearing his destination, she said, “So far away!” in a tone of despair that lifted him on to a pinnacle of hope, but the next minute she tumbled him down again by observing, like one entirely absorbed in the matter . . . / “Here’s the place for my

Main Street: their unkempt harshness. / As she dragged homeward Carol looked with distaste at her clay-loaded rubbers, the smeared hem of her skirt. She passed Lyman Cass’s pinnacled, dark-red, hulking house. She waded a streaky yellow pool. This morass was not her home, she insisted. Her home, and her beautiful town, existed in

The Five Wonders of the Danube: (Copyrighted material.)
“The Legend of Sleepy Hollow”: other, watching the achievements of a little wooden warrior, who, armed with a sword in each hand, was most valiantly fighting the wind on the pinnacle of the barn. In the mean time, Ichabod would carry on his suit with the daughter by the side of the spring under the great

The Possessed (a): Tower of Babel, and certain athletes at last finish building it with a song of new hope, and when at length they complete the topmost pinnacle, the lord (of Olympia, let us say) takes flight in a comic fashion, and man, grasping the situation and seizing his place, at once begins

The Possessed (b): could see the happiness in her face. She walked in with an open-hearted air, wearing a magnificent dress. She seemed to be at the very pinnacle of her heart’s desires, the fete—the goal and crown of her diplomacy—was an accomplished fact. As they walked to their seats in front

Waverley: though the thickness of the walls had resisted the fire, unless to a partial extent, the stables and out-houses were totally consumed. The towers and pinnacles of the main building were scorched and blackened; the pavement of the court broken and shattered, the doors torn down entirely, or hanging by a