The Universal Structure of Plot Content: Suspense, Magnetic Plot Elements, and the Evolution of an Interesting Story

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by

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Authorization to Submit Thesis

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Abstract

This thesis provides a theoretical framework for the universal structure of plot content. In it, I propose a three-part structure with narrative suspense as the keystone of plot: first, suspense is cued by the introduction of a plot element [IPE]; second, the plot element is constrained [C] by subsequent narrative elements that restrict potential outcomes; and third, the plot element is resolved [R] by answering potential questions posed by the introduced plot element. Thus: [IPE] + [C] + [R] = a grammatical plot unit, which can represent either a part or whole of a fictional narrative. Multiple plots can overlap, connect, or both to make up larger narrative structures combinatorially. Additionally, I explore universal suspense cues, which I call "magnetic plot elements." These sixteen categories of suspense cues have been derived from the study of thousands of stories of different genres, lengths, media, and cultures, and are shown herein to be highly connected to evolutionary concerns. Further, I explore three exemplar texts of one category of magnetic plot elements – dilemma. Examination of these dilemma narratives, "Defender of the Faith" by Philip Roth, "Delicate Edible Birds" by Lauren Groff, and "St. Lucy's Home for Girls Raised by Wolves" by Karen Russell, demonstrates how this three-part structural heuristic can be used as an analytic tool for plot content. Its use provides precise, empirical methodology for criticism and comparison that presents avenues to deeper understanding of narrative content. Lastly, I propose potential uses for this structural heuristic across multiple scholarly and scientific disciplines, ranging from literary studies to cognitive poetics to cultural anthropology.

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Table of Contents

Authorization to Submit Thesis	ii
Abstract	iii
Acknowledgements	iv
Table of Contents	v
List of Figures	vii
Preface: What We Talk About When We Talk About Plot	1
1: Literature Review	6
From Campfire to Amphitheater:	6
From Amphitheater to Movie Theater:	11
The Heyday of Structuralism:	14
The Cognitive Revolution:	18
Full Circle – From the Cognitive Revolution Back to the Campfire:	21
2: Suspense	27
On the Nature of Suspense:	27
The Anatomy of Grammatical Plot Structure:	32
The Introduction of Plot Elements [IPE]:	46
Constraints [C]:	51
Resolution [R]:	57
3: Magnetic Plot Elements: Categorizing the Universally-Interesting Suspense Cues	62
Genetic Survival:	67
Relationship to the Social Hierarchy:	69
Rules of the Social Environment:	72
Discovery:	74
4: Dilemma as MPE in Three Literary Narratives	79
Why Dilemmas Matter in Fiction:	79
Anatomy of Dilemma:	80
Focalization of Dilemma:	85
An Unconventional Dilemma:	93
Location of Dilemma:	98
Cognitive Value of Dilemma:	105
Epilogue: Cross-Disciplinary Applications for Future Study	110

orks Cited:	 -

List of Figures

2.1	Comparison of Suspense Between Sporting Events and Stories	.35
2.2	Visual Representation of Universal Structure of Plot Content	.40

Preface: What We Talk About When We Talk About Plot

The term plot can easily be taken for granted, especially among people who care little for literary theory and analysis. Ask several folks what the word means, and you're likely to get widely divergent answers that circle around a similar theme: plot is what happens in a story. Ask literary scholars and writers, and curiously, you're likely to get a similar set of divergent answers. Perhaps there will be some well-formulated theories or some references to other writers or scholars, yet most will circle around the same main conception that plot is what happens in a story. It is, after all. But there's certainly a lot more to be said about it, not least of which is that plot proves incredibly difficult to talk about. Why should this be so, though? One of the reasons plot is so difficult to conceptualize, especially for literary theorists, is that the term itself represents so many different ways of analyzing a text.

The most common approach to plot goes back to our earliest theorists, Aristotle, foremost among them, who spoke of plot on what modern-day theorist Seymour Chatman described as the "global" level (61). These are the major events and themes of the story. The German novelist and playwright Gustav Freytag illustrated perhaps the most well-known visualization of plot's global structure in the form of his pyramid, which delineated five distinct parts: exposition, rising action, climax, falling action, and denouement (LaPlante 99). Visualizations like Freytag's have served as useful tools for both storytellers and critics, and thus are quite common in the discussion of plot. A century after Freytag, a far-more-successful novelist, Kurt Vonnegut, contributed several frameworks for visualizing plot by tracking story arcs according to the main character's good or ill fortune over the course of the story (LaFrance). Vonnegut identified several distinct shapes which he named things like "man in a hole," "cinderella," and "boy meets girl" (LaFrance). These metaphorical conceptualizations are often the terms on which writers discuss plot, with arc being

perhaps the most common term of all. Yet global plot, whether it be discussed in triangles, arcs, or other shapes, merely covers one of the many conceptualizations writers and scholars use in the discussion of plot.

Another aspect of plot often encountered in literary studies is the nature of time in narrative. The Russian formalists were the first to explore narrative time in depth, drawing an important new distinction between fabula, the linear totality of events that unfold in the story and *sjuzet*, the order in which the text reveals the events to the reader (Chatman 20). This distinction allows writers and scholars to contemplate timelines that take place out of order, such as flashbacks, flashforwards, or other anachronies in the story's timeline. Several decades later, the French narratologist Gerrard Genette would delve far deeper into this distinction, which he termed "order" (33). Genette also explored another important facet of narrative time by highlighting the tension between text time (the amount of time that ostensibly passes in the storyworld) and the time it takes the reader to read the same passage, naming this distinction "duration" (88). In essence, this distinction explores narrative's temporal flexibility, where the passing of a single page can whisk a reader through an entire century or keep the reader suspended in a single consequential moment for a hundred hyper-descriptive paragraphs. By drawing on this distinction, literary scholars and writers can more accurately categorize narrative fiction into scene, summary, pause, and ellipsis (95-112). These four categories of duration, taken together, are more commonly referred to in literary circles as "pacing" (Gardner 59). At the root of pacing is the distinction between "narrative elements" and "non-narrative elements" (Possible Worlds 125). This sentence-level distinction concerns whether content serves a descriptive function (using a-temporal linking verbs) or a narrative function (using action verbs that generate a temporal sequence). Here, all the way at the level of the verbs in a sentence, is where many

narratologists of the mid- to late-twentieth century looked to explore plot as a sequence of events at the structural level.

Several decades before Genette's revelations, Noam Chomsky's 1957 paradigmshifting proposition of an innate Universal Grammar was the main force that compelled structuralists like Roland Barthes, Gerald Prince, Teun Van Dijk, and others to seek out a Universal Grammar of plot content. Many of the seekers of this narratological holy grail sought it out at the level of the event sequence – how the narrative elements connect causally from event to event. The complexity of these connections inevitably led to arcane and complex models that were often too cumbersome to be of much utility to writers or literary scholars. Yet this framing of narrative as a sequence of events was similar to the models used by the early A.I. programmers in their initial attempts to teach computers how to recognize natural language (Kurzweil 72). It also partly explains the emergence of computer scientists Roger Schank and Marie-Laure Ryan as key figures in the continued quest to produce a grammar of plot content based on event sequences. Both explored the causal connections between event sequences and the reader's stored memories (or scripts), in an attempt to further understand how plots come together at both the micro- and macrolevel of narratives. Yet neither Ryan nor Schank specifically proposed a universal grammar of plot, and Ryan expressed skepticism of the possibility as recently as 2017, stating in her remarks while accepting the Wayne Booth Award that plot is "too complex" a phenomenon to possess a universal grammar. Additionally, both Ryan and Schank explored "themes" or

¹ Barthes alone, who may well have come closest to developing a universal grammar for plot content, had no fewer than five heuristics for studying plot content, which he called codes: Proairetic, Hermeneutic, Cultural, Connotative, and Symbolic. Rabkin, Todorov, van Dijk, Prince, Greimas, and many other Structuralists echo Barthes' tendency toward the rococo in the complexity of their theorization. See Scholes 148-157.

"points" that echo Vladimir Propp's earlier concept of the "narrateme," which categorizes events and event sequences according to their function in the plot (Chatman 90). Meanwhile, on the opposite end of this spectrum of universal structure in plot content, narrative theorist Patrick Colm Hogan makes a case for global plot structure following universal cross-cultural patterns in narratives — i.e. the marriage plot, the hero's quest, etc. (Hogan 101, 109). Yet Hogan proposes so few universal structures that even the unschooled reader could easily present multiple narratives that don't fit into his categorizations of universal macro-narratives.² Nor does he present his ideas as a universal plot-grammar of the type the earlier structuralists sought after so fervently. Finally, somewhere between the micro-level event sequences of the structuralists and the global-level universal macronarratives of Hogan reside the archetypal story categorizations proposed by the psychoanalysts Freud, Jung, and Neumann.

As Ryan correctly noted in her reception speech, there seems an almost infinite level of complexity to narrative plots. The word itself almost seems a catch-all when all its manifestations are fully considered. A truly functional universal plot grammar would require a single theory to do a lot of work. Primarily, it must be fluid enough to encompass the multiple conceptual frames "plot" represents, all the way from the global scale of Freytag and Vonnegut to the event-sequences of the structuralists and computer scientists. It must function just as effectively with a narrative of ten sentences as it does with a narrative of ten million sentences. It must accommodate an infinite number of plots, as the

² In contrast to the elaborate nature of structuralist theories, Hogan, whose approach more appropriately resembles that of cultural anthropologist than structuralist, outlined only four prototypical universal narratives under the categories of Romantic Tragi-comedy, Heroic Tragicomedy, Sacrificial Tragi-comedy, and the universal coda he called an "Epilogue of Suffering." See Hogan 230-238.

set of all stories is potentially infinite. Therefore, a truly universal plot grammar must be both combinatorial and nodal. Lastly, it must be equally descriptive cross-culturally.

In this thesis I will outline a theory that checks all the above boxes. Pieces of this universal grammar of plot can be found dispersed throughout the historical body of narratological literature, in multiple psychological fields of study, and in the stories themselves. Much like other combinatorial systems, the fundamental structure of a grammatical plot is surprisingly simple given the astounding level of complexity to which it gives rise. The basic three-part plot unit requires a change of state (narrative element) plus a suspense cue that opens multiple possible lines of progression in the narrative. Next, these lines are constrained by further changes of state in the narrative. Lastly, subsequent state changes resolve the tension proposed by the initial suspense cue. Plot units of this type can be combinatorially added to each other, both as sequences of discrete plot units or as overlapping structures that are embedded within a larger grammatical plot. Additionally, I propose sixteen universally interesting categories of suspense cues, which I dub "magnetic plot elements" for their attention-grabbing narrative appeal. I derive these categories from the careful study of hundreds of narratives and nearly as many texts on narrative theory and cognitive function. The combination of the basic plot grammar I describe, along with these magnetic plot elements, offers a powerful heuristic for the study of plot at all levels of abstraction. It also opens new avenues for the exploration of fictional narratives in multiple genres and media. Eventually, I hope to see this model adopted as a valuable tool in the emergent field of distant reading and potentially as an algorithm for the cross-cultural study of narratives in both anthropology and evolutionary psychology.

1: Literature Review

From Campfire to Amphitheater:

Jonathan Gottschall and David Sloan Wilson's 2005 collection of essays on evolution and the nature of narrative is titled *The Literary Animal*, and one can safely presume that title refers to us, regardless of whether we're worthy of such a moniker. It seems right at first glance, but is it right? Certainly not in a universal sense. It's an easily forgettable fact in the modern West that there have been far more pre-literate societies than literate ones, and it's even easier to forget that fact while immersed in university life, where we act, for all purposes, as though everyone we encounter is literate. We don't much encounter illiterate people in the university setting, at least not knowingly, and we certainly don't encounter many people from pre-literate societies. That reality is a relatively recent one:

In the mid-nineteenth century, only 10% of the world's adult population could read or write. At the dawn of the twenty-first century, UNESCO estimates that over 80% of adults worldwide can read and write at some minimum level. This unprecedented social transformation occurred despite the world's population quintupling from about 1.2 billion in 1850 to over 6.4 billion today. (Matsuura 189)

Certainly, this explosion of literacy is a welcome and productive step forward in the development of our collective human intelligence, but it isn't necessarily a natural one. Steven Pinker reminds us in his 2014 style manual that though speech is instinctive, "The written word is a recent invention that has left no trace in our genome and must be laboriously acquired throughout childhood and beyond (*Sense of Style* 27). This reality is certainly not lost on learned evolutionary thinkers like Sloan Wilson and Gottschall, who only use the term "literary animal" metaphorically in their title. But it's curious that it seems right in some sense, especially in an evolutionary one, despite alphabetic writing only having evolved once in our species' history (Daniels and Bright 92-96). It seems that

we've been working our way forward collectively as literate and then literary animals, though Darwin himself would no doubt take issue with that statement.

One of the questions Gottschall, Sloan Wilson, and other Literary Darwinists were attempting to begin to answer in that collection of essays is just how the process of our literary evolution occurred. A passage of fiction comes to mind from William Golding's *The Inheritors*, a novel involving a tribe of proto-linguistic Neanderthals. Early in the novel, the protagonist, Lok, attempts to tell the story of his discovery of a wooden idol—the little Oa—that serves as a sort of fertility goddess to the tribe. Golding's narrator recounts Lok's story as follows:

'—I am standing among the trees. I feel. With this foot I feel —' He mimed for them. His weight was on his left foot, and his right was searching the ground. '—I feel. What do I feel? A bulb? A stick? A bone?' His right foot seized something and passed it up to his right hand. He looked. 'It is the little Oa!' Triumphantly he sunned himself before them … The people applauded him, grinning, half at Lok, half at the story. Secure in their applause, Lok settled himself by the fire and the people were silent, gazing into the flames. (Golding 23)

Lok's story performs two functions that surely placed a finger of the selective scales of our deep evolutionary past: it centers the tribe's attention on a speaker, creating a shared focus and group coherence, helping to forge a group identity, and it raises the status of Lok in the group's esteem. Doubtless this last point would not go unnoticed by other group members, and it's not a giant leap from this fictional moment to the countless other hypothetical moments that must have occurred in the minds of receptive audience members amongst our successful ancestors. Innumerable aspiring storytellers must have sat in wonder at tales well-told, hoping that they too could one day captivate the attention of their fellow creatures so, thus raising their status in kind. This certainly had to be an impetus for the genre of narratology itself, perhaps most specifically surrounding the study of plot. The

questions—what captivates, what enthralls, what works—surely have been on the minds of storytellers from the very beginning.

Though Aristotle's treatment of the topic in the fourth century BCE is the oldest extant narratological text on plot, *Poetics* was not done in the absence of a considerable literary tradition already well established in the Hellenic world by Aristotle's day. Though much scholarly debate surrounds many of the important elements of the Hellenic literary tradition, there is consensus on some crucial points that inform the world Aristotle would have been writing in (Vandiver 1). By far, the most important texts of antiquity were the epics of Homer, both of which Aristotle was well familiar with—so much so, that Homer forms the main exemplar in several of Aristotle's central points regarding poetics.

Therefore, it is well worth exploring the environment that spawned these seminal epics of western civilization, as their very existence is testifies to the evolution of the poetic mythos that likely began in circles around the campfires of scattered tribes for millennia preceding Homer.

The ancient Greeks were legendary agonists, constantly striving after glory, admiration, and status among peers, adversaries, and even the heroes and immortals they held as moral exemplars. This agonistic cultural imperative was encapsulated by the term *kleos aphthiton*, a Homeric theme in itself, which can best be translated as "immortal glory." There was certainly something to the idea, given that mythical names like Achilles, Theseus, and Heracles as well as historical names like Pericles, Leonidas, and Alexander still resonate more than two thousand years later. *Kleos* was not a battlefield-specific concept, nor was the spirit of competition for *Kleos* limited to the battlefield. To say that competitions in music, poetry, and drama were common in the Hellenic world of the first millennia BCE would be to sell short the competitive artistic spirit of the age. It isn't certain

the degree to which these competitions were specifically religious in nature, but they were common practice at religious sites like Delos and Delphi, from as early as 700 BCE, and as many as seventeen specific sites are known to have sponsored musical contests in Greece before 400 BCE (Martin 17). Some estimates place the number of performers necessary to populate the contests in Attica alone at as many as five thousand poets, musicians, and dramatists (19). This type of widespread cultural competition is surely a long way from Lok's meager campfire, but the spirit was much the same. Classicist Elizabeth Vandiver credits the vast role of storytelling in pre-literate societies to the necessity of transmitting all of the necessary rules and norms of the society: "In a culture that has no writing, there's only one way to transmit all of the cultural values, and that is through the traditional stories of the culture" (Vandiver 1). The Darwinian elements of the Pan-Hellenic dramatic and poetic competitions echo Golding's Neanderthal proto-narrative: they both raise the status of the bard and both develop group coherence through shared cultural norms.

The Hellenic competitions were Darwinian institutions in themselves. The competition for the attention and admiration of audiences and for the esteem of the judges produced an environment where successful dramatic forms could take shape and be increasingly refined. Poets and playwrights who failed to generate suspense, thereby capturing the attention, imagination, and admiration of audiences, weren't rewarded with valuable prizes, and they failed to capture the most valuable prize of all in the artistic realm—*kleos aphthiton*. The lure of that elusive glory drew all of the most talented artists of Greek antiquity, some whom we remember today: Sophocles, Euripides, Aristophanes, Aeschylus—each staged major dramas in competitions. These dramas were forged in the blazing fires of public competition and scrutiny. And like the Homeric epics themselves, they all preceded Aristotle's treatise on poetic form.

Aristotle's observations in *Poetics* were so rich and sharp, that many of his precepts about poetry, drama, and the dramatic arts still hold true today. Aristotle begins, for the purpose of clarity in his discussion, by separating forms into genres – epic poetry, comedy, and tragedy (Poetics 1). None of the genre considerations Aristotle outlined were his own, as the idea of genres had already been well established by the agonistic environment of the festivals, as well as in the symposia, where "small" genres like elegiac poetry, riddles, fables, jokes, and songs all thrived (Martin 25). Thus, it may be best to think of *Poetics* similar to the way Homeric scholars who argue for "Homer" as an amalgamation of multiple poets – as the product of a Hellenic Darwinian crowd wisdom. Among the other major concepts Aristotle captured in his treatment of plot were the concept that the action of the plot precedes the characters in importance: "In a play accordingly they do not act in order to portray the characters; they include the characters for the sake of the action. So that it is the action in it, i.e. its Fable or Plot, that is the end and purpose of the tragedy; and the end is everywhere the chief thing" (*Poetics* 6-II). For Aristotle, action takes precedent: character concerns are not relevant without a sense of narrative suspense that engages the audience. Additionally, Aristotle advocated strongly for the idea that a fully-formed plot should have, among other things, a beginning, a middle, and an end (*Poetics* 7). Aristotle also argued that a story should have a unity in itself rather than involving the totality of what could hypothetically have befallen a character in their life. "In writing The Odyssey," Aristotle writes, "he [Homer] did not make the poem cover all that ever befell his hero—it befell him, for instance, to get wounded on Parnassus and also to feign madness at the time of the call to arms, but the two incidents had no probable or necessary connection with one another – instead of doing that, he took an action with a unity of the kind we are describing as the subject of the *Odyssey*, as also of the *Iliad"* (*Poetics* 8). He also provides a "*Heracleid*"

and "Theseid" as hypothetical exemplars of poems that would fail to adhere to this precept, making a common poetic "mistake" in the process. In terms of mimetic content, Aristotle states that a plot should evoke pity or fear, and he systematically examines what types of plots could best evoke such responses – such as a virtuous character moving from good fortune to bad fortune and vice-versa, or a nefarious character moving from good fortune to bad fortune and vice-versa. Finally, Aristotle declares the best plot to be one where the character's fortunes shift from good to ill due to some error in judgement on the character's part (*Poetics* 13). Perhaps one of his final statements on plot is most telling. When describing how poets came to discover which types of plots were most evocative of pity and fear, Aristotle states, "It was accident rather than art that led the poets in quest of subjects to embody this kind of incident in their plots" (Poetics 14). This seemingly innocuous closing thought on plot content seems to support the idea that successful plot content arose from a process of trial-and-error, with the successful plots being imitated and the unsuccessful plots being forgotten or discarded – not unlike a form of living dramatic game theory. To a modern narratologist, Aristotle's treatise may seem scattered and protean in nature. Yet we'd do well to remember that Aristotle's observations were those of one who had access to hundreds of years of evolved intuitive wisdom that was passed down via reliably successful form and content.

From Amphitheater to Movie Theater:

To a narratologist today, the gulf between Aristotle and the modern study of narrative might seem as broad as the gulf between the campfire and the amphitheater would have to seemed to Aristotle himself. Indeed, a full two millennia passed between *Poetics* and the birth of Russian formalism, the next significant leap forward in the narratological study of plot. The innovation of the early formalists, most notably Viktor Shklovsky and Vladimir

Propp, was to begin the study of literature as a study of language and literary devices essentially focusing on the text itself in isolation. This approach signaled a shift toward a more scientific approach to narrative. Shklovsky, for instance, didn't overtly call for such a shift in his seminal essay "Art as Device"; he merely asserted that, "We shall designate as 'works of art' only such works that have been created by special methods intended to have them perceived as artistic" (Shklovsky 159). He proceeded to examine one such method the device of "estrangement" employed by Tolstoy and the various ways Tolstoy achieved this sense of estrangement. This approach to literature echoed the scientific approach the Geneva School linguists – most notably Ferdinand de Saussure – had been applying to language since the turn of the twentieth century. One significant narratological innovation highlighted by the Russian formalists regarding plot was the distinction between fabula and sjuzet, which described the difference between the linear events of a story and constructed plots that often deviated from a chronological timeline. The other major concept in the study of plot, advanced by Vladimir Propp in Morphology of the Folktale, is the concept of "narratemes" or narrative units. Propp categorized thirty-one specific story elements comprising the hundred Russian folktales he analyzed, such as the interdiction – wherein the hero is warned—and the violated interdiction—wherein the hero violates the warning they were given (Propp 25). Propp discusses each of his narratemes in detail, as well as designating roles for each character, such as hero, villain, helper, donor, etc., who each have a function within the narrative (Propp 79). Though useful in the domain of the folktale, Propp's categorizations prove far less effective when applied beyond. One might fairly ask what light Propp's observations would shed on the novels of Dostoyevsky or Tolstoy, or any of the short stories of Chekhov.

Curiously, other similar categorizations were evolving separately outside the scholarly sphere half a world away. By the 1920s in Los Angeles, the birth of film as a commercial medium was spawning an entirely new Darwinian marketplace for fiction. Though quite unlike the festivals and symposia of the Greeks two millennia earlier, this new marketplace was far less about generating works of aesthetic beauty for the purposes of cultural enrichment and transmission: this new marketplace was uniquely American and dollar-driven. Enter a mostly-forgotten, failed screenwriter named Wycliffe Hill, who, from a very different point of departure to Propp, began his own search to answer a question he posed to several different celebrated screenwriters of the day: what is the difference between narrative and plot? Hill's dissatisfaction with their answers set him on a quest to discover the answer for himself, and remarkably, over the course of about fifteen years, Hill came to a strikingly similar conclusion to Propp's – that there were precisely thirty-one "basic dramatic situations" (Hill 10). Hill adapted most of his dramatic situations from his study of "past literary masters" (only two of whom he named: Polti and Goethe); and though his categorizations were identical in number to Propp's, the classifications were quite different – rescue, obstacle to love, the enigma, sacrifice for an ideal, and fatal ambition to name only a few (10). Hill published several commercially-driven books on plot from as early as 1918, culminating in *The Plot Genie Index* in 1931, which, depending on one's viewpoint, was either an ingenious or quite cynical little device that randomly generated a dramatic plot using a mechanical number generator and a written index – not unlike a board game played at a party (32-33). Though not nearly as celebrated a narratologist as his Russian counterpart Propp, Hill's persistence and ingenuity were clearly compelled by the same passion for answering the question narratologists have been wrestling with since long before Aristotle: what makes a good story?

The Heyday of Structuralism:

The next major movement forward in the narratological study of plot again followed a giant leap in the field of linguistics. In 1957, Noam Chomsky published perhaps the most influential text of the twentieth century in the humanities. *Syntactic Structures* put forth a powerful empirical argument for the innateness of universal grammar that directly contradicted the dominant behaviorist models of language and social development. Stephen Pinker captures Chomsky's argument succinctly:

Chomsky called attention to two fundamental facts about language. First, virtually every sentence that a person utters or understands is a brand-new combination of words, appearing for the first time in the history of the universe. Therefore, a language cannot be a repertoire of responses; the brain must contain a recipe or program that can build an unlimited set of sentences out of a finite list of words. The second fundamental fact is that children develop these complex grammars rapidly and without formal instruction and grow up to give consistent interpretations to novel sentence constructions that they have never before encountered. Therefore, he argued, children must innately be equipped with a plan common to the grammars of all languages, a Universal Grammar, that tells them how to distill the syntactic patterns out of the speech of their parents. (*The Language Instinct* 22)

Chomsky's observations, not surprisingly, were controversial with the old-guard in the field of linguistics. Yet the younger, more-cognitively-focused generation of upcoming linguists and cognitive scientists adopted methods of research that began to explore cognition outside the behaviorist framework. The idea of a Universal Grammar tantalized not only linguists but also developmental psychologists, neurologists, and geneticists (23). It also seemed to close the book on the difficult problem Saussure and the linguists of the formalist era were wrestling with regarding the search for structure in the infinite complexity of language. Chomsky's elegant solution seemed to offer the prospects of a similar solution to the problem the early twentieth-century narratologists had been struggling with: narrative—like language—is a human universal, yet the structure seems

elusive due to its infinite possible permutations. Chomsky's revelations sent scores of narratologists looking for the elusive "universal" structures of narrative, including Roland Barthes, who outlined the problem as follows:

To confine myself to the current period, the Russian formalists, Propp, and Levi-Strauss have taught us to identify the following dilemma: either narrative is a random assemblage of events, in which case one can only speak of it in terms of the narrator's (the author's) art, talent, or genius—all mythical embodiments of chance; or else it shares with other narratives a common structure, open to analysis however difficult it is to formulate. (Barthes 238)

These seekers of the universal structure in narratives came to be called structuralists, and there was no shortage of structuralist scholars in the mid-twentieth century. Robert Scholes summarized the disparate parts of the movement in his 1974 book Structuralism in Literature. On more than a few complex topics Scholes excelled at distilling the diverse and difficult arguments into powerful, pithy statements. First on the nature of structuralism, "The perception of order or structure where only undifferentiated phenomena seemed to exist before is the distinguishing characteristic of structuralist thought" (Scholes 41). He also understood the purpose of defining such structures: "If we know what the universal elements of narrative are, and can agree on a terminology for these, then it can be possible to make the comparisons and discriminations which are the basis of literary understanding, and to make them much more clearly, convincingly, and systematically than we do at present" (92). That prospect was a powerful lure to structuralist literary scholars like Barthes, Tzvetan Todorov, A. J. Greimas, Northrop Frye, Claude Bremond, Gerard Genette, Eric Rabkin, and Robert Scholes himself, as well as seminal thinkers in other disciplines like Claude Levi-Strass in the field of anthropology or Jean Piaget in the field of developmental psychology. The difficulty for these diverse and brilliant scholars was agreeing on the two

elements outlined by Scholes – the structures themselves, and the terminology that describes them. Most went in very different directions.

Claude Bremond focused in several essays on the theory that fiction, however long and complex, can be represented as an interweaving of sequences with the smallest unit being a triad where a possibility is presented, either actualized or not, resulting in either success or failure (97). In terms of plot content, the elegant simplicity of Bremond's idea would be echoed by several later scholars despite criticisms about the arbitrary nature of determining the components of each triad and the danger of post hoc imposition of a perceived structure onto a narrative instead of describing the structure inherent in the narrative as is. Todorov, on the other hand, characterized a narrative as having layers that seemed to stack on top of each other to build a coherent whole, such that when the parts of speech combined to form propositions, they could then be combined to form narrative sequences, which together would make up the smaller parts of a whole story (113). Though perhaps equally promising and useful as these distinctions seem to be in light of Bremond's ideas, they still suffer from a lack of resolution of the two original problems structuralists were attempting to describe: first, of the potentially infinite diversity of the sequences, and second, of the danger of arbitrarily grouping events into particular sequences post hoc. Barthes, meanwhile, preferred to analyze narrative content in accordance with a set of codes he determined to be five-part: codes of actions, codes of puzzles (hermeneutic), codes of culture, codes of connotation, and thematic codes (154). Barthes also made a valiant effort to synthesize the structuralist effort to describe a narrative grammar in "An Introduction to the Structural Analysis of Narrative," yet the essay seems to reflect the structuralist movement all too well – first by echoing the tantalizing promise of linguistics as a model to follow in order to describe the universal structure of narrative, and then by

proceeding to demonstrate that structuralist theorists had yet to identify any such universal plot structure. Barthes's essay wades deep through abstruse theories that differ on their level of analysis (proposition, sentences, actions, sequences, macrostructure, etc.) and their meaning within the context of the story (functions, actions, and narration). This pattern of complexity repeats itself in many of the structuralist theories of plot. Rabkin, for instance begins his investigation into plot, *Narrative Suspense*, by presenting a simple hypothesis—that narrative suspense is the fundamental element of plot—which he (sometimes successfully) elaborates upon until the argument reaches a level of complexity that is arcane enough that it defeats the purpose of a reductionist structuralist approach to begin with. Thus, the structuralists, already lacking any sense of internal coherence, abandoned the possibility of universal structure to plot when the deconstructionists arrived on the scene to challenge the possibility of universalist modes of interpretation with their postmodernist version of "the frame problem," where a theoretically infinite number of valid interpretations exists for any given narrative.

Yet, though the search for the universal structure of plot seemed to be largely unsuccessful, other structuralist theorists were making outstanding breakthroughs by applying a systematic approach to narratology. Even as structuralism was falling out of favor with narrative scholars with the rise of deconstructionist thinkers like Foucault, Derrida, and Lacan, Gérard Genette was revolutionizing narratology by outlining useful structuralist heuristics for the study of narrative. Genette published numerous essays exploring elements of narratology that became almost immediately indispensable to literary scholars—outlining categories like order, frequency, duration, voice, and mood; distinguishing between narrative posture and focalization; and highlighting the important distinctions between levels of participation and time of narration for the narrator. The

publication in English of Narrative Discourse against the tide of poststructuralism quietly confirmed a continued utility for structuralist methodologies. Genette, using Proust's Remembrance of Things Past as a model, presented his frameworks with a self-effacing humility, stating: "Laws of Proustian narrative are, like that of narrative itself, partial, defective, perhaps foolhardy: quite empirical and common laws which we should not hypostatize into a Canon. Here the code has its gaps, its surprises" (Genette 268). Gaps and all, though, Genette's work, like the work of several other persistent structuralists, proved too useful to discard, even if structuralist thinking was falling out of fashion with mainstream literary scholars. Though Genette seemed more interested with dynamics of plot like chronology, frequency, and duration, scholars like Seymour Chatman were continuing to chip away at the problem of plot content from a structuralist perspective. Chatman adapted Barthes's codes to distinguish what he called "kernels" and "satellites" as a way of describing smaller units of plot that fit within the macrostructure of larger narratives (Chatman 53). Though Chatman challenged the idea of a successful structuralist approach to a universal theory of plot at the level of macrostructure, his rejection was not of the possibility, but of the likelihood of success given what he considered our limited knowledge of cultural conventions (95). Chatman considered learned cultural codes as foundational to any proper interpretation of plot macrostructure, and in the absence of complete understanding of these (seemingly infinite) codes, any universalist would fail unless we gained a broader cultural understanding – an outcome Chatman seemed to deem possible.

The Cognitive Revolution:

By the time deconstructionism and its descendants had supplanted structuralism as the dominant mode of thinking within the sphere of literary scholarship, outside influences

from scientific fields were starting to creep their way into new structuralist thought.

Computer scientists like Roger Schank and even Ray Kurzweil were beginning to take interest in narrative, as the earliest forms of artificial intelligence began to run into significant roadblocks. One of the main stumbling blocks for A.I. was the consistent failure of early A.I. systems to interpret basic narratives correctly. A.I. systems weren't up to the task, not because of processing speed or computational power, but because the sheer number of inferences a human mind makes in interpreting the world was something everyone—cognitive scientists, philosophers, computer programmers, and narratologists alike—took for granted. As Schank himself noted in *Tell Me a Story*:

In the end all we have, machine or human, are stories and methods of finding and using those stories. Knowledge, then, is experience and stories, and intelligence is the apt use of experience and the creation and telling of stories. Memory is memory for stories, and the major processes of memory are the creation, storage, and retrieval of stories. To build models of intelligence or simply to understand the nature of intelligence we must understand the role stories play in memory. (16)

Schank, and another computer programming narratologist, Marie-Laure Ryan began to influence structuralist narratology by introducing concepts from A.I. research and cognitive science like schema and scripts; stacks, frames, and boundaries; and indexing stories, story skeletons, and gists—conceptualizations that the early structuralists could not have predicted or known to consider in their early formulations of plot structure. Ryan was particularly influential in narratology, advancing concepts too numerous to mention individually regarding the study of plot, especially in her 1991 book *Possible Worlds*, which approached plot from several novel perspectives drawn from narratology, computer science, and cognitive science.³ Ryan's most notable contribution here to the ongoing quest

³ Ryan's *Possible Worlds* helped to mainstream several previously obscure concepts in the study of plot—Possible Worlds Theory, and Tellability being two. Additionally, her framing of narrative as

for universal plot structure was her in-depth exploration of William Labov's concept of tellability—essentially the narrative value of the story's "point" (148-156).

Additionally, the cognitive revolution enveloping all fields studying the brain from clinical psychology to philosophy to neurology to cognitive psychology — was starting to inspire narratologists to increasingly take cognitive approaches to understanding the psychological underpinnings of fictional narratives. In Toward a Natural Narratology, Monika Fludernik made a compelling case for examining narrative thought with an eye toward "natural" narratives—in the vein of our ancestors' verbal narratives. David Herman revisited many of Genette's most useful structuralist frameworks from a cognitive perspective in Story Logic. In Narrative as Virtual Reality, Marie-Laure Ryan examined the concept of immersion from several cognitive perspectives, offering the most comprehensive narratological study of narrative suspense – or as she phrased it, "temporal immersion" – since Rabkin decades earlier (140-148). Suzanne Keen explored the emotional connection readers build through the process of empathizing with fictional characters in *Empathy and* the Novel. Lisa Zunshine, with Why We Read Fiction, similarly investigated how theory of mind – one of the important social elements of human cognition – helps to explain our penchant for fictional narratives and our ability to interpret the abstractions therein. Indeed, it seemed that by the mid-2000s very few of the cognitive revolution's revelations hadn't been examined with respect to their narratological implications. Despite new structuralist literary scholars being comparatively tiny in number when compared to their post-structuralist colleagues, the quality and diversity of the work in the field had helped to

computer language allowed for new types of symbolic representations of plot. Her Principle of Minimal Departure also introduced the idea that readers bring specific scripts with them to the text, and the text functions by altering those scripts rather than building a storyworld from scratch.

keep structuralist thinking relevant, even if well-disguised behind self-applied monikers like cognitive narratologist.

Full Circle – From the Cognitive Revolution Back to the Campfire:

In the first collection of essays I referenced in this review, *The Literary Animal*, Jonathan Gottschall begins the introduction by sharing the story of how he adopted a Darwinian perspective on narrative only to find it reviled by mainstream scholars in the humanities. Gottschall found himself such an outcast within his English department he was forced to find committee members outside his field when he chose to write a dissertation that centered around Homer and evolutionary psychology (Gottschall and Wilson xx). Unfortunately, Gottschall's story is no anomaly. Evolutionary psychology is not a popular discipline within the humanities. The way Darwinian scholars have been so vociferously, and often maliciously, opposed is most clearly typified by the reaction E.O. Wilson received when he applied Darwinian thinking to several branches of the humanities, literature included. For his trouble, Wilson was branded everything from a determinist, to a eugenicist, to a defender of slavery, racism and sexism, to a proponent of genocide (The Blank Slate 110). Following Sociobiology's publication, Wilson had his lectures picketed and shut down by protesters carrying banners adorned with swastikas (110). Wilson isn't the only Darwinian thinker to get such treatment in the last several decades. Robert Trivers, Richard Dawkins, and Napoleon Chagnon, are just a few of the Darwinian scholars whose work has sparked reactions that, in the words of Steven Pinker, degenerated into "harassment, slurs, misrepresentations, doctored quotations, and, most recently, blood libel" (119). Cases such as these highlight the continued unpopularity of Darwinian thought outside the natural sciences.

In his contribution to David Buss's *Handbook of Evolutionary Psychology*, Joseph Carroll, a literary Darwinist, described the environment enveloping his fellow adaptationist literary scholars as follows:

Literary adaptationists have emerged and survived on the margins of the literary establishment, like small early mammals creeping about nocturnally among the feet of sleeping dinosaurs. The dinosaurs in this case consist of two populations. One population is composed of the last lingering elements — of old-fashioned, humanist critics – most of them gray, stiff, and fragile ... a little lost and disoriented in the modern world of progressive empirical knowledge (see Abrams, 1997; Carroll, 1999b). The other population is composed of the postmodern establishment, no longer revolutionary but fully ensconced in all the precincts of academic power. This population can be compared to an invading army that has conquered a vast district, ravaged it, left it destitute, and thus deprived itself of the resources necessary to maintain itself on the ground it has conquered ... Life among the dinosaurs is sometimes dangerous and uncomfortable for adaptationist literary scholars, and it is especially difficult for younger scholars struggling to survive in a hostile job environment. Those who do survive have the satisfaction of feeling that they are participating in a large and successful movement oriented to progressive knowledge. (947)

Indeed, the lure to the type of progressive knowledge only a Darwinian approach can offer must indeed be strong for such scholars. Given the reception Wilson and others have received from their opponents, it's small wonder literary Darwinists would be content to creep in the small cracks and shadows of the scholarly realm. Yet despite the slight range of their influence and their small number, such critics have quietly gone about the business of producing consistently useful and interesting work on various aspects of Darwinian literary scholarship.

At first, few literary scholars dared to confirm E.O. Wilson's initial prediction in *Sociobiology* that evolutionary psychology would serve as a force to unite biological behaviorism with the humanities. According to Carroll, the first significant steps in that direction came out of a series of conferences in the mid-1990s organized by Brett Cooke which provided the basis for two collections of essays – *Sociobiology and the Arts* (1999) and

Biopoetics: Evolutionary Explorations in the Arts (1999), which, according to Carroll, "reflect a rather vague and inchoate sense of what an adaptationist perspective might involve" (932). Perhaps due to the emergence of like-minded scholars, or perhaps due to the growing distance in time from the academic-pogrom *Sociobiology* incited, or perhaps due to both, a few notable literary scholars with Darwinian interests emerged as the new millennium approached. Nancy Easterlin was one of the prominent literary scholars to contribute to both of Cooke's collections. She also edited a similarly-themed essay collection of her own: After Poststructuralism, Interdisciplinarity and Literary Theory. Easterlin has continued to publish essays on various topics connected with evolutionary literary theory, and in 2012 she released A Biocultural Approach to Literary Theory and Interpretation, which argued for the inclusion of biological and cognitive perspectives to literary scholarship. In addition to Easterlin, prominent literary scholar H. Porter Abbott helped to legitimize the study of narrative's Darwinian origins by exploring some of the possible ways narrative could have evolved in his 2000 essay "The Evolutionary Origins of the Storied Mind." Abbott's prominence and consistency in publishing articles both Darwinian in nature and articles more traditionally literary in nature have helped to shape the perception of literary Darwinism more favorably within the broader field. Another prominent Darwinian thinker to emerge was Brian Boyd, who, in addition to many essays espousing adaptationist theories, published a full-length study of evolutionary theory as it relates to narrative: *On* the Origin of Stories (2009). In it, Boyd presents a novel theory on the role of attention in the storytelling context as a Darwinian clash between the storyteller and the listener for the audience's attention – a clever echoing of the struggle Aristotle reflected from his Hellenistic-agonistic framework. Boyd also presents convincing arguments for the positive adaptive value of fiction in humanity's collective Darwinian struggle, appropriately fitting

stories in the center of the discussion of important cognitive adaptations. Joseph Carroll himself has also been a steadfast and steady proponent of literary Darwinism from the publication of *Evolution and Literary Theory* in 1995. He has continued to publish articles and books in the same vein, notably 2011's, *Reading Human Nature: Literary Darwinism in Theory and Practice* and 2004's *Literary Darwinism: Evolution, Human Nature, and Literature*, wherein he charts the history of Darwinian thought as it relates to the long history of narratology, dating all the way back to Aristotle's day.

Additionally, thinkers from outside the siloed walls of English departments have crept their way into the field of narratology. Jerome Bruner was one of the first noted psychologists to begin to re-recognize the importance of stories to the human psyche following the cognitive revolution. His 1990 book based on his Jerusalem-Harvard Lecture series, *Acts of Meaning*, centers around the importance of folk psychology—essentially the stories we tell ourselves about ourselves, each other, and our cultures. Bruner's work demonstrates how folk psychology helps individuals build meaning within their cultural environments. Cognitive psychologist Steven Pinker, in 1997's *How the Mind Works*, offered an oft-quoted and intriguing possible explanation for the universal enjoyment of fiction as a sort of pleasurable, fortuitous evolutionary spandrel that,⁴ similar to music, acts like a kind of cognitive candy, allowing us to, "See breathtaking landscapes, hobnob with important people, fall in love with ravishing men and women, protect loved ones, attain impossible goals, and defeat wicked enemies" (539). Yet Pinker also allows for possible adaptationist explanations: "Literature, though, not only delights but instructs ... A Darwinian would

⁴ A spandrel is a concept in evolutionary biology, first proposed by Stephen Jay Gould and Richard Lewontin, that proposes some traits are byproducts of the evolutionary process rather than being selective features themselves. See Gould & Lewontin "The Spandrels of San Marco and the Panglossian Paradigm: A Critique of the Adaptationist Programme" (1979).

say that ultimately organisms have only two [goals]: to survive and reproduce. And those are precisely the goals that drive human organisms in fiction" (541). Similarly, evolutionary psychologists like Robin Dunbar have noted the striking similarities between the needs and goals of humans in the real world and the plots of their fictional counterparts (Dunbar 170). Another prominent cognitive psychologist Keith Oatley, whose expertise is particularly focused in the psychology of emotions, has made a life-long study of the psychology of fiction and also adopts Darwinian perspectives in *Such Stuff as Dreams: The Psychology of Fiction*. Additionally, in his recent article, "Fiction: Simulation of Social Worlds," Oatley lays out a convincing case for fiction as a potentially adaptive cognitive tool that helps people improve their social understanding, their ability to build empathy, and their mental modeling of possible future scenarios. Thus, narratives have emerged as a fruitful ground of exploration for cognitive scientists to help them explore the possible origins of Gottschall and Carroll's evolved "literary animal."

Despite the hostile environment that still surrounds literary Darwinism, there exist cracks and shadows where bold narratologists quietly creep, occasionally corresponding with like-minded thinkers outside their domain, slowly bringing Wilson's vision of a biologically-informed approach to the humanities closer to fruition. These narratologists still bear the legacy of the formalist desire to understand narrative's systems and devices; they bear the scientific approach of structuralist thinking; and, as a result of the cognitive revolution, they bear new understanding of the human mind. One wonders whether Carroll could have possibly foreseen the current state of literary Darwinism over two decades in the future when he optimistically wrote in 1995,

Barring a second Dark Ages, the future belongs to science, not to the irrationalist obstructions of the postmodernists. Being part of a population that will provide descendants to the future offers motive and consolation, but the chief motive for

adaptationist critics is the stimulus of meeting the two challenges that are immediately in front of them: (a) to assimilate information outside their own field of expertise and (b) to formulate the elementary principles that are specific to their own field. (Carroll 947)

And it is just this challenge that attracts the few scholars that are quietly going about the business of synthesizing these disparate and complex fields to advance our collective understanding of narratology's place in the study of human intelligence. Fitting, it would seem then, that we would find some of the more cutting-edge narratologists, like Marco Caracciolo, back at Lok's campfire, pondering fictional representations of our very earliest proto-human narrative thought.⁵

⁵ See Marco Caracciolo's 2016 article "Literary Pro-Humans: Cognition and Evolution in London's *Before Adam* and Golding's *The Inheritors,*" wherein he offers close-readings of two narrative modes portraying proto-human narrative thought as a window to the early cognitive stages of our evolutionary past.

2: Suspense

On the Nature of Suspense:

The key component in a theory of the universal structure of plot content must be the narrative suspense that catches and holds the interpreter's interest. It is this component that generates enough attention in a story's recipient that the interpreter will undertake the complex cognitive processes required to produce mental simulations of characters, settings, times, and objects in a storyworld.6 Among the early structuralists, Eric Rabkin was unique in centering his focus on suspense. He noted an important truism about literature that has often been ignored by theorists, perhaps because of the truism's inconvenience: "When there is no interest, books will not get read" (3). Writers often shrug their shoulders here as well. I found this problem almost entirely ignored during my three-year MFA program. It was the figurative elephant in the room in almost every workshop, especially when characters were lacking that seemingly-ineffable element that engages the reader or when the story was, simply put, boring. I suspect writers ignore talking about this problem—a problem they all know is perhaps *the* most important problem a writer must confront because no one has an easy answer for it. Rabkin's truism proved so difficult for structural narratologists to pin down that many noted structuralists ignored the idea of finding structure in plot content altogether; instead, most aimed at clearly defining features like narrative postures, focalization,⁷ and other more approachable structural elements. After all, where do we begin to describe the structure among the set of all things interesting?

⁶ Erin James defines a storyworld as, "A mental model of context and environment within which a narrative's characters function." See *The Storyworld Accord* 253.

⁷ The term focalization, coined by Gerard Genette, draws a distinction between two questions that deal with narrative perspective: who sees and who speaks? A narrator outside the storyworld may be "speaking," yet simultaneously directing the reader to visualize the text from the perspective of a character inside the storyworld. This locus of mental simulation is the text's focalization. See also pg. 81.

Could such a thing be universal? These are questions that must be properly addressed in order to describe the universal structure of plot.

In *On the Origin of Stories*, Brian Boyd describes one of the most important points to be reckoned with in understanding universal structure in plot content. He describes a crucial aspect of storytelling by framing a story as a competition between the storyteller and the listener as a battle for the listener's attention (Boyd 219). Yet Boyd doesn't specifically theorize any universal narrative component that storytellers employ in this battle. One key reason fictional stories capture our attention is that they are distilled representations of reality, and because they're so distilled, a storyteller can edit the mundane, unimportant, and insignificant out of the story. This must be the storyteller's fundamental task—to distill the narrative to a representation that contains only the elements necessary to capture the listener's interest. Otherwise, the listener will turn their attention to matters that are either more interesting or more pressing. But out of the infinite set of possible fictional occurrences, what elements to keep and what elements to edit out?

For stories to ever have been elevated to the top slot in any of our ancestors' hierarchies of attention, they had to have generated tremendous interest to their listeners. One only need imagine our savanna-dwelling proto-human ancestors walking across terrain where a vast array of predators was waiting for them to lower their guard, presenting all manner of terrible threats, and representing only one category of obstacles to proto-human survival. Studies that follow visual tracking indicate that humans innately pay close attention to elements in their environment that are historically adaptive (New et al. 16598 & Jackson et al. 1011) and that we form hierarchies in order to judge which environmental elements we should attend to (Klein et al. 306). With so many possible threats about, I contend that attention-diverting fictional narratives needed to encode either

interesting or adaptive information consistently enough for the practice of telling stories to be retained in human behavior. Boyd's framing of attention as a Darwinian contest is apt. Even if we set aside immediate environmental threats, spare time is perhaps our most precious resource, and allotting it to a fictional narrative was, and surely still is, a costly endeavor. Framed in modern terms, one could compare an undergrad spending his time consuming tv series after tv series on Netflix with a diligent student using that same amount time studying at the library. Which student is better suited to thrive in the university environment? Get a more lucrative job? Have access to better resources in the future? Each story has a cost, and in a dangerous world, that cost had to come with some adaptive feature to offset the loss.

Likewise, as Boyd points out, storytellers had to figure out how to retain the listener's attention or risk being ignored or losing status within their group (219). This requires storytellers to have some intuitive sense of what will interest the listener and the ability to refine that sense to create better stories than their competitors; otherwise, they risk being ignored and denigrated. Presumably aspiring storytellers would begin developing this understanding with the first narratives they assimilated early in life. Given that structuralists have yet to decipher a universal structure to plot content, this understanding would have to be intuitively grasped in the same way Universal Grammar is intuitive during language acquisition (*Language Instinct* 22). Thus, as Roland Barthes stated, the same stubborn challenge remains: "Either narrative is a random assemblage of events . . . or else it shares with other narratives a common structure, open to analysis however difficult it is to formulate" (*Structural Analysis* 238). A grammar of stories, like the grammar of language, must be universal if it exists at all.

The study of human universals can be a contentious issue within the humanities, though some points exist that should evoke little controversy. Humans share common DNA, the same bodily structures, and radically similar behavior patterns despite our species' amazing ability to adapt to profoundly diverse environmental and cultural surroundings. The idea of human universals gets particularly controversial when discussing cognitive processes. Noam Chomsky has often addressed this controversial issue when writing for lay audiences:

No one would take seriously the proposal that the human organism learns through experience to have arms rather than wings, or that the basic structure of particular organs results from accidental experience. Rather it is taken for granted that the physical structure of the organism is genetically determined ... The development of personality, behavior patterns, and cognitive structures has often been approached in a very different way. It is assumed that in these domains, social environment is the dominant factor ... But human cognitive systems, when seriously investigated, prove to be no less marvelous and intricate than the physical structures that develop in the life of the organism. Why, then, should we not study the acquisition of a cognitive structure such as language more or less as we study some complex bodily organ? (*Reflections on Language* 9)

Indeed, the similarity in brain structure from human to human is what allows for the reductive study of the brain to begin with. The anatomy of the human brain is so structurally similar that any student marginally trained in neuroanatomy or cognitive psychology can immediately and reliably diagnose damage to a region of the neocortex called Broca's area upon encountering a stroke patient with nonfluent aphasia who has lost the ability to speak (Riesberg 351). Neurologists Oliver Sacks, V. S. Ramachandran, and Michael Gazziniga have offered numerous case studies of specific neurological deficits that occur when certain brain areas are impacted by trauma, stroke, tumors, or other forces. Careful study over the centuries has demonstrated that neurological deficits manifest in predictable behavioral outcomes. That human beings share similar underlying cognitive structures is long past argument.

Likewise, it would be equally preposterous to deny the influence of culture on human behavior, despite our similar underlying neuroanatomy. Here's merely one example: among the Satere-Mawe people of the Amazon, adolescent males subject themselves to a painful ritual during which they willingly place their hands into gloves filled with bullet ants, and, in order to prove themselves eligible for marriage or important roles in the tribe, they must betray no emotion while they are savagely stung numerous times by what is reportedly the most painful insect sting in the world (Bosmia 271).

Meanwhile, high school juniors and seniors in New Jersey rent tuxedos or buy evening gowns and go to prom. These are clearly two vastly different cultural behaviors that bear almost no similarity, and, at first glance, would seem to have nothing in common. Yet, if we look at both behaviors in the context of anthropologically-established human universals, they both fall firmly into the category of rites of passage (Brown 139). To assert universal qualities to human behavior is not to ignore or negate the manifest differences of cultural expression. Cognitive psychologist Steven Pinker makes this point when he addresses how seemingly-unrelated behaviors may have underlying universal components:

Familiar categories of behavior — marriage customs, food taboos, folk superstitions, and so on — certainly do vary across cultures and have to be learned, but the deeper mechanisms of mental computation that generate them may be universal and innate. People may dress differently, but they all may strive to flaunt their status via their appearance. They may respect the rights of the members of their clan exclusively or they may extend that respect to everyone in their tribe, nation-state, or species, but all divide the world into an in-group and an out-group. (*Blank Slate* 39)

The revelation of a Universal Grammar innately present during child development is only one example of a linguistically-focused, culturally-shaped human universal. Narrative is another. And if there is any hope of discerning the universal structure of plot content, it would only make sense to avoid looking for it at the superficial level of cultural

expression—where manifestations of similar behavior can be as diverse as bow ties and bullet ants; rather, narratologists should seek it out at the level of, "the deeper mechanisms of mental computation that generate them."

Additionally, the quality of being universal cannot be the only consideration when looking for the underlying universal grammar of plot content. One only needs to think for a few moments about the realities of human universals, both behaviorally and biologically, to discover that most universals are entirely uninteresting. Five fingers? Not so captivating. That we all drink water? Hardly enthralling. Puberty? Getting warmer, perhaps, but not necessarily on the grounds of the universal itself. This is not the kind of stuff to draw anyone's interest away from their immediate survival needs and social concerns.

There's also the consideration that things individuals consider interesting are incredibly diverse and rarely universal. Some people actually enjoy studying narrative enough to travel—often trans-continentally and annually—to attend conferences where they can discuss the most abstract details of narratology. Most people couldn't care less. Other people collect stamps. Still others are fascinated by birds, pygmy rabbits, or monster truck rallies.

Thus, there are very uninteresting universals and very interesting (to some) non-universals. Instead of lingering in these areas, any theory of a universal structure of plot content must be sought at the level of universally-interesting universals. One such element exists in the form of narrative suspense.

The Anatomy of Grammatical Plot Structure:

One narratologist who did propose suspense as the cornerstone element of all narrative was the structuralist theorist Eric Rabkin. In his introduction to *Narrative Suspense*, Rabkin puts it thus:

Of course, our written language is linear. And of course, then, it must present progressions. But he [the reader] is into this progression because, having been interested by the title, he waits now to find out more. "And then?" [he asks] He waits. And he reads while he waits. This is suspense. (5-6)

What Rabkin suggests is that one must be interested by a narrative in order to continue the process of engaging with that narrative. Put another way, in the context of Boyd's concept of stories as competition for the reader's attention, a text must pose a question to the reader that is sufficiently engaging that the reader will forego all other activities to participate in the process of learning the answer to the question posed. Rabkin explores this concept in depth, arguing that the foundation for suspense is the "subliminal knowledge" that underpins the reader's sense of uncertainty (Rabkin 9). A more familiar modern terminology for Rabkin's subliminal knowledge would be schema and script material that makes up our baseline knowledge of the world we live in. To offer a computing analogy, a fictional narrative offers a situation for us to run, and we run it using the constructs we carry with us, as suggested by Marie-Laure Ryan's principle of minimal departure.8 Suspense arises because people have real-world constructs against which to judge fictional scenarios: for example, readers are able to process the possible dangers for the old man in Hemingway's The Old Man and the Sea as the hooked marlin begins to pull him further from shore in his small boat. Hemingway's readership would grasp the dangers of being in a boat far from land – the old man could capsize, catch a dangerous current and remain adrift, get caught in dangerous weather, etc. — and readers stay engaged with the story to uncover the canonical outcome of the text. Rabkin isn't the only structuralist scholar to

⁸ In *Possible Worlds* (51), Ryan describes the Principle of Minimal Departure as the process whereby we construe the central features of a textual world based on our representation of the actual world. Essentially, readers project their representation of the real world onto a text until the text directs them to do otherwise. Ahab, for example, would have two legs in the reader's mind until Ishmael describes him as possessing whale-bone leg. See also: Footnote 3, pg. 19.

suggest this element—narrative suspense—as fundamental to narrative. Robert Scholes, while discussing Barthes's hermeneutic code,⁹ wrote the following almost as an aside:

A story may be said to exist by virtue of starting actions and raising questions which it then refuses to complete for a certain period of time. A story consists of barriers to the completion of actions, and various lures, feints, and equivocations which delay the answering of questions. (154)

Within Barthes's concept of hermeneutic code, he suggested that narrative has three parts — *enigma, delay,* and *disclosure* — during which time, the reader experiences the type of suspense Rabkin is suggesting (*S*/*Z* 84). Rabkin, Scholes, and Barthes are all saying similar things: a story exists when actions start and raise questions for the reader, which are slowly brought toward an answer by means of the devices in the text that partly answer or delay that answer, and culminate with a resolution where the answer to the main question is finally disclosed.

In 2001, Marie-Laure Ryan performed the most in-depth exploration of narrative suspense since the structuralist fascination with it and the poststructuralists' subsequent abandonment of it. Ryan studies the phenomenon of suspense as a form of "temporal immersion" and defines it thus:

Temporal immersion is the reader's desire for the knowledge that awaits her at the end of narrative time. Suspense, the technical name for this desire, is one of the most widely appreciated literary effects, but also one of the most neglected by narratologists, in part because of its association with popular literature, but mainly because of its stubborn resistance to theorization. (*Virtual Reality* 141).

Alhough, Ryan's definition is technically correct, like all definitions, it excludes some points that bear mentioning. The "knowledge" that awaits the reader at the end of the story cannot be the only consideration when thinking about suspense. Certainly other elements

 $^{^{9}}$ One of Barthes' five codes for structural interpretation of narrative plots. Others concern the behavior of the characters, the cultural connotations, the themes, and the plot's actions as a sequence of events. See Barthes S/Z, or Scholes 154-155.

draw the reader's interest, and probably too many to name specifically; but I add a few obvious elements here for the sake of elaboration: the reader's desire to witness something interesting; the anticipation of the moment of resolution; the desire to affirm or disaffirm predictions; the hope for a certain outcome for the situation or characters involved; the enjoyment of the process of empathizing with characters along the way. There is also an additional element that I will visit in greater detail shortly, but for now, let us call it a physicality or sensation about the experience of suspense that can captivate a reader. All of these elements are part of what awaits the reader, not just at the end of narrative time but during the process of getting there as well.

Like all of her work, Ryan's study of suspense is thorough, systematic, thoughtful, and illuminating. She offers a useful metaphor of how a reader experiences suspense by comparing it to a sports fan experiencing an unfolding game: though readers and sports fans may both bristle at the comparison, the similarity is striking:

Figure 2.1 Comparison of Suspense Between Sporting Events and Stories. (adapted from *Narrative as Virtual Reality* 141-142)

Sports:

- Spectators pick a team/player and wish for a positive outcome (victory).
- Rules, plays, constructs (field, court, equipment used, etc.), and the passing of time constrain the number of possible pathways the game can take.
- The constraints reduce the game to a play or series of plays that produces a binary of win/lose.
- ➤ The final play is played, and a resolution occurs.

Stories:

- Readers identify with a protagonist and hope for a positive outcome.
- Events, Actions, Moves, Happenings, etc. constrain the number out possible outcomes for the story.
- Like the constructs in sports, setting, time, and rules of the storyworld represent constraints as well.
- The constraints narrow the story to a small window of possible outcomes.
- ➤ The story is played out to resolution and the narrative concludes.

Both scenarios involve three key components that generate suspense for spectators and readers: a starting question, actions that constrain the possible answers to this question, and a resolution. I would also add here that the process of identifying with a team or characters in sports and narratives is not a necessity. As surely as sports fans will watch a game in which they have no rooting interest just to see how the game unfolds, lovers of fiction will still read a story where they don't feel any particular connection to the characters—though neither are probably the dominant mode of experience.

Additionally, Ryan recognizes that suspense comes in several forms and names four of them as follows: What Suspense, where the interested reader wants to know what will happen; How or Why Suspense, where the interested reader cares how things come about; Who Suspense, where the interested reader wants to solve the question of who did it (whatever it is); and Meta-Suspense, where the interested reader wants to discover how the author will finish the tale (143-145). Ryan's discussion of suspense is one of the first to delve deeply beyond the superficial narratological term "suspense," in order to treat it as though it is not a unidimensional element. She also recognizes, quite astutely, that the representation of suspense is exactly that, a narrative representation of a real-world phenomenon with which we are all well-familiar. We experience non-narrative suspense constantly in varying degrees of intensity, whether it be wondering if we'll get a promotion or get fired; waiting for our sister to deliver her baby; when we meet the eyes of a potential lover; while watching a potential accident unfold – the possible suspenseful permutations of the real world are nearly infinite, and thus, manifest in differing levels of intensity and sensation, almost all of which catch our interest in the real world.

Suspense in this sense is best understood, not as a narrative technique or some epiphenomenological byproduct of a narrative. It is an emotion a reader experiences empathically when engaging with a narrative in the same way we experience happiness, sorrow, concern, fear, disgust, or anger while simulating storyworlds. Narratologist Suzanne Keen observes that empathy and emotions are never easy narratological problems to pin down, and are often treated as elements distinctly different from suspense:

Empathy with a situation responds to plot as much as to character, though it often finds its focus in a character's feelings. Narrative theorists know how difficult it is to disentangle plot from character, for without events, the agents of fiction are inert. Reading for plot certainly involves attention to character, but it engages with action-sequences, development of complex circumstances, and the hoped-for resolution of suspenseful enigmas. As psychologist Richard J. Gerrig observes, "to a large extent, a theory of suspense must include within it a theory of empathy," since the motivation for caring about the consequences of actions is bound up in "active thought" about characters' fates (Experiencing 80). Yet liking or approving of the characters may not be a requirement for the situational empathy that occurs for some readers. (Keen 79)

The problem Suzanne Keen highlights here is one that has often been leveled at theories of suspense as the foundational element of narrative: critics have argued that it neglects the emotional element of narratives. But suspense-focused readings of narrative don't neglect emotion, they just focus on the crucial emotion that generates reader interest: suspense. This is surely a big part of the "stubborn resistance to theorization" to which Marie-Laure Ryan refers. Narratologists regularly miss the mark on suspense because they incorrectly frame it as both a uniquely narratological phenomenon and as something separate from the types of emotions that we readily accept as empathic emotional experiences while reading, like happiness, sorrow, concern, fear, disgust, or anger. Hence the stubborn resistance to theorization. Even a narratologist with Marie-Laure Ryan's skill for systematizing would surely struggle to formulate a literary theory of narrative love. Emotions are impossible to classify perfectly: do we begin with the way a character might love her dog, her job, her boyfriend, her mother, or the smell of roses on a rainy spring day? Yet all of those things fall into the broad emotional categorization of love. Similarly, suspense exists when a text

poses a reader a question about a character's potential new lover; his dilemma when he finds out his wife has been embezzling from the law firm where they both work; his impressions of his strange new neighbor; his decision to freeclimb a thousand-foot cliff; and as Chekhov famously once put it, the presence of that rifle on that wall. None of these cues to suspense resonate the same way emotionally, just as none of them would in real life.

Moritz Lehne is a neuroscientist studying the underlying emotional impact of art. One of his interests is narrative. "A key emotional response to narrative plots," Lehne says, "is suspense. Suspense appears to build on basic aspects of human cognition such as processes of expectation, anticipation, and prediction" (Lehne et al. 1). Lehne and his team of researchers analyzed fMRI data to examine many of the neural processes underlying emotional experiences of suspense while subjects read a suspenseful literary text. Lehne's results seemed to match key parts of the intuitive theories of suspense-focused narratologists, and they indicate that, "Text passages that are experienced as suspenseful engage brain areas associated with mentalizing, predictive inference, and possibly cognitive control" (Lehne et al. 13). In other words, as readers experience suspense, they're predicting outcomes for the questions the text is posing, exactly as Rabkin hypothesized. Lehne isn't alone. Matthew Bezdek has been doing similar fMRI studies to test the hypothesis that narrative suspense serves to narrow experiencers' focus during moments of increasing suspense. His work provides, "neural evidence that perceptual, attentional, and memory processes respond to suspense on a moment-by-moment basis" ("Brain Activation" 73). Bezdek's work also shows that this narrowing of attention and focus heightens recall of narrative elements ("Neural Evidence" 344), sharpens visual focus away from the periphery ("Brain Activation" 78), and increases processing overall in the center of the subject's visual field (79). This offers neurological support that an experiencer of a

suspenseful narrative not only predicts outcomes, but narrows their focus to attend to the suspenseful elements and remembers critical events more accurately. In addition to the neurological studies, Katrin Riese and Mareike Bayer were able to demonstrate that physiological signs, specifically pupil dilation, are regularly manifested by subjects reading suspenseful texts (Riese et al. 225) and that there were clear correlations between pupil diameters and the subjective suspense ratings the research subjects applied to the passages read.

While the neurological research of these groundbreaking specialists in cognitive poetics is still in its infancy, it is supportive of many of the underlying theories posited by the structural narratologists decades earlier. Suspense seems to focus the experiencer's attention on the most important elements of unfolding scenarios, allowing for better centrally-focused visual perception, facilitating better retention of memories, and focusing cognitive awareness on prediction of outcomes. All of these seem to support, not refute, Rabkin's intuition that suspense was the underlying universal element of fictional narratives.

With suspense centralized as the prime element in a universal grammar of plot content, the parts of speech, so to speak, of the grammatical plot come into clearer focus.

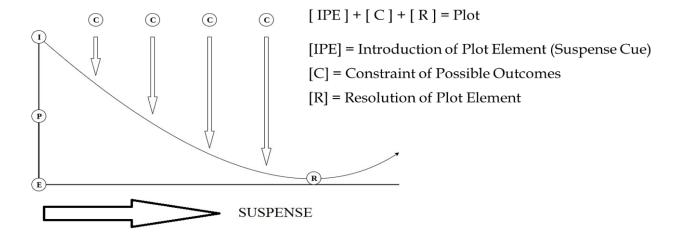
Marie-Laure Ryan, in describing suspense narrows the possibilities:

At the beginning of a story, everything can happen, and the forking paths into the future are too numerous to contemplate ... suspense increases as the range of possibilities decreases ... narrative devices constrain the horizon of possibilities in the same way rules of games determine what can happen ... until finally, a polarization marks the beginning of the climax in the action. (*Virtual Reality* 142)

Essentially, what we see in Ryan's description is similar to Barthes's hermeneutic code. The beginning, with broad pathways to possible futures, highlights one novel area on which the reader is cued to take interest. Barthes calls this initial plot element *enigma* (*S*/Z 84). Ryan

raises a key point that is absent in Barthes's three-part formulation by emphasizing the constraining of possibilities heightening suspense, where Barthes highlights *delay* as the second grammatical element in the sequence (*S/Z* 84). Delay may very well be a part of the equation, but delay can only be a grammatical plot element insofar as a reader is willing to tolerate that delay: if delay were the key element of the equation, a narrative that indefinitely delayed the resolution would remain indefinitely compelling, which clearly isn't the case. Constraint, on the other hand, as Ryan points out, increases the level of suspense by reducing the number of possible outcomes to a consequential few. Lastly, what Barthes calls *disclosure*, is the structural point in the plot where the outcome is revealed, similar to Ryan, but Ryan instead highlights the binary of success or failure rather than the final answer following that polarizing. My view aligns more closely with that of Barthes. Thus, I have rendered the following diagram of the universal structure of plot content according to my adjustments to earlier theorization:

Figure 2.2 Visual Representation of Universal Structure of Plot Content with Components.



The X axis represents the introduction of a plot element with a broad array of possibilities in play; the passing of text-time reveals constraints, heightening suspense along the Y axis;

until the initial plot element introduced is resolved. The totality of ways texts cue the element of suspense is a diverse topic—one far too broad to cover in full detail here.

Certain aspects of the topic need to be covered, though, in order to define the Universal Plot Grammar's parts of speech. We begin, therefore, as Philip Roth suggests, at the beginning—the *subject*, which in our case is the *introduction of plot elements* or [IPE]. I'll first discuss a few important points about the suspense of a storytelling situation before moving on to some common ways texts generate IPEs.

Social Suspense & The Grace Period: Before discussing the IPE directly, an important point must be raised about the social currency stories inherently hold. The promise of a story grabs attention, not uniformly of course, but certainly universally. Storytelling situations contain a baseline element of suspense that is embedded in the very storytelling act itself.

If we think of stories in their evolutionary contexts, we surely cannot forget that oral storytelling, historically the dominant mode of story transmission, was (and still is) a social act. This was also often likely an act that attracted the attention of many participants at a time. In discussing unwritten discourse rules, David Herman outlines the process by which participants in a conversation intuitively decide when it is appropriate to "take the floor" in a conversation and when it is appropriate to relinquish the floor to other conversants (Herman 188). Herman uses a similar analogy for conversation to Brian Boyd's model of storytelling as a competition for attention: the time each participant spends, both speaking and listening, is a currency implicitly negotiated between participants in a conversation. Storytelling is, just as a conversation is, a cooperative act between speaker and listener, where a speaker (or group of speakers) must take the floor and the listeners must implicitly

agree to remain a quiet member of a receptive audience. Additionally, as Herman argues, "The scope or richness of what counts as a turn will vary across different contexts of talk" (189). In a storytelling situation, an audience collectively would agree to cede the floor to a floor-taking narrator for a long period of time, but the larger the turn afforded the speaker and the more listeners, the greater the expected payoff in terms of value. Thus, a storyteller would be granted a certain amount of baseline attention by virtue of the social currency granted by the social situation. One of the ways such large amounts of implicit social currency would be negotiated is through the phenomenon of behavioral contagion. Onlookers would witness the attention of group members being directed at the storyteller, and their attention would be similarly drawn to the storyteller as well. According to psychologist Andrew Gallup, who has studied this phenomenon extensively, "One effective means by which individuals track features in the local environment is to monitor the visual attention of others through the assessment of gaze direction" (Gallup et al. 7245). His research indicates that the visual attention of others can be contagious, and it also demonstrates that the power of this contagion is affected by the size of the group orienting their vision in a certain direction (7246). In essence, we are behavior copiers, and it seems the more people present in a group orienting their attention in specific direction, the more likely a passerby is to direct their gaze similarly. Thus, an individual's attention is likely to be co-opted by the collective focused attention of the group around them. If a storyteller begins telling a tale on the street and several people begin to listen, others are likely to gather. This effect helps to partially explain why there is an underlying level of suspense inherent in the storytelling situation itself. If others are willing to cede their attention, we're likely to join them. Another likely part of this inherent magnetic power of the storytelling situation is enculturation. Most Westerners contain scripts from our earliest childhood of a

teacher, parent, or other caregiver gathering a group of children for story time, whether it be an extemporaneous or improvised narrative or a reading directly from a picture book. Though the specifics of the storytelling situations may vary from culture to culture, narrative and storytelling are human universals (Brown 132), and these social situations are certain to encode the expectation of shared attention directed toward the speaker in a similar manner.

It is also important to consider how the expectation of suspense gets embedded into the structures surrounding narratives as they evolve into differing forms of distribution in modern societies. In the same way an attentive crowd of onlookers would signal an event valuable enough that an individual should direct their attention toward it, a marquee outside a theatre would signal passers by of the attentional value of a play being staged within. Likewise, the millions of dollars invested in production, the marketing campaigns, the collective work of hundreds of people, as well as the very physical structure of a movie theater itself — all of these trappings surrounding a major studio film perform a similar social function to a sizeable crowd gathered attentively around a campfire. Similarly, the cache of a major publishing house's printing of a novel signals to potential readers that the story has been vetted by people professionally dedicated to selecting stories that are worth a reader's time and attention. In all these modern cases, the social situation is the same as the conversations described by Herman or the narratives discussed by Boyd: we trade our silence and attention for a story that keeps us engaged. Authors explicitly speak of the implicit "contract" with the reader, and smart authors test the bounds of this contract at their peril. Readers read with the expectation that their efforts will be worthwhile and trade their attention only insofar as they believe that contract is being fulfilled. The audience or reader brings with them to the social situation of a narrative a certain amount of attention

they're willing to spend on that narrative, regardless of the form it's in. The grace period each person is willing to give a story before the story itself begins to engage their interest is doubtless affected by innumerable factors from attention span to personality to age, culture, sex, personal interests, life experience, and who knows how many other factors. But we give stories our attention at the outset, even before they cue suspense within the narrative. This too is suspense.

The Title: One of the first suspense elements Rabkin explores in his study is a story's title. His exemplar is Melville's novel *Typee*, which Rabkin suggests, written in full (*Typee: A Peep* at Polynesian Life During a Four Month's Residence in A Valley of the Marquesas), encodes several cues to suspense that would capture readers interested in literature of the sea and exploration (5). Yet, a monstrous seventeen-word title like this surely encodes other elements of suspense for Melville's target audience – adventure in a general sense, what Polynesian life might be like, and perhaps even a question like, "Where on Earth are the Marquesas?" It would be difficult, if not impossible, to extract all the potential cues to suspense encoded in a title, especially if one endeavors to delve into the potential interpretations and misinterpretations each potential reader might bring with them from a schematic and script standpoint. What Rabkin gets right here is that titles often begin the process of cueing suspense from the outset – especially good titles. The modern pattern of aggressive marketing of stories, in books, films, comics, video games, and various other media also attempts to ensure that potential consumers come to the table with their interest already piqued. Movie trailers, advertisements, viral marketing campaigns, and various other modern techniques are doing the job of generating a pre-loaded expectation of

suspense that was once mostly encoded in the weight of a title and the word-of-mouth transmission of the name representing the story offered under that moniker.

I'll echo Rabkin here by exploring the title of Karen Russell's short story "St. Lucy's Home for Girls Raised by Wolves." Though still a long title as titles go, Russell's title for this story is slightly less than half of Melville's, at eight words. Yet one could make an argument that this title cues just as much suspense, if not more. A recent parallel evolutionary history with wolves ensures a connection with the wolf that ensures schematic knowledge of the animal that we might describe partially as mystery, danger, fascination, and a wildness that might represent freedom and natural beauty, among a host of other things. "Girls Raised by Wolves" suggests other suspenseful elements when put into contrast with "St. Lucy's Home." The schematic information that the Christian academy cues suggests a strict socializing force that directly contradicts the wild imagery wolves and girls raised by them calls to mind. The story hasn't even properly begun, and already the reader has a generalized picture of the conflict that will play out in the story. Additionally, there is a sly humorous undertone that the concept of a pseudo-animalistic population of girls raised by wolves could be so vast as to warrant a school specifically adapted to bring this population into society. Like much of Russell's writing, a Calvinoesque absurdity runs through the story, and it is hinted at here in the title. This title introduces the plot element, albeit non-specifically, setting the stage for the opening few lines where the girls run roughshod through the campus of the parochial academy while the nuns look on with a resolute, knowing calm as the girls' process of enculturation begins. Russell, like many authors before her, refuses to wait till the first sentence of the story before setting her hook. If not an IPE in its own right, this title certainly foreshadows one.

The Introduction of Plot Elements [IPE]:

At the start of each story, the narrator operates with the baseline level of attention the interpreters allot to the social storytelling situation plus the anticipation their prior knowledge of the narrative informs them to bring with them. For example, a moviegoer who has enjoyed past titles by a certain director might allot that director a longer grace period than a viewer with no knowledge of that director's work. Similarly, a sci-fi fan would likely more patiently await the interesting part of a promised sci-fi narrative than a reader without that proclivity. Regardless, the grace period is limited. At some point early in a story, the text itself must engage the interpreter or the interpreter will lose interest. A title, suspense-laden as it may be, is not a narrative element any more than the suspense of a promised narrative can be said to be part of the narrative itself. Marie-Laure Ryan explores the theoretical dynamics of plot by echoing Barthes, Chatman, and Prince, who all seem to agree that a narrative must present a movement of states – a progression that changes the storyworld from one state to another resultant state (*Possible Worlds* 125). Narratologists seem to agree that a storyworld cannot be static: for a narrative to exist, something must change. The anticipation of a story cannot do this, and the title cannot do this: the narrative must do this. Narratives adopt differing strategies in making the narrative's first meaningful movement, but the most basic formulation for what constitutes an IPE is a change of state plus a suspense cue.

$$\Delta$$
 State + Suspense Cue = [IPE]

I've identified three common ways for moving a narrative from its opening to the first IPE.

In Media Res: A tried and tested method for introducing an initial plot element is to begin with things in motion, already changing states. Karen Russell's aforementioned "St. Lucy's Home for Girls Raised by Wolves" offers an excellent example of a story that wastes no

time by introducing a plot element already in progress. It begins with the following epigraph:

Stage 1: The initial period is one in which everything is new, exciting, and interesting for your students. It is fun for your students to explore their new environment.

-from The Jesuit Handbook on Lycanthropic Culture Shock

The epigraph mimics a hypothetical guidebook written for the Jesuit teachers at the institution, inviting the reader to take up the perspective of the teacher in imagining new students (cued by the words "Stage 1: The initial period") exploring the new environment, presumably the school. The first three sentences of the text proper produce the IPE:

At first, our pack was all hair and snarl and floor-thumping Joy. We forgot the barked cautions of our mothers and fathers, all the promises we'd made to be civilized and ladylike, couth and kempt. We tore through the austere rooms, overturning dresser drawers, pawing through the neat piles of the Stage 3 girls' starched underwear, smashing lightbulbs with our bare fists. (Russell 225)

In the first two sentences, the narrator declares the pack's aggression and forgotten promises. The third sentence offers the first change of state: "We tore through the austere rooms," changing the status quo from one of austerity and starched underwear to broken lightbulbs, and presumably bloody fists. These brief opening lines could cue the reader to ask any number of reasonable questions. The specifics of such an array of questions aren't particularly important beyond the matter of whether the text provokes interesting enough questions, whether implicit or explicit, for the reader to stick around. What is particularly suspense-provoking in this opening is that it seems to offer an array of potential questions that pertains to both the immediate situation (the wild abandon with which the pack appears to transgress the rules of this new world) and the larger plot content (the assimilation of a wild pack of girls raised by wolves into a world where they are expected to be "civilized and ladylike, couth and kempt").

Establishing a Baseline: Another common method for introducing the first plot element is allotting some textual space to establishing the state of the storyworld prior to the first suspenseful change to it. In contrast to Russell's "St. Lucy's" where the reader arrives on the scene to the chaos of breaking lightbulbs and turning out of drawers, a narrative that establishes a baseline lets the reader know a little bit about the storyworld before moving to alter it in a suspenseful way. Here are a famous few opening lines from a narrative that follows this well-trod path:

In a hole in the ground there lived a hobbit. Not a nasty, dirty, wet hole, filled with the ends of worms and an oozy smell, nor yet a dry, bare, sandy hole with nothing in it to sit down on or to eat: it was a hobbit-hole, and that means comfort. (Tolkien 3)

Tolkien's famous introduction to Middle Earth doesn't change the state of the storyworld in its opening few lines; rather, it works to establish some ground rules for this storyworld — such as that hobbits live in holes, and comfortable holes at that. The narrator of *The Hobbit* continues to establish the baseline of this unfamiliar storyworld by describing the hole as a humble if comfortable home in a pastoral setting. He takes almost two paragraphs to describe the hole, the land around the hole, and to introduce the hobbit as a Baggins, before stating that, "The Bagginses had lived in the neighbourhood of The Hill for time out of mind, and people considered them very respectable, not only because most of them were rich, but also because they never had any adventures or did anything unexpected" (4). Thus far, all the information presented by the narrator works to establish the baseline of the storyworld until the following line that strikingly contradicts its immediate predecessor: "This is a story of how a Baggins had an adventure, and found himself doing and saying things altogether unexpected" (4). This contradiction introduces an obvious suspense-laden question: how did this adventure come about, given what we know of hobbits and

Bagginses? Yet the story still has not done more than promise the suspenseful situations that are inherent in a journey categorized as "an adventure." The storyworld can't be said to have changed states for yet another three paragraphs. The narrator continues to describe the Shire, the family history of the Bagginses, further laying out the baseline of the storyworld before stating, "Bilbo Baggins was standing at his door after breakfast smoking an enormous long wooden pipe that reached nearly down to his woolly toes (neatly brushed)—Gandalf came by" (Tolkien 5). The narrator presents the promise of adventure, couples it with the arrival of a mysterious stranger, and the reader has ample reason to continue reading in order to learn how this homebody of a hobbit ends up taking an unexpected adventure in contrast to his established mode of being.

The Hook: Another common technique for beginning a narrative is by setting a hook. Similar to the promise of Bilbo Baggins's adventure, Herman Melville begins *Moby Dick* with Ishmael declaring, "I thought I would sail about and see the watery part of the world" (1). Yet, unlike Bilbo's adventure, which arrives in the presence of the dwarves several paragraphs after Gandalf's first appearance, Ishmael builds the suspense surrounding his whaling voyage by waxing poetic about the human connection with water, explaining his proclivity to sail as a common deckhand, and touting the great looming specter of the whale itself, and then, he dithers. He makes friends with Queequeg, lingers at the Spouter Inn, attends church, sails to Nantucket, enjoys a few delicious bowls of Mrs. Hussey's chowder, all the while delving into the philosophical depths of each encounter with equal parts profundity and jocularity. And all this before he and Queequeg even set out to find their ill-fated vessel. Yet as discursive a narrator as Ishmael certainly is, there is a definite progression to the narrative. The reader knows where the story is going and can remain

content to linger with such a companionable narrator because the hook was set in the novel's second sentence and we can trust Ishmael to bring us out to sea, despite the diversions and introspection.

These three general scenarios – media res, baseline, and hook – are but three possibilities for how the IPE may appear at the beginning of a narrative. They certainly represent only a fraction of potential forms. Indeed, just as phrase-structure grammar describes an infinite combinatorial system where an infinite possible number of items or combination thereof can represent the subject in a sentence, so too is the number of possible permutations for the appearance of an IPE infinite. Moreover, once the IPE appears, the nuances of linguistic presentation of each introduced plot element only multiply in complexity. As the exploration of the title "St. Lucy's Home for Girls Raised by Wolves" reveals, each successive word conveys such a multitude of connotations that a text's full array of suspense-evoking cues would be impossible to describe fully. Perfect specificity in a textual sense for all the linguistic permutations represents a kind of literary butterfly effect, where each sequential complexity represents no guarantees but the absolute certainty of a chaotic and unpredictable multiplicity of meanings. Yet in the same way we can describe chaotic systems like the weather with generalizations, we can recognize the promise of suspense when an IPE arrives. Rabkin was perceptive on this point when he dubbed subliminal knowledge the foundation of suspense (7). Indeed, we may never be able to trace the totality of the reasons we feel compelled to find out what awaits Ishmael when the Pequod finally leaves Nantucket astern. Yet, when we feel compelled to read on or continue watching or listening, we know that suspense has been cued. We can also, in the same way a meteorologist systematically tracks weather patterns, trace and

systematically categorize suspense cues in a general way. The IPE is what gets us started and constitutes the point of reference against the ensuing information a text reveals.

Constraints [C]:

Constraints are the set of potentially-infinite narrative or non-narrative elements that restrict the reader's perception of possible outcomes with respect to the IPE. They might also be thought of as, "barriers to the completion of actions, and various lures, feints, and equivocations," as Robert Scholes stated when discussing the second stage in Barthes's hermeneutic sequence. Constraints of the IPE fit into this three-part plot grammar in the same way Barthes adopted the idea of the *delay* as the second stage in his hermeneutic sequence (S/Z 84). I adopt the term *constraint* from Marie-Laure Ryan's study of temporal immersion, as this terminology is closer to the cognitive function of these units of information. Though, at times, constraints may serve to delay the revelation of further information concerning the IPE, they primarily work to increase or maintain suspense by decreasing the number of possible canonical outcomes for the plot unit in question.

Constraints funnel the story toward its resolution by limiting the actions the characters can take or by opening new pathways toward sequences that advance the narrative toward its ultimate resolution. If we use a familiar narrative as an exemplar, we can explore several common ways in which constraints funnel narratives toward their resolution. First, the IPE:

... but Odysseus alone, filled with longing for his return and for his wife, did the queenly nymph Calypso, that bright goddess, [15] keep back in her hollow caves, yearning that he should be her husband. But when, as the seasons revolved, the year came in which the gods had ordained that he should return home to Ithaca, not even there was he free from toils, even among his own folk. And all the gods pitied him [20] save Poseidon; but he continued to rage unceasingly against godlike Odysseus until at length he reached his own land. (*Odyssey* 1.13)

Homer begins *The Odyssey* wasting little time getting to the IPE, revealing before the fourteenth line, not more than a few breaths into the epic, that Odysseus wishes to return

home to Ithaca and to his wife Penelope. But, of course, what would the story be without a few toils along the way? Essentially, these toils are *The Odyssey's* constraints. Subsequent to the early revelation that Odysseus wishes to return home, all the information the poem presents will be processed with the knowledge that Odysseus is ostensibly acting toward the goal of returning home to Penelope. Narrative theorist David Miall puts it thus: "We do not wait until reaching the end of a text before beginning to entertain ideas about what the text means: various aspects of the text, semantic, stylistic, and narrative, provide suggestions upon which a reader is likely to build his or her anticipations" (Miall, 277). We process as we go, in other words, and we process with respect to what we want to know about the IPE - in this case, perhaps something along the lines of, "I wonder if this poor guy will ever make it home to his wife." And the constraints that follow an IPE generate suspense by complicating the question: a shipwreck, for example, will make the task more difficult by placing the outcome in further doubt. Such constraints come in many forms. **Happenings:** Ryan defines *happenings* as, "unpredictable events," which are either natural forces, failures of execution on the part of the characters, or accidental occurrences (Possible Worlds 129). One might think of happenings as the storyworld imposing on the characters in some way they cannot control, such as weather, disasters, wars, elections, or plagues. Several examples of happenings from *The Odyssey* would be storms blowing the Ithacan ships off course, the presence of suitors in Odysseus and Penelope's home, or the arrival of Nausicaa at the river where Odysseus is sleeping in the nearby bushes. Odysseus washing up naked in Phaeacia constrains the narrative by eliminating any possible outcome where he navigates his raft directly home to Ithaca. All of the anticipated possible lines the story could take that included this possibility are cut, and the narrative must follow a new path. Likewise, the appearance of Nausicaa is a happening that presents Odysseus with a further

constraint—he must choose to either elicit Nausicaa's help or choose to avoid his being discovered in a such a desperate state by the maiden. Her appearance raises further questions which the reader can interpret on multiple levels at once—at the local level: perhaps, "How will this young girl react to being confronted by a naked stranger hiding in the bushes?"; or at the global level: perhaps, "Could this maiden Nausicaa somehow help Odysseus to get home?" These constraints generate suspense by reducing the number of possible outcomes and presenting new possibilities with respect to Odysseus's overarching goal of returning home.

Actions: According to Ryan's State-Transition plot dynamics, actions are physical events motivated by: goal + plan (130). She breaks down actions into two further categories — habitual doings and conflict solving moves (130). Actions, then, serve low risk functions that align with the activities of daily living, and, as such, are mundane and not particularly suspense evoking of their own accord. As an example, take the following from Book Nine of *The Odyssey*:

Thence for nine days' space I was borne by direful winds over the teeming deep; but on the tenth we set foot on the land of the Lotus-eaters, who eat a flowery food. [85] There we went on shore and drew water, and straightway my comrades took their meal by the swift ships. But when we had tasted food and drink, I sent forth some of my comrades to go and learn who the men were, who here ate bread upon the earth; [90] two men I chose, sending with them a third as a herald. (*Odyssey* 9.82)

After happening upon the shores of the Lotus-eaters, the sailors in Odysseus's fleet perform mundane tasks one might expect in such a situation. They look to replenish their stores of fresh water, eat a decent meal after surviving a long ordeal at sea, and seek the inhabitants of the island to discover what help they can possibly provide—presumably bread-related help. These are ordinary actions, yet Odysseus's ordinary actions as captain set in motion events that constrain the Ithacan sailors. When the herald does not return, Odysseus learns

that the men he sent, upon eating the lotus flowers, have lost all desire to leave the island, representing a potentially-fatal threat to his quest to return home. The Lotus-eaters have taken actions that constrain the Ithacans' potential outcomes. Odysseus takes action against this threat, dragging his lotus-eating crew members back to the ship and ordering his crew to embark and sail away before they have the chance to eat the lotus flowers as well. These actions constrain any idea of gaining help from the Lotus-eaters, preventing the Ithacan sailors from gaining any useful information or even any well-needed rest. Thus, the potential pathways here are closed, and the expedition takes to the sea once more, where they encounter things quite beyond the mundane, forcing them to engage in higher-stakes actions to survive.

Moves: Ryan's second category of action distinguishes mundane actions from high-risk, high-reward actions she calls moves (130). Moves are generally suspense-evoking and tend to evoke more suspense the riskier the moves become. Thus, when the Ithacan sailors, hungry and fresh from their encounter with the Lotus-eaters, land on a set of islands that are teeming with flocks of sheep and goats, with no people in sight, it doesn't seem like much of a move when they begin to eat the goats. It is far more a move than an action when Odysseus decides to leave the safety of this uninhabited goat-island to search a nearby inhabited island to see what sort of people he might find there. Here, he finds the cave of Polyphemus:

Speedily we came to the cave, nor did we find him within, but he was pasturing his fat flocks in the fields. So we entered the cave and gazed in wonder at all things there. The crates were laden with cheeses, and the pens were crowded [220] with lambs and kids. Each kind was penned separately: by themselves the firstlings, by themselves the later lambs, and by themselves again the newly weaned. And with whey were swimming all the well-wrought vessels, the milk-pails and the bowls into which he milked. Then my comrades spoke and besought me first of all [225] to

take of the cheeses and depart, and thereafter speedily to drive to the swift ship the kids and lambs from out the pens, and to sail over the salt water. (*Odyssey* 9.215) Odysseus seems all but forced into making a move—on the one hand it would certainly transgress the rules the Ithacans live by to steal the provisions within the cave; on the other hand it is certainly a risk to wait for a wild cyclops to return so they can negotiate. Odysseus's move is to walk the line between the two choices, sitting down, helping themselves to the Cyclops's cheese, and awaiting his return in the hopes he will treat them well. "Yet, as it fell, his appearing was not to prove a joy to my comrades," he later states (Odyssey 9.215). His wild understatement precedes the text's revelation that the Cyclops's move is to entrap the men in his cave by blocking the exit with a massive boulder. Polyphemus then dashes two of Odysseus's men to the ground, killing them instantly, whereupon he dismembers and cooks them for dinner. Odysseus's initial move – waiting for the Cyclops to return – by Ryan's method of categorization, and no doubt Odysseus's as well, is a disastrous failed move. Odysseus must now perform a new move – high-risk, high-reward plan of action — for his men and himself to escape with their lives. The failure here eliminates the possibility of aid from the people of this island, and in the process, it diminishes Odysseus's crew by six of his best men. Finally, it ends with the Cyclops's devastating curse: "If it is his [Odysseus's] fate to see his friends and to reach his well-built house and his native land, late may he come and in evil case, after losing all his comrades, [535] in a ship that is another's; and may he find woes in his house" (Odyssey 9.534). Thus, the move of daring to encounter Polyphemus narrows the possible outcomes of the narrative dramatically.

Setting: Just as the actions characters take in the storyworld constrain the number of possible outcomes, so does the space potentially limit the number of potential actions.

Mountains can be impregnable barriers; deserts can be deadly, arid expanses; rivers can be raging, impassable rapids; and in the case of Odysseus and his crew, the sea can be a fickle, perilous expanse, prohibiting clear passage to the destination. Here the crew is constrained to the single possibility of traveling by sea on some type of vessel. This places them in danger, at the mercy of the wind and current, as well as necessitating their making ports of call in unknown lands for provisions. Likewise are they constrained by setting when the Cyclops, during one of those ports of call, confines them within his cave. The walls of the cave and the massive boulder blocking the entrance constrain the men to a set of actions limited to the space inside; thus, the setting becomes a plot constraint.

Time: A sure method for imbuing a narrative with suspense is to place time constraints on the narrative. Homer knew this well and introduced such a time constraint on the plot when he had Telemachus tell the suitors:

If so be I shall hear that my father is alive and coming home, then verily, though I am sore afflicted, I could endure for yet a year. But if I shall hear that he is dead and gone, then I will return to my dear native land and heap up a mound for him, and over it pay funeral rites, full many, as is due, and give my mother to a husband. (*Odyssey* 2.220)

Given that the first few lines of the poem present two desires for Odysseus — for his return home and for his wife — this time constraint represents a serious threat to Odysseus fulfilling his second desire to reunite with Penelope. This constrains the possible future paths rescticting a positive resolution only to the set of Odysseus's paths that end in Ithaca in under one year. Additionally, what we know of sea travel in the Bronze Age allows us to calculate the realistic time-frame for his return. Time constrains where Odysseus can reasonably be on any given day, and the realistic scripts and schema of this storyworld inform the interpreter that Odysseus had better hurry.

Rules: As Ryan noted when comparing the suspense of a storyworld to the suspense of a sporting event, the rules of the game constrain the number of moves a player can make. So too do the rules of storyworlds. For Odysseus, a trip to the island of Lotus-eaters or the Cyclops, or even a journey to the underworld to converse with the dead—all are fair game. Telemachus converses with Athene, who takes the guise of a human at will; all the while his father shares the bed of an immortal nymph. None of these fantastic occurrences reach beyond the rules of this storyworld—in fact, they seem slightly less than extraordinary, if not quotidian, as the events unfold before the characters. Odysseus, no stranger to carnage in battle, seems far more shocked to see his men killed by the Cyclops than by the sight of the Cyclops itself. Such are the rules of this game. Gods intervene; Cyclopses eat your crew for dinner; Sirens will sing you to be dashed on the rocks. But you're sailing home, and it's probably going to take a year, depending on the wind and the will of the gods.

Much like the way loose modifying phrases, clauses joined by coordinating or subordinating conjunctions, and interrupters can elongate a sentence in a theoretically infinite extension of the base clause, so too can constraints act to elongate and modify the IPE almost infinitely. Surely Scheherazade was proof of this. Yet, for a story to be grammatical, it must present some answer to the interesting question(s) it poses at the outset. Eventually, a story constrains its possible paths to a point where the narrative produces a canonical outcome.

Resolution [R]:

Not to be mistaken with the climax, where the suspense in the narrative often seems to be highest, resolution of a plot structure provides the answer to the original question posed. In the case of Odysseus, our answer is yes, he will get home to Ithaca, and in time to save his marriage to Penelope. Here, the question posed by the Introduced Plot Element and

advanced by numerous Constraints is resolved – sometimes in ways satisfying, sometimes in ways unsatisfying or perplexing, sometimes in ways utterly confusing or sublime – but the questions are resolved, closing the plot-unit for good or ill. Barthes called this part of speech in the plot's grammar, "the ultimate predicate" (S/Z 84). Indeed, a plot that lacked a resolution would seem innately incomplete, because we carry with us an innate sense of structure for plot content and recognize an ill-formed plot structure in the same way we recognize when a person is speaking ungrammatically. Perhaps we can understand story fragments in the same way we might recognize a sentence fragment working its way toward completion. And certainly, just as some functional sentence fragments convey meaning in their context, not every plot will be complete. Many an acclaimed American short story writer has attempted to undercut reader expectation by leaving the resolution ambiguous or creating surprise or irony by deliberately refusing to answer critical questions posed by the text's IPEs. Yet the sense of surprise or irony wouldn't exist without the underlying script described above. Perhaps my favorite example of this phenomenon is the finale to Monty Python and the Holy Grail, where King Arthur and his remaining cast of knights are metafictionally rounded up by the (then) modern-day police while in the process of storming the Castle Ahhh, where the Grail is thought to reside. The comedy of the situation lies in the deliberate breaking of an otherwise grammatical plot structure at the final moment in the most absurd way possible. It defies the expectations whose very presence confirms the underlying presence of a structural script.

Deviation from the Model:

While Barthes, and myself, both use Chomsky's Universal Grammar of the sentence as a model, there is an important distinction to note between the two structures. A sentence, though it can include within it a theoretically infinite number of modifiers, coordinate

clauses, and subordinate clauses, is a closed system, meaning that no grammatical elements in this sentence can modify the elements of the sentence preceding or succeeding it. A sentence is ultimately self-referential, while plots can, and often do, overlap. The resolution of one grammatical plot structure can also serve as the IPE of a subsequent structure. An example would be Odysseus washing up on Calypso's island: he has avoided certain death at sea and is once again safe on land [R], yet now he is confined to Calypso's island at her discretion [IPE]. Additionally, sometimes complete grammatical plots are embedded within the larger plot and serve as a single constraint in the narrative's main plot structure. The adventure with the Cyclops, the trip to the underworld, even the brief diversion to the land of the Lotus-eaters, all exemplify grammatically complete plot structures that serve as single constraints in Odysseus's larger narrative—the quest to return home to Penelope. Seymour Chatman, among others, makes the same distinction between macro- and micro-poetics or macro- and micro-structure (Chatman 84). This complication raises further complications.

Plots differ from sentences structurally in another key way. Quite unlike sentences, a grammatical plot element's prominence in the narrative is prominent at the discretion of the narrator. An apt example of this point is the 2016 release of Lucasfilm's *Rogue One: A Star Wars Story*. This entire theatrical feature, a complete grammatical plot, was based on a single sentence in the scroll from the original 1977 film *Star Wars: A New Hope:* "During the battle, Rebel spies managed to steal secret plans to the Empire's ultimate weapon, the DEATH STAR, an armored space station with enough power to destroy an entire planet" (Lucas). The sentence, which remains on screen for only a few seconds in the original Star Wars film, was successfully reframed, albeit by a different set of narrators, to turn what was the smallest of plot constraints into a fully-formed grammatical macro-plot, complete

with its own set of grammatical micro-plots. Aristotle realized that plots could be reframed in this manner when he discussed which elements of the life of Odysseus Homer chose to relate and which elements he chose to omit (*Poetics* 8). This ability to reframe plots is one of the features of narrative that makes it exponentially more cognitively complex than sentences, and potentially, exponentially messier. Where one interpreter may see a distinct subplot, another may see a mere constraint or perhaps even a bit of extraneous information they interpret as entirely unrelated to the plot. Yet the same difficulties persist with natural speech and Universal Phrase-Structure Grammar. Most utterances are not sentences and make sense only in the context in which they're spoken. People rarely speak in perfect grammatical sentences. Yet this fact doesn't negate the reality that underlying ungrammatical speech are inferences and social cues that make these utterances interpretable within an implicit structural framework we have all internalized. And it's the same story with stories. Just as speech can lead to misinterpretation and miscommunication, so too can stories be misunderstood and misinterpreted, and rarely are they perfectly grammatical – hence, plot holes, loose threads, or the dreaded deus ex machina ending. This doesn't negate—rather it reinforces—the reality of the implicit structure's presence, and it is certainly one of the parameters against which an interpreter judges a narrative's overall quality.

Magnetic Plot Elements:

A final important question remains to be answered in the search for the universal structure of plot content: if narrative suspense is what makes a plot grammatical, then what makes it interesting? Like Aristotle, Propp, Hill, and countless others, the main impetus for seeking the universal structure of plot content is to understand the question of what makes a good story a good story. The answer to this question, not surprisingly, lies deep in our

evolutionary past with the things that necessarily captured our attention in the real world—the human universals that universally cue suspense. I've named these universal suspense cues magnetic plot elements for their immediate attentive pull. Their presence makes narratives interesting, and cueing them makes a story go. I will explore each of the sixteen magnetic plot elements and their evolutionary underpinnings in the following section.

3: Magnetic Plot Elements: Categorizing the Universally-Interesting Suspense Cues

I came to study plots, as most people do, through the consumption of the narratives of my culture. As a toddler, I was captivated by picture books and fairy tales. As a child I was engrossed by Star Wars, ET, Indiana Jones, and Alice in Wonderland. As a teenager I read Tolkien, watched *The X Files*, and, somewhat embarrassingly, happened to be more than a little fond of Buffy the Vampire Slayer. Later, when I began to write novels, I drew upon my internalized sense of a good plot from the sum of "good" plots I'd assimilated over the course of a lifetime as a consumer of narratives. My sense of plot was very much intuitive. This serves many writers quite well. One who comes to mind is John Cheever, who once explicitly claimed, "I don't work with plots . . . Plot implies narrative and a lot of crap. It is a calculated effort to hold the reader's interest at the sacrifice of moral conviction" (qtd. in LaPlante 284). Now, I have some vague sense of what Cheever might have meant by that statement, but, by way of contradicting one of the true masters of the short story, I offer into evidence the first paragraph of his masterpiece "The Country Husband," wherein the reader joins Cheever's protagonist in the process of surviving a plane crash. Cheever most decidedly did "work with plots," and one of the reasons he was such a successful writer was that he did so masterfully. But not only did Cheever manage to work with plots masterfully, he had a way about telling a "good" story. He had an intuition for writing about things that kept his readership interested, like a mid-life crisis that upsets the balance of a suburban home in the aftermath of a plane crash. A plane crash is interesting, which is probably why Cheever opened "The Country Husband" with that scene, as opposed to, say, his protagonist musing over the monotony of his suburban life while in the checkout line at the grocery store. One choice is very much more interesting than the other.

Marie-Laure Ryan gives a broad accounting of this fact when she explores what she calls "the problem of tellability" (Possible Worlds 150). What Ryan attempts to tackle is a theoretical way to understand the reality that certain subjects make far better fodder for storytellers than others. Some grab interest, others don't. Ryan mentions a list of areas proposed by Roger Schank that he refers to as areas of absolute interest—death, danger, power, sex, and large amounts of money (154). However, she quickly abandons that line of inquiry, stating, "Substantial points cannot be left out of a theory of tellability, but their study is not particularly interesting. It begins with a catalog of themes, motifs, and topoi, and ends with the reasons for their appeal" (154). As a novelist, that is exactly what I find most interesting – what are the most engaging narrative topics and why? Part of the reason I suspect Ryan didn't find this subject worth pursuing was that she approached the inquiry at the level of the superficial structure of the narrative. Ryan is correct that we wouldn't learn much from a nearly-infinite list of the sum of all interesting elements in fictional narratives or their relative narrative values. This is too tight a level of abstraction to be useful. However, we can learn an immense amount if those narrative points are usefully categorized, which, as it turns out, is no simple matter.

In categorizing anything, one inevitably runs into the same problem the lexicographer does when attempting to define a word. Boundaries can be slippery things. For instance, at what point does a jog become a run and a run become a sprint? This variation of philosophy's "frame problem" is a conundrum so complex our brains have evolved multiple parallel strategies to deal with it. Cognitively, we categorize things three ways, using prototypes, comparing against exemplars, and developing theories (Reisberg 320). Let's consider, as an example, a problem your brain has no problem with at all—like identifying an object, a house, for instance. This might seem like a simple task at first,

because your brain does it so subconsciously you're not even aware that it is a task. If an experimenter were to display four pictures, say, of a shack, a modest home, a mansion, and a castle, and then asked subjects to identify the "house," most subjects would have no difficulty selecting the modest home as the "house" in question. Yet if you were to ask those same subjects what differentiates a shack from a house and a house from a mansion, the boundaries would start to get fuzzy. For this reason, our brains categorize objects using prototypes – the ideal "center" of a category, and people do this so reliably that they'll recognize a bird like a sparrow as a "bird" far more quickly than a bird that isn't prototypical, like a penguin or an ostrich (*How the Mind Works* 126). For our example of identifying a house, the subjects would likely carry a similar visual image of an "ideal" house and select the picture that looks closest to that prototypical house. Another similar strategy people employ is comparing a novel object against a catalogue of exemplars (Reisberg 292). Subjects likely have many memories of different types of houses that they can compare the new pictures against. Thus, the subject can compare their memories of objects that fit into the category of "house" against the four pictures our hypothetical experimenter has shown, identifying the picture that most resembles those exemplars. Lastly, and perhaps most importantly for our purposes, we categorize things by forming theories (305). In the example of the four "house" pictures, this may play out by noting common attributes of houses – that they are usually of a certain size, have windows, a roof, serve the function of sheltering their inhabitants, and that certain types of people live in houses as opposed to castles, for instance. The ability to categorize in this manner might seem trivial, but people have very good reasons to sort objects in their environment into categories. Steven Pinker puts it this way: "The mind has to get something out of forming categories, and that something is *inference*. Obviously we can't know everything about

every object. But we can observe some of its properties, assign it to a category, and from the category predict properties that we have *not* observed" (*How the Mind Works* 307). Theories particularly allow us to make inferences about members of a category – perhaps that the shack is likely to blow over in the approaching storm, so you might want to look for a sturdier shelter before the rain starts falling.

The ability to form useful inferences, in the case of narrative, about specific plots, based on other similar plot types establishes one strong reason to adopt a system of categorization for plots. In adopting such a system of categorization, we must also consider utility. Marie-Laure Ryan, I suspect, questioned the utility of such a categorical system because the prospect of a list of a thousand categories offered no benefits. This undoubtedly proves valid at the level of abstraction that she and most structuralists framed their study of plot content: the event sequence. However, with a deeper frame, the benefits of categorization come into clearer focus. An example of a deeper frame I referenced earlier would be the case of the bullet ant mittens of the Satere-Mawe adolescents and their promgoing counterparts in New Jersey: both were engaging in similar, culturally-universal rites of passage. At the level of the event sequence, though, any interest these two behaviors might evoke in a fictional narrative would be categorized entirely differently because of their seemingly unrelated nature. This is precisely where assessing events using a deeper frame proves useful. Suddenly, unaccountable differences become meaningful, making it possible to form useful theories about how certain plot elements share properties with other plots in the same category, and further, why the plots in that category are universally interesting.

My initial attempt at categorization of plot types was, in part, prompted by Schank's themes of absolute interest: death, danger, power, sex, and large quantities of money (qtd.

in *Possible Worlds* 154). Immediately, a few other categories became obvious candidates for the list – revenge and conflict, to name two. I continued to add to my list, deliberately paying attention to the elements of plots that captured both my interest and the interest of colleagues in classes and workshops. Not surprisingly, these elements appeared frequently across narratives of all types. Eventually, after documenting the appearance of interesting suspense cues in hundreds of narratives, I ceased to be surprised by new ones. All the interesting elements of novel stories I read would fall neatly into one of my sixteen categories, which I dubbed "magnetic plot elements" for their tendency to pull a reader's attention to the specific suspense cue. Additionally, as I was developing my categories, I noticed a commonality among them that convincingly explained why each of these magnetic elements should be of great suspense-generating interest to a narrative's interpreter. All sixteen categories, at a deep level, concerned events, situations, or behaviors that were highly-consequential from an evolutionary standpoint. Some, like sex and death, dealt with far more obvious evolutionary concerns than other suspense cues. Some categories like goals or deceit appear more obscure in their evolutionary origins, but further study in the psychological literature helped to reveal the important connections. I have since divided the magnetic plot elements into four groups: 1) genetic survival, which concerns matters of life, death, and mating; 2) relation to the social hierarchy, which concerns status in social interactions as a strong indicator in genetic fitness; 3) rules of the social environment, which concerns the types of explicit and implicit social contracts that govern the relationships among group members; and 4) *discovery*, which concerns the individual's or group's strategies for negotiating unexplored space in their environment. I will address each magnetic plot element (henceforth MPE) and its evolutionary implications briefly

here, leaving in-depth analysis of each MPE to chapters specifically dedicated to each plot element.

Genetic Survival:

<u>Sex</u>: Sex is the MPE with the clearest evolutionary implications. The consistent sales of romance novels¹⁰ and the ubiquitous cross-cultural presence of the marriage plot provide two obvious testaments to the magnetic pull of sex as a plot element¹¹. What may not be quite as superficially evident is the tension between the differing sexual strategies that males and females have historically employed because of the disparity in parental investment (Buss 315). An obvious narrative conflict is likely to ensue between male and female characters employing conflicting mating strategies. This is to say nothing of narrative empathy and the magnetic pull of literature that promises sexual arousal as a selling point: E. L. James's *Fifty Shades* series, merely one example, sold over 150 million books between 2011 and 2017 (Schaub).

<u>Death</u>: Death too has obvious evolutionary implications, especially as it pertains to young characters. The human fascination with death permeates the narratives of all cultures for good reason. With respect to characters' goals in fiction, Steven Pinker notes, "A Darwinian would say that ultimately organisms have only two: to survive and to reproduce" (*How the Mind Works* 541). This may help to explain why narratives about deaths are ubiquitous.

Early in human development, across multiple studies, children show attentional privilege to threatening stimuli (LoBue 291). They also learn and recall information regarding

 $^{^{10}}$ Rachel Dalke of OSU has compiled a collection of impressive statistics regarding the sales of romance novels from various sources: this includes a total of 1.5 billion dollars in book sales in 2016 alone, representing over $\frac{1}{4}$ the total book market and $\frac{1}{2}$ the market in paperbacks.

¹¹ Hogan's Romantic Tragi-comedy is essentially a variation on the traditional marriage plot, a cultural universal, according to Hogan. See Hogan 232.

predators and other deadly environmental hazards more readily than non-adaptive information (Buss 92). Given what Matthew Bezdek has shown about narrative suspense heightening recall of suspenseful narrative content, a strong case can be made for the magnetism of death narratives as cognitive tools for sussing out deadly environmental threats. In other words, we let our characters die so we don't have to.

Danger: Danger grabs attention and reliably generates suspense. Here, the fuzzy category boundaries between death and danger may represent the two MPEs that most frequently overlap. Danger often exists in narratives in the form of threats of fatal consequences to a character's predicament. However, obviously non-fatal dangers can be magnetically compelling as well, like the difference in life-trajectory for a character like Thomas Hardy's Tess, whose life spirals into turmoil when she becomes pregnant out of wedlock in Victorian England. A character who loses his job, turns into a giant cockroach, or loses his job because he turns into a giant cockroach is negotiating a dangerous path that a reader is unlikely to anticipate as fatal in the same way they would for a character in a knife fight. The sense that a course of action will end badly for a character is both magnetically compelling and slightly different from anticipating that the character might die, though a similar case could be made for narratives that explore non-fatal dangers as tools that help interpreters negotiate the dangers of their environment.

Goals: A character with a goal is one of the commonest and most reliably suspenseful narrative forms. As Brian Boyd notes, "Intelligence evolved out of movement, to guide organisms away from threats and toward opportunities" (224). Pinker describes human intelligence as a hierarchy of goals with our emotions as the regulators of which goals sit atop, mobilizing mind and body to meet the challenges of survival in the environment

(*How the Mind Works* 373-4). Hunting exemplifies how and why goal attainment would be both suspenseful and adaptive. Kill antelope, eat, survive. No antelope, bad news. Survival means attaining goals. Narratives that highlight the virtue of goal attainment tap into one of our oldest neurological drives; whether it's Rocky going the distance with Apollo Creed, Ahab seeking the great white whale, or Scheherazade delaying her execution one more night, people are captivated by characters with goals.

Relationship to the Social Hierarchy:

<u>Power</u>: Power is a term often given a far broader interpretation in literary criticism than I give it here. In her widely-read craft guide for creative writers, Janet Burroway says the following of power: "Remember that 'power' takes many forms, some of which have the external appearance of weakness. Anyone who has been tied to the demands of an invalid can understand this: Sickness can be great strength" (37). Liberal interpretations of power of this kind warp the meaning of the word far enough that almost anything could be interpreted as power. The type of power that is magnetic in the plot sense concerns the struggle for positioning in a status hierarchy. Dominance hierarchies are facts of life for all social animals, to the extent that crickets, hens, and chimps all keep a record of the fights they've won and lost, and they bear the physical and psychological scars of their losses while the winners reap the benefits of rising to the top of their respective hierarchies (Buss 349). Robert Sapolsky has shown that among primate hierarchies, including humans in modern societies, the rewards for sitting atop hierarchies include healthier, longer lives, greater access to mates, and lower levels of debilitating stress hormones (648). As Mel Brooks so aptly put it, "It's good to be the King." Humans form hierarchies around many cultural values – competence, prestige, wealth, artistic talent, seniority, religious devotion, etc. We also nest hierarchies within other hierarchies to form larger organizations, and we

form these hierarchies almost instantaneously. In one experiment involving three-person groups of strangers, a clear hierarchy formed within five minutes in 100% of the fifty-nine groups (Buss 349). Whether it's a law firm, a chess tournament, a cult, or a street gang, people need to know where they stand, and luckily for us all, in most cases, we've evolved beyond the horn-locking of tournament species and the wooden clubs of our cave-dwelling ancestors. The main reason for this is the great cost of fighting (*How the Mind Works* 494). Much more often, the costs of fighting outweigh the benefits, so people have had to learn to pick up on social cues regarding the status of other individuals in their group, or they develop clearly delineated ranks and rules that govern them. Power plots concern the shifting of status and the struggle of characters to ascend or maintain their position atop a hierarchy. Or, alternatively, a power plot can dramatize a fall.

Wealth: Life-altering wealth is one sure way for characters to instantly change their relationship in their respective hierarchies. The evolution of women historically seeking resource-rich mates is hypothesized to be one of the primary factors in intra-sex competition among men for wealth and status. 12 Stories like *Treasure Island*, where the trappings of the good life are the rewards for facing death and danger, prove to be magnetic because they offer the reader the chance to vicariously climb the ladder with a beloved protagonist. On the other hand, a tragedy might document the descent into poverty of a flawed or unlucky hero or heroine. Whatever the individual case or currency may be, wealth that changes the fortunes of a story's characters is universally compelling.

¹² Though perhaps a controversial statement in some circles in a modern capitalist economy, the data to support this claim is robust cross-culturally and replicated by studies too numerous to mention here. David Buss's textbook *Evolutionary Psychology* 105-122 contains a thorough review of the psychological literature regarding evolved female mate preferences.

Conflict: Conflict also grabs attention. The narrative formula for conflict, outlined by Marie-Laure Ryan, involves the inner wishes, desires, or obligations of a character coming into direct opposition with the wishes, desires, or obligations of another character (*Possible Worlds* 121). This can be compelling on multiple fronts because conflict has the potential to escalate dangerously to violence and possibly even death, and barring that, it may involve the type of metaphorical horn-locking that shifts a character's position on a power hierarchy. Conflict can make the difference between the maintenance or dissolution of a vital relationship between allies, the difference between a family breaking apart or sticking together in tough times, or the difference between a fatal or correct course of action in the heat of battle. When conflicts occur, people take heed.

Violence: Violence may just as well fit under the heading of genetic survival, depending on the intensity of the violence. The ultimate cost for engaging in violence is obvious, and the reasons for violence are myriad. Evolutionary hypotheses support but do not limit its motivations to the acquisition of resources and territory, defense, infliction of damage on intra-sex rivals, negotiation of status hierarchies, deterrence of rival aggression, and deterrence of sexual infidelity (Buss 288). Historically, though, the ability to engage in violence successfully has been an important component in male positioning on status hierarchies. In hunter-gatherer tribes, a clear correlation exists between status and aggression (298). Most of humanity's earliest extant stories extol the virtue of men who cover themselves in glory on the battlefield — Achilles and Heracles, Arjuna, Gilgamesh, King Arthur and St. George come immediately to mind. Even Christ had his moment, taking up a chorded whip and driving the money changers from the temple (John 2:15). Violence's magnetism grabs attention in narrative as surely as in real life; whether it's a

sanctioned fight in front of millions of pay-per-view subscribers or a spontaneous shoving match in the stands at a sporting event, it's almost impossible to look away. It's likely that as long as people tell stories, storytellers will depend upon violence to captivate audiences.

Rules of the Social Environment:

<u>Deceit</u>: One of humanity's nobler features is the ability to form elaborate cooperative coalitions. A vital part of our ability to cooperate involves a well-developed sense of fair play. Cultures have written and unwritten rules: in fact, a functional definition of the word culture itself might be just this – the sum of written and unwritten rules within a group or society. Lying is a human universal that so often transgresses cultural rules that detection of deceit among group members is also a human universal (Brown 131). Recognition of mistaken beliefs forms as early as age three in humans and evokes facial expressions of suspense in response to narratives with toddlers, suggesting we pay close attention when others have false beliefs (Moll 208). We also have a keen sense for detecting and remembering cheaters (Cosmides & Tooby 180-184). Deceit as an MPE in narratives manifests in diverse ways. It can appear as clever trickery performed by a hero—think Odysseus and the Trojan horse. It can represent a betrayal of the highest order – think Peter denying Jesus three times before the rooster's third crow. Or it can be a plan that goes horribly wrong – think Romeo encountering Juliet's ostensibly lifeless body. Deceit is almost always accompanied by consequential reward or punishment, one of the many reasons its pull is magnetic.

<u>Transgression</u>: The transgression of rules also generates a universal suspense cue. Rules, as the popular saying goes, are meant to be broken. At least in stories, that is. When Vladimir Propp outlined his narratemes, his second was "the interdiction," or the

declaration of a rule a character was commanded to obey; the third narrateme is the violation of that very rule (25). What happens after that is usually not a good result, at least initially. After all, characters that never break any rules wouldn't be very interesting. Nor would stories be very interesting if breaking the rules didn't have consequences. Cinderella stays a little too long at the ball. The suburban father takes a little too much interest in the babysitter. The crooked cop takes a little too much liberty in associating with mobsters. When rules get broken there are consequences: waiting to see what those consequences will be presents a magnetic pull.

Betrayal: Though very closely related to deceit, betrayal has important differences.

Betrayal can only take place following either an explicit or implicit agreement among two or more characters. Its magnetic pull may be partly explained by the same cognitive mechanisms as deceit: mistaken beliefs. Yet betrayal cuts a little deeper at the social contract between characters. The Artful Dodger causing a distraction so Oliver Twist can pick a pocket is undoubtedly a deceitful act, but he hasn't betrayed the trust of the unwitting victim, who has no reason to expect loyalty from a street orphan. Nor has Odysseus betrayed the Trojans. Et tu Brute, though? That's cutting deep literally. Friends and allies turning on friends and allies? This is dangerous and consequential territory from an evolutionary perspective. Watching a single episode of *Game of Thrones* will teach a viewer this. Finding reliable coalitions can easily mean the difference between peace and conflict, wealth and poverty, or life and death. Additionally, tragic narratives where characters knowingly betray their own interests out of weakness or cowardice may be deeply compelling and completely lack the element of deceit.

Revenge: Deceit, transgression of rules, and betrayal all have consequences. One of the most narratively magnetic consequences of these elements is revenge. Vengeance is a deeply rooted human universal, and, though it may seem barbaric to law-abiding Westerners, it is not without its vital evolutionary purpose. Steven Pinker notes that, "In many societies, an irresistible thirst for vengeance is one's only protection against deadly raids" (How the Mind Works 413). In a society without the rule of law, fear of retribution is the strongest deterrent against a violation of the social order. People experience pleasure while punishing violators of social rules (Buss 279). After all, who doesn't enjoy seeing the villain get his comeuppance? Revenge narratives depend upon this cognitive pleasure and the anticipation of it. Hence revenge's reliability as a universal suspense cue.

Discovery:

Michael Gazziniga's experiments on split-brain patients (whose severed corpus collosum precludes communication between the two hemispheres) led to his discovery of our left brain's overactive tendency to confabulate — that is, to construct a story to explain things it not only doesn't understand, but couldn't possibly know (Bloom 68). People seem to have a compulsion to behave a lot like this brain area Gazziniga dubbed "the interpreter." The tendency to act as though we know about our world with certainty even when we don't, must have certainly led to the apocryphal Mark Twain quote, "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so" (qtd. in Shepherd). The premise that neurological structure is divided to deal with the bifurcation between what we know and what we don't is likely far too low-resolution an oversimplification for the most complex structure in the known universe. But the problem is that simple. People dwell in the safety of spaces they have explored and know. They are also simultaneously drawn to explore the unknown, despite the hazards that surely await in untrod territory.

Sometimes necessity and sometimes the prospect of discovering something of value compel people to step out of the bounds of their known world. Characters in fiction act out the duality of this drama as well.

Mystery: Narrative mysteries offer dramatizations of the uncertainty between the known and the unknown. Here there is more to the story than mysteries of the Sherlock Holmes variety, though that type of mystery is very much a universal suspense cue. That type of mystery represents a wrinkle in the fabric of the known environment that curiosity compels people to iron out. In addition to the mysterious presence of something novel (and potentially dangerous) in a known environment, the Russian formalists, Shklovsky in particular, addressed the idea of defamiliarization — the art of showing something familiar in an unfamiliar, and therefore revelatory way. A novel like Philip K. Dick's *The Man in the High Castle* (a dystopian alternate universe where the Japanese and Nazi Empires won World War II) might be one example where an author plays with the very structure of the known environment to explore the unknown. Mystery also might involve a seemingly inexplicable action of a character and the attempt of a reader to unravel a plausible motivation.

<u>Dilemma</u>: Like conflict, narrative dilemmas, according to Marie-Laure Ryan, also concern a character's wishes, desires, and obligations. Yet with dilemma, the conflict manifests between the character's competing internal desires (*Possible Worlds* 121). The character grapples with a difficult choice between two outcomes that pull at competing self-interests. The narrative becomes a process of discovery. For the character's part, the dilemma is about exploring a seemingly impossible choice between two future possible worlds. For the

reader, in part, the suspense is about testing their presuppositions against the narrative's outcome.

Stranger and Quest: An additional apocryphal quote, often attributed to Tolstoy, presents our two final MPEs: "There are only two kinds of stories: a man goes on a journey and a stranger comes to town." The quote seems more likely to derive from the exercises in John Gardner's *The Art of Fiction* (O'Toole), but these two plot types round out this categorization for good reason. The arrival of a stranger is mystery personified. Not only does the stranger represent unexplored territory, but the stranger also brings the certainty of transformation into the realm of the explored territory. The magnetic attentive pull of a stranger when arriving in a seemingly stable hierarchy likely has deep roots in our primate ancestry. The behavior of animals leaving their group to seek their evolutionary fortunes elsewhere is universal among primates, fraught with danger, and a mysterious behavior in itself (Jack and Isbell 430). For humans, the stranger brings the promise of new information, the potential of broadening connections, and novelty. Unfortunately, there's the possibility of disease, usurpation, and bad intentions. On the other hand, the hero's quest proves magnetic in the inverse way. The quest involves an individual leaving the stability of a comfortable environment to face dangers, temptation, and threats, usually receiving a reward for the trouble (Peterson 150). It's plausible that part of the magnetic draw of the hero's quest, similar to dilemma narratives, lies in the interpreter's ability to vicariously make a journey, and thereby attain the knowledge that comes with it, without having to risk venturing outside the safety of their explored territory.

A few final points bear consideration in this overview of magnetic plot elements.

Some events may not obviously fall into one category or another. The fast friend of a few

days steals the naïve protagonist's wallet—is this betrayal or deceit or both? This question certainly speaks to the fuzziness of categorization addressed at the outset. The question of when exactly deceit becomes betrayal is likely to be far from self-evident to the readers, the scholars, or the authors themselves. Yet this does not negate the purpose of categorization so long as the categories can help us to draw useful inferences about the majority of plots that do fall neatly into a category. Additionally, if factor analysis can reveal useful heuristics, such as the Big 5 personality types, for something as complex as human personality, it's probable that similar techniques could be brought to bear on narrative texts, possibly revealing novel ideas about how people think about human behavior. Another point worth mentioning is that many compelling events in a narrative can easily be categorized under multiple MPEs. Adultery is an example that could fall under sex, betrayal, danger, and transgression. This observation may lead to new discoveries. In her theory of tellability, Ryan introduces a concept she calls "functional polyvalence," which discusses narrative situations that perform multiple plot functions at once (Possible Worlds 121). Similarly, the fact that some narrative situations fall into multiple categories might help to explain their tellable value. For example, adultery, seated in four MPE categories seems to have a lot more tellable value than a husband and wife having sex, which would only fall into one.

Having outlined the structure of a grammatical plot-unit, with narrative suspense as the focal point, and with the magnetic plot elements (universal suspense cues) explained, I turn to the literary analysis of three texts using this model of plot grammar as a heuristic. In the following section I explore the MPE of dilemma, using three short stories as exemplars. Dilemmas represent an interesting case study in the application of the above theory to plot content because the evolutionary significance of dilemmas may not be superficially

obvious. Yet dilemmas offer not only prototypical cases of how suspense is introduced, constrained, and resolved, but they also exemplify the way in which narratives can act as cognitive tools for shaping a person's map of their cultural landscape. This social terrain, for creatures supremely-social as humans are, can be just as crucial to a person's ability to survive and succeed from an evolutionary standpoint.

4: Dilemma as MPE in Three Literary Narratives

Why Dilemmas Matter in Fiction:

It may not be immediately intuitive why dilemma in fictional narratives might take a high priority. This MPE category prominently recurs in narratives and regularly generates suspenseful stories, but its evolutionary significance was not obvious to me at first. Once I understood its evolutionary significance, though, the degree of importance dilemmas play in shaping people's relationship to their social environment made it the most intriguing of the MPEs to explore for this thesis. One of the chief areas of study for evolutionary psychologists is the social landscape of human cultures. Evolutionary psychologist Robin Dunbar provides insight to why this is so: "Given that humans, like all primates are intensely social, and that sociality is the principal basis for their evolutionary success, society is the battleground between each individual's short-term, selfish interests, and their long-term gains through cooperation" (Dunbar et al. 172). Thus, it is critical for people to be able to learn about the subtle differences in their unique social landscapes to be able to successfully negotiate their specific cultural domain. In her Homeric lecture series, classicist Elizabeth Vandiver highlights the importance of oral narratives as the primary vehicles for distributing the norms of the culture across generations and territorial distances in preliterate societies (Vandiver 1). Similarly, in societies with written narratives, one of the most prominent uses of writing is to record and disseminate cultural narratives. Vandiver relates that one hypothesis for the adoption of alphabetic script in ancient Greek culture was specifically to record the Homeric epics (1). It's telling, then, that *The Iliad* itself begins with Achilles's dilemma of how to appropriately respond to Agamemnon's slight to his honor. Narratives play a vital role as models for negotiating social landscapes by offering interpreters the opportunity to explore complex, challenging, hypothetical social situations

without real-world risk. In reality, the wrong course of social action can easily result in rejection, humiliation, embarrassment, or even ostracism. Similar to the fuzziness of categories themselves, dilemmas exist in the fuzzy moral and social domains between fixed categories of acceptable social behavior, which can vary widely from culture to culture. "Thou shalt not kill" is a clear social norm, but knowing when to fight to stand up for oneself, and knowing how far to take that fight, can easily mean the difference between life and death literally, or, a figurative social death by negotiating the social battleground incorrectly. A text like *The lliad*, which offered rich information to Myceneans in forming their cultural roadmap, say, regarding when and how to fight, still encodes suspense through its dilemmas: modern readers may not need to deal with a king trying to coax them into battle, but they may encounter a tyrant of a boss with the power to move them up or down the company hierarchy. In this way, dilemmas, new and old, are magnetic, suspense-generating, and rightly demanding of a reader's attention. This puts them near the top of the hierarchy of magnetic plot elements.

Anatomy of Dilemma:

Unlike other important elements of plot, dilemma requires some knowledge of the character it involves and that character's motivations. Plot elements like danger, sex, mystery, or violence can be understood with relatively little plot or character information a priori—an example being the compulsory opening montages in James Bond films, such as the opening to 1995's *Goldeneye*, wherein Bond bungee jumps 220 meters from the top of the Contra Dam. No setup is needed for the viewer to process the danger inherent in the action, providing a classic Bond opening in media res. No one needs to know why Bond is leaping to be captivated by it. Dilemma, though, requires more development.

Perhaps the clearest delineation of this need for development was laid out by Marie-Laure Ryan in *Possible Worlds* by presenting the narrative dilemma through the lens of Possible Worlds Theory. This mode of envisioning a narrative focuses on a text as a network of overlapping modal universes that fit together to form a storyworld. Ryan begins with the actual world, or AW, which she describes as the "factual domain" or the world of the reader (Possible Worlds 112). Ryan deems the storyworld the "textual actual world," or TAW, and explains that it represents the totality of the narrative universe, including all the possible worlds (or modal universes) of the characters (113). She identifies several of the modal universes that can be conceived as part of each character within the storyworld; these include the character's knowledge world, obligation world, wish world, pretended world, and fantasy world (114-119). Each of these worlds, in Ryan's model, represents a part of the character's psyche. For example, the knowledge world represents the sum of knowledge a character has about the universe they inhabit, while the wish world is the character's representation of the storyworld as they wish it to be, and the obligation world represents the character's, "system of commitments and prohibitions defined by social rules and moral principles" (116). Ryan describes conflict internal to a character's psyche (or dilemma) as follows:

Conflict occurs within a character's domain when the satisfaction of one world of this domain requires the nonsatisfaction of another. Classical Examples of such personal conflict include incompatibility between wish world and obligation world [the realization of the character's desires requires some forbidden or morally wrong action...] (121, 122)

An example of this might be a married character having vows that oblige them to remain faithful while holding the incompatible wish to carry on an affair with a desirable lover.

The key to setting up a narrative dilemma in Ryan's model would mean a text offering the reader access to at least two key areas of the character's psyche that are in opposition with

one another. Understanding of this type of internal tension requires that the text set up at least those two elements of the character's knowledge world.

A classic example of such a dilemma can be seen in Philip Roth's 1960 short story "Defender of the Faith." The protagonist and narrator, Nathan Marx, is a sergeant returning from the European theater of the Second World War. He's also a Jew. This is the tension the text introduces and explores, and it's the central question of Marx's dilemma: to what system of moral obligation does one owe more adherence, the code of the soldier or fealty to one's faith? This clash of Marx's two very potent obligation worlds is introduced when he meets a young Jewish private named Sheldon Grossbart, and the text signals conflict from the outset.

He turned away and I heard him mumbling. His shoulders were moving, and I wondered if he was crying.

"What's your name soldier?" I asked.

He turned, not crying at all . . . He walked over to me and sat on the edge of my desk. He reached out a hand. "Sheldon," he said.

"Stand on your feet, Sheldon."

Getting on his feet, he said, "Sheldon Grossbart." He smiled at the familiarity into which he'd led me. (385)

Very subtly, the text cues the reader to the tension that will develop between Marx and Sheldon. In this opening encounter, Sheldon coaxes Marx into familiarity by pushing the barrier that Army protocols prohibit. Here Sheldon does it in two ways—by sitting on the desk and by offering his superior his first name instead of his rank and surname. And the reader learns in the final line above that Sheldon is partially successful and knows it, even if Marx does correct him for the transgression of sitting on the Sergeant's desk. While correcting him Marx confesses, "I felt I sounded like every top sergeant I had ever known," indicating that Sheldon has also coaxed Marx into feeling guilty for adhering to his military obligations. This success emboldens Sheldon further. After he answers Marx's next

question, "He slipped up onto the corner of the desk again—not quite sitting, but not quite standing either." These cues demonstrate the dilemma to the reader. Marx desires not to "sound like every top sergeant he had ever known," yet Sheldon is forcing him to have to embody the militaristic disciplinarian he clearly doesn't enjoy being.

Over the course of the story, Marx grows increasingly more annoyed at Sheldon as the young private continues to push the boundaries Marx's Army obligation world requires him to enforce. Another example of this involves Grossbart's habit of calling Marx "sir" instead of "sergeant."

"Thank you, sir," he said.

"'Sergeant,' Grossbart," I reminded him. "You call officers 'sir.' I'm not an officer. You've been in the Army three weeks—you know that."

He turned his palms out at his sides to indicate that, in truth, he and I lived beyond convention. "Thank you anyway," he said. (389)

This breach in convention is a tactic Grossbart uses to test the boundaries between Marx's two obligations. By calling Marx "sir," Grossbart is attempting to generate a kinship while testing the strength of Marx's adherence to military regulations. The behavior quickly spreads to the other Jewish privates as Grossbart introduces the other Jews in the platoon, who, to Marx's consternation, call him "sir" as well.

Grossbart continues to push boundaries within the camp. Marx's commanding officer, Captain Barrett, asks him about Grossbart by name and informs Marx that Grossbart's mother has called a congressman about the food at Camp Crowder. As Captain Barrett becomes increasingly agitated, Marx finds himself, defending his fellow Jew:

"Sir, Grossbart is strange—" Barrett greeted that with a mockingly indulgent smile. I altered my approach. "Captain, he's a very orthodox Jew, and so he's only allowed to eat certain foods." (393)

Curiously, despite Marx's clear annoyance at the young private, Grossbart manages to pull at the tension between Marx's two obligation worlds persistently enough that Marx

actually lies to Captain Barrett on Grossbart's behalf. Marx calls him orthodox when he knows him to be very much otherwise. Sergeant Marx finds himself thrust into an even deeper tension between these two obligations when Barrett brings Marx to the firing range to confront Grossbart about the food problem. Grossbart tells him,

"I eat because I have to, sir. But Sergeant Marx will testify to the fact that I don't eat one mouthful more than I need to in order to survive."

"Is that so Marx?" Barrett asked.

"I've never seen Grossbart eat, sir," I said.

"But you heard the rabbi," Grossbart said. "He told us what to do and I listened."

The Captain looked at me. "Well, Marx?"

"I still don't know what he eats and doesn't eat, sir."

Grossbart raised his arms to plead with me, and it looked for a moment as though he were going to hand me his weapon to hold. "But, Sergeant —"

"Look, Grossbart, just answer the Captain's questions," I said sharply. Barrett smiled at me and I resented it. (396)

Here, Grossbart and Barrett are each pulling at one of Marx's obligations, and it's evident that what Marx wants more than anything is to not be stuck in the middle. It is this tension the story engages until the final piece in the anatomy of a dilemma arrives—the decision.

As Ryan notes regarding the suspense of narrative plots in *Narrative as Virtual Reality*:

The future begins to take shape when a problem arises and confronts the hero with a limited number of possible lines of action. When a line is chosen, the spectrum of possible developments is reduced to the dichotomy of one branch leading to success and another ending in failure, a polarization that marks the beginning of the climax in the action. (142)

In the case of a dilemma, it isn't necessarily easy to distinguish success or failure; otherwise, the character's choice would be easy. What is important in the case of dilemma is that the text constrains the character's choices to a dichotomy and leaves the character no option but to act on one of these choices. In "Defender of the Faith," Grossbart pushes Marx's obligation world to the point where Marx is forced to consider whether he should intervene in the destination of Grossbart's deployment: should he send his fellow Jew into

battle in the Pacific or use his influence to change the orders? By virtue of this plot structure, "Defender of the Faith" can be seen as a prototypical narrative dilemma.

Focalization of Dilemma:

Another key point in the study of the narrative dilemma is that in order for the dilemma to resonate with readers, they need to be able to understand the character's dilemma. To that end, the interpreter of the narrative must bring to bear one of the more impressive feats of cognition: Theory of Mind, otherwise known as a person's capacity for understanding the intentional stances of others. Cognitive psychologist Steven Pinker even goes as far as to deem it a form of mind reading:

We mortals can't read other people's minds directly. But we make good guesses from what they say, what we read between the lines, what they show in their faces and eyes, and what best explains their behavior. It is our species most remarkable talent. (*How the Mind Works* 330)

Indeed, it is such a remarkable talent that people need not even be real for readers to ascribe intentions to characters by interpreting their words, behaviors, and even the subtlest gestures. Many narrative theorists, taking cues from the fields of the cognitive sciences, view this ability as a critical part in our cognitive capacity for understanding narratives. In *Why We Read Fiction*, Lisa Zunshine notes that, "On some level, then, works of fiction manage to 'cheat' these mechanisms [that monitor the intention of others] into 'believing' that they are in the presence of material that they were 'designed' to process, that is, that they are in the presence of agents endowed with a potential for a rich array of intentional stances" (10). Zunshine also argues that a key component to our understanding of narrative seems "to be grounded in our ability to invest the flimsy verbal constructions that we generously call 'characters' with a potential for a variety of thoughts, feelings, and desires and then to look for the 'cues' that would allow us to guess at their feelings and

thus predict their actions" (10). In other words, people have the capacity not only to read the minds of the actual people around us, as Pinker notes, but we are also able to interpret the actions, feelings, and perceptions of literary characters in the same way. However, just as people in the real world require the cues that Pinker mentions—words, gestures, expressions, etc.—in order to interpret the intentions of others in the real world, a reader needs textual cues in order to understand the intentional stances of characters. In the case of dilemmas, this involves understanding both conflicting internal positions.

A key component affecting a reader's ability to interpret the intentional states of characters is focalization. The term focalization, coined by Gerard Genette, concerns the place from which the reader visualizes the storyworld (Genette 189). Focalization provides a distinction between "point of view" and "voice," which, in the case of a characternarrator may be one and the same; yet, in the case of an extradiegetic narrator, 13 the narrator's perspective often differs from that of the focalizer. If we return to "Defender of the Faith" as an example, the story is focalized through Marx himself. He is both the narrator and the focalizer. This perspective offers the reader the clearest possible window into Marx's perspective on Grossbart, as the reader is granted access to Marx's thoughts directly.

Marx's dilemma, though compelling, represents one rather simple dilemma concerning the choice facing a single character. To demonstrate how focalization is a key component of a literary dilemma, I turn to Lauren Groff's story "Delicate Edible Birds," which involves five news reporters faced with a single highly-complex and emotionally-compelling dilemma narrated by a non-characterized extradiegetic narrator. "Delicate

¹³ Genette's terminology for a narrator existing outside the storyworld. In more common parlance, an omniscient narrator. See Genette 248.

Edible Birds" begins with a jeep full of war correspondents fleeing Paris in June of 1940 as the Nazis approach the city. The protagonist of the story, Bern, is a female American reporter, who is traveling with four other newsmen: Parnell, a Brit with whom she's having an affair; Frank, an older American newspaper reporter; Viktor, a Russian reporter; and Lucci, an Italian photographer. The dilemma does not materialize immediately in the story, and the focalization shifts, offering a glimpse into the intentional states of all five main characters.

The narrative begins focalizing with Bern, and there are cues right away that direct the reader to interpret Bern as tough, sometimes in an over-the-top fashion. Bern curses the French Prime minister, Reynaud, for handing over Paris to the Nazis without a fight. The men in the jeep respond to Bern by rationalizing Reynaud's decision to calm Bern down. Yet she persists: "It's cowardly, spat Bern. Frank sighed and rubbed his fat hand over his head. Oh Bernie. Don't you grow tired of being the everlasting firebrand? . . . Bern bristled. There weren't enough women firebrands in the world as far as she was concerned" (119). Frank's sigh and gesture, rubbing his head, cue the reader to interpret his frustration with Bern's abrasiveness. And from her dialogue, the reader gets a picture of Bern as the tough female trying to prove herself in a world of war and male reporters.

The second section of the story is focalized through Viktor as he drives the jeep with the five journalists through the French countryside. Viktor fantasizes about taking Bern and leaving the other men behind, and his thoughts offer cues to how he views the others. "Lucci was all right, but Parnell and Frank he despised. Parnell for obvious reasons [he is Bern's current lover]; Frank because he was a greasy toad" (121). Much of the rest of the section follows Viktor's interiority, his reflections on his past intimate relationship with Bern, his recollection of their night together and her subsequent rejection of him. This

serves to build a foundation for the reader to interpret Viktor's behavior toward Bern and the others through this lens of unrequited love. Viktor resents Bern's rejection of him, yet he still loves her and wishes to marry her. When Bern notices Viktor's grave silence, she states, "Viktor, you're wearing ye olde death-head again . . . What's the matter?" Instead of telling Bern that he loves her, as he wishes to do, Viktor merely grinds out his cigarette and states, "We should be off, then, if we don't want the Krauts to catch us" (123). The reader can infer that Viktor's reticence reflects his fear that Bern would only reject him again. The reader gets a firm foundation through which to interpret Viktor as a scorned lover who views the other men as rivals.

Parnell is the focalizer of the next section, in which the reporters continue to flee through the French countryside. Parnell's thoughts wander to Bern and the others: "He stared at this brusque American, appalled as ever. Then she softened and cuddled against him, a good kitten, and he reminded himself that she never meant it, not really. She talked a terrible hard streak, but was a dear thing inside" (124). This window into the thoughts of Parnell offers a type of recursion to the reader: the reader interprets Parnell through the lens of the text while interpreting Bernie through the lens of Parnell's belief that Bernie is not as tough as she talks—that she is "a dear thing inside." The text offers a complex set of intentional stances from Parnell's view alone. Parnell thinks of Frank briefly: "Badtempered fellow . . . but he doesn't seem to mean any real harm" (124). The reader sees a picture of how Parnell views the others and simultaneously is given cues on how to interpret Parnell based on his impressions of the others. The shifting focalization allows the reader to interpret multiple character viewpoints in a way a single focalizer couldn't.

The reporters, hungry and running low on fuel, take refuge at a farmhouse in the French countryside with the hope that they will be able pay the farmer for a night of

lodging, food, and gas for the jeep. At this point, Bern again becomes the focalizer. Over dinner, she notices that the farmer has pictures of Hitler on his walls and his armed adolescent sons haven't set down their weapons. Following dinner, the farmer makes it clear that he intends to hold the group hostage until Bern agrees to sleep with him. When Bernie refuses, the farmer directs his sons to lock the reporters in the stone barn across from the farmhouse.

The first few moments in the barn leave the reader to interpret what at first seems a collective dilemma. There is solidarity among the group from the outset. Bern states, "I would commit hari-kari. Spectacular fucking brute. Never in my life would I sleep with a fascist" (132). Frank agrees, stating that he would shoot her himself if she did; Parnell agrees; and Viktor expresses his wishes to murder the farmer in his bed. The group collectively agrees that allowing Bern to sleep with the farmer is out of the question. Yet the prospect of the pursuing Nazis still represents a potential death sentence for everyone, and they are stuck in the barn. The dilemma for each of the men involves whether their obligation to respect Bern's right to refuse the farmer can withstand their wish to escape the barn and the pursuing Nazis. Bern's situation is more complex, as the lives of all four men rests in her hands. The narrative's suspense, originally the danger the pursuing Nazis poses the journalists, now shifts to the introduced dilemma, and the driving force of the narrative becomes the question of how the constraints of this dilemma will compel each of these five characters to act in respect to their original positions.

During the first day in the barn, focalized through Frank now, their initial solidarity begins to turn. Frank is the first to distance himself, and the reader interprets this through the lens of Frank's own focalized thoughts: "Always, always the others around. And he no match for Parnell, handsome as he was, or Viktor, who simply sweated virility. Or even

Lucci with his easy charm . . . He might as well forget about it. Not that a cold bitch like Bern would be good for him, drive a cold dagger through his heart, more likely than not" (136). The cues presented show that Frank is beginning to view the situation through that of a rival lover to these other men, and when he realizes where he stands, he blames Bern for it and grows angry and resentful. He reflects on the one drunken night they spent together and concludes that she slept with him out of pity. As the afternoon passes Frank grows hungry. He begins to rationalize that the farmer is younger and better looking than he is. The reader can possibly infer that Frank views the farmer's looks as a reason for Bern to acquiesce. When she rejects the farmer's second request that afternoon, Frank's thoughts grow sharper: "Frankly, in the light of day, he didn't see what the all the fuss was about. She'd slept with everyone and his brother, so why one more peasant meant anything at all, he didn't know. Phony, prissy bitch" (137). This shift in Frank's resolve makes clear his new intentional state. Frank began their confinement firmly supporting Bern out of obligation to their past friendship and Frank's adherence to a moral code that prohibits sexual violence. Now, after a full day in the barn, Frank resents that Bern won't put aside what he sees as false pride on her part. Frank's wish to get out of the barn before the Nazis arrive overwhelms any sense of obligation he once had for Bern. Not surprisingly, Frank is the first to break with the group that evening: "Dammit, girl, he said, just do it" (138). This utterance touches off a physical confrontation with Viktor, who comes to Bern's defense, and the earlier cues in the text focalized through Victor allow the reader to infer that Viktor's desire to defend Bern stems from his continued feelings for her.

The final section of the story focalizes through the Italian photographer Lucci.

Perhaps surprisingly, Bern's lover Parnell is the next to crack as they wake the following morning. Brought to tears by a nightmare about the coming horrors of the Nazis, Parnell

states, "I want to go home . . . Please, Bern. Just let us go home" (139). This turn in Parnell's position quickly prompts Frank to echo the sentiment: "See, Bern. You're hurting all of us, you know. Your morals, he said, are hurting all of us" (139). And as Viktor is again moving to confront Frank physically, Lucci steps between them. The text presents Lucci's backstory here as well, explaining that his wife was taken from him, pregnant, for "doing what she needed to do against the fascists" (139). The reader is also presented Lucci's musings on the terrible things happening to Europe because of the war: "And yet, he thought, there are still people like Bern, and this is good. White-hot people with a core of iron" (140). The reader can infer from this that Lucci will likely not desert Bern easily. Soon after, Viktor, Bern's protector, collapses from exhaustion and Frank grows bold, berating Bern: "Why the hell not, Bern. Everybody knows you're a slut" (142). Viktor continues to protest until Parnell piles on, revealing that she'd even slept with Frank. This revelation wounds Viktor to the point that he relents as well: "Do what needs to be done, Bern" (143). By this time, Frank, Parnell, and even Victor have allowed their wish to escape to take priority over their obligations to respect Bern's decision. Bern has only Lucci to turn to for support. Yet the withdrawal of Victor's support shifts the energy inside the barn. The text offers ample cues through which to interpret the moment: "In a minute, Bern stepped closer to Lucci, searched his face. She tried to take his hand. But Lucci couldn't breathe anymore. He stepped away. He turned his back" (143). Here, Lucci's gesture provides a perfect example of a textual description of a physical movement cuing the reader to interpret a character's action as a reflection of his inner feelings. As Zunshine notes, "Writers have been using descriptions of their characters' behaviors to inform us about their feelings since time immemorial, and we expect them to do so when we open the book" (4). By turning his back at this moment, Lucci says what he wants to say even though he doesn't have the courage

to say it. The gesture is far more expressive than what Lucci could articulate, encoding a vast store of complex, emotional interactions that have built up over the course of the story. The reader's ability to correctly understand these complex emotions results directly from the cues presented to this point in the story, cues that depend upon multiple focalizations so that each character's perspective could be understood relative to their place in their collective dilemma. Lucci's gesture provides the perfect reaction from the slight sketch of his character the text presents for Lucci preceding this critical stage in the story. So too does Bern's reaction to Lucci's betrayal: "Bern blinked, and her voice came out raggedly, Et tu, Lucci, she said with a grim little smile" (143). Bern's "grim little smile" offers the reader a similar physical cue through which to envision her emotions at that moment—a grim little smile of resignation to her companions' betrayal.

The earliest cues to suspense in "Delicate Edible Birds" revolve around the danger the journalists face fleeing the Nazis. This danger acts as the hook, and as this hook is being set, the text presents, through multiple focalizations, the information the reader needs to process the intentional states of each character. When the farmer's ultimatum presents the dilemma that becomes the primary magnetic plot element in the story, the reader then possesses the information necessary to "read" the characters thoughts, in the way Pinker and Zunshine suggest when referencing Theory of Mind. What follows are multiple constraints that shift the thinking of the men—the passing time, the approaching Nazis, their hunger, their growing resentment of Bern, their perception of the other men's waning support—all of these concerns constrain the dilemma to Bern's sense of isolation when Lucci turns his back. At this moment, dilemma rests squarely upon Bern, as it always did, and the resolution becomes clear.

An Unconventional Dilemma:

Both "Defender of the Faith" and "Delicate Edible Birds" represent fairly conventional dilemma narratives. Both take place in recognizable storyworlds and are narrated in conventional literary styles, one a with a character-narrator as a single focalizer, and the other with an extradiegetic narrator and multiple focalizers. Neither story explores any of the less conventional modes of narration that scholars like Brian Richardson might call unnatural. In order to explore this aspect of the literary dilemma, I'm returning to Karen Russell's "St. Lucy's Home for Girls Raised by Wolves," which both adopts an unconventional narrational posture and explores a storyworld slightly unfamiliar to the real-world reader. Despite the apparent strangeness of the narrative and the quasi-animalistic characterization of the protagonist, the same narrative structure applies here as well. The text cues suspense from the opening, the subsequent events continue to constrain the dilemma the protagonist faces, and the narrative is drawn to a moment of resolution.

The premise of Russell's story is just as fantastical as the title implies. One narrative device that helps to increase the believability of what would seem a ridiculous premise is the unconventional narrational posture that the narrator adopts from the opening.

Grammatically, this collective narrative posture is recognizable by the first person plural pronouns, signaling a collective narration that seems organic to the story being narrated: how else would a member of a wolf pack tell her story if not through collective narration? She sets the stage for the drama:

¹⁴ In his 2006 book *Unnatural Voices*, Brian Richardson systematically explores unconventional narrative postures that intentionally subvert the traditional narrative postures of modern fiction. These include 2nd person or "you" narration, "we" narration that uses 1st person plural pronouns, as well as a number of postmodern counterfactual types of narrators ranging from "fraudulent" to "permeable." Narrators of these types often exist to push the boundaries of traditional narrative expectations.

We'd arrived at St. Lucy's that morning, a part of a pack fifteen strong . . . Our mothers and fathers were werewolves. They lived an outsider's existence in caves at the edge of the forest, threatened by frost and pitchforks . . . Our parents wanted something better for us . . . We would go to St. Lucy's to study a better culture. We didn't know at the time our parents were sending us away for good. Neither did they. (my italics 226, 227)

This collective narration cues the reader to view the narrator as a member of a pack instead of a single individual. This protagonist's individuation will serve as the story's magnetic plot element, forcing her into the dilemma of whether to reject the impulsive joy of her animal wildness in favor of the benefits of enculturation in a well-structured community. This journey is reflected in the narrator's use of pronouns, as she gradually adopts the first person singular "I," moving away from the collective narration of the opening. On the topic of collective narration, narratologist Brian Richardson writes, "'We' may represent an intimate or vast group, and its composition may—and usually does—change during the course of the fiction . . . Another important question is how homogeneous the 'we' cluster is and how it becomes more or less inclusive as the text progresses" (Richardson 38). In the case of the narrator of "St. Lucy's," what may seem more relevant is not whether the "we" is inclusive, but how much the narrator self-identifies as a member of the "we" as the text progresses and how her dilemma becomes more pronounced the more she begins to identify as an individual. From the opening line to the page break signaling the start of "Stage 2" in the girls' progression toward full membership in a human culture, the narrator uses the personal pronoun "I" only once, presumably to signal a specific identity to the narrating entity. All the other personal pronouns used to reference the girls in the opening section are collective pronouns until the Jesuit nuns decide that the girls have become habituated enough to their new surroundings to begin their process of assimilation. This process begins with the bestowing of new names:

The oldest sister had spent the past hour twitching in her sleep, dreaming of fatty and infirm elk. (The pack used to dream the same dreams back then, as naturally as we drank the same water and slept on the same red scree.) When our oldest sister saw the nuns approaching, she instinctively bristled . . . Sister Maria gave her a brave smile. "And what is your name?" she asked. The oldest sister howled something awful and inarticulate, a distillate of hurt and panic, half-forgotten hunts and eclipsed moons. Sister Maria nodded and scribbled on a yellow legal pad. She slapped on a nametag: HELLO, MY NAME IS_____! "Jeanette it is." The rest of the pack ran in a loose, uncertain circle, torn between our instinct to help her and our new fear. We sensed some subtler danger afoot, written in a language we didn't understand. (Russell 228)

As this passage begins, the girls are so in tune with one another as to dream the same dreams. It isn't until the Jesuit sister approaches that the narrator even distinguishes the eldest sister as an individual entity. Before this moment in the story, the collective narration relates the pack's action as unified: "We interred sticks . . . Our diminished pack threw back our heads in a celebratory howl . . . Our noses ached . . . We had just sprawled out in the sun . . ." (227). The mere act of naming the girls highlights the dilemma that was merely implicit to this point in the story: should one resist the civilizing process in order to retain that cohesion with the family unit or embrace assimilation and the pitfalls that come with it? The reaction of the girls is telling here — danger, fear, and confusion, not unlike the tribulations of children as they become habituated to a new social circle and set of social processes on their first day of school. Once the door is opened to individuated thinking, apart from the family unit, the progression seems inevitable. The pack's transformation has begun and the dilemma implicit in the opening begins to grow more pronounced and more explicit.

As "Stage 2" begins, the narrator continues to use plural pronouns: "Those were the days when we dreamed of rivers and meat" (229). But more and more, the singular pronoun begins to creep into her consciousness: "We would snarl at one another for no reason. I remember how disorienting it was to look down and see two square-toed shoes

instead of my own four feet" (229). This uncertainty echoes the earlier fear and confusion, yet the earlier apprehension is slightly subdued. Now, instead of fear, the reader can detect disorientation and an unease within what was once a consonant pack. As "Stage 2" progresses, the dilemma becomes explicit to the girls: "We had never wanted to run away so badly in our lives; but who did we have to run back to? . . . Could we betray our parents by going back to them?" (230). Here, it is evident that the girls are aware they are caught between two worlds. Their dilemma is clear: they wish to cling to the comforts of their collective selves—the "floor-thumping joy," the "kinetic laughter," the "exultant and terrible noise" of the wild pack mentality they'd arrived at St. Lucy's embodying; their obligation, though, is to their parents' wishes that they become civilized. It is this tension that pulls at the girls' separate possible worlds, between the obligation to assimilate and the wish to remain wild.

As the pack continues to learn more about their new world, the narrator begins to focus on her sisters as individuals, worrying about her youngest sister Mirabella's failure to assimilate and resenting the ease with which her oldest sister Jeanette adopts the new culture's ways. Midway through "Stage 2," the narrator, now known to the reader as Claudette, begins to self-identify: "I was one of the good girls. Not great and not terrible, solidly middle-of-the-pack" (232). And the idiomatic use of the phrase now seems at least partly figurative. The dilemma is reflected in the pack's attitude toward the girls on both extremes: "The pack hated Jeanette, but we hated Mirabella more" (233). The hatred of both sisters on the extremes seems a reflection of their fears for each possible outcome, especially the unknown outcome for failure to assimilate.

At the end of "Stage 2," the narrator rejects Mirabella when the younger sister covers herself in splinters and comes to Claudette whimpering: "Still, looking at

Mirabella—her fists balled together like small white porcupines, her brows knitted in animal confusion—I felt a throb of compassion. How can people live like they do? I wondered" (235). Again, the dilemma is apparent. Claudette's obligation prevents her from licking her sister's wounds, as, "wound licking was not something you did in polite company" (235). Yet it seems clear that Claudette's wish world still compels her to comfort her sister and fellow pack member.

As "Stage 3" begins, the nuns grow tired of Mirabella's antics, and Claudette echoes their frustration. She drifts further away from the pack mentality and closer to the individuation her older sister Jeanette embodies. The plural pronouns also appear less and less often. By "Stage 4" Claudette narrates almost exclusively in singular pronouns. When Jeanette, the clear alpha, askes Claudette to help her with the mess Mirabella has made, Claudette scoffs: "I ignored her and continued down the hall. I only had four more hours to perfect the Sausalito. I was worried only about myself. By that stage, I was no longer certain of how the pack felt about anything" (241). Claudette has not only begun to act as an individual, but has adopted an objective that has value in her new culture (winning a dance contest), one which would have had no value in her old culture. This rejection seems to presage Claudette's ultimate decision to her dilemma, which reaches its moment of resolution during the dance contest, by which time she has completely abandoned the pack mentality in favor of the parochial school's individualistic culture. Yet at the story's moment of highest suspense, Claudette stumbles, forgetting her dance steps and eliciting a silent near-howl of desperation. To her shock, she's rescued by her wild youngest sister, who tackles her, "barking at unseen cougars, trying to shield me with her tiny body" (244). Claudette confesses that, "I had never loved someone so much, before or since, as I loved my littlest sister at that moment" (244). It is at this moment as well that the dilemma is most pronounced. It is Mirabella's pack instincts that have rescued Claudette from humiliation, and it gives her the opportunity to make a choice regarding her enculturation and whether her sisters choose to reject Mirabella. "Everybody was watching; everybody was waiting to see what I would do" (244). The plot resolves when Claudette rejects her sister, accusing Mirabella of ruining the dance, which sets the dilemma to rest completely. The suspense that is hinted at in the title, cued from the outset, and sharpened through each constraint, now recedes following the resolution. The narrative ends with Claudette returning to the woods unable to navigate without the help of the woodsmen.

The strangeness of Russell's story offers an intriguing problem: what benefit does an unconventional dilemma narrative in such a counterfactual culture offer real-world readers? Stories and myths that stretch the boundaries of credulity seem to be culturally ubiquitous. I hypothesize here that practice negotiating dilemmas in strange fictional universes may be an adaptive ability for creatures with such wide-ranging and fast-changing cultural norms, as humans are. Fast adaptors to new cultural landscapes stand a better chance of surviving a quick shift in the social environment, like the death of a monarch, a natural disaster that wipes out a capital city, or a conquest. The ability to ponder outcomes in uncertain environments may make understanding an unnatural dilemma narrative a key social skill to possess.

Location of Dilemma:

Each of these three dilemma narratives, though different in many ways, shares commonalities that might be expected of stories whose primary magnetic plot element is a literary dilemma. By comparing narratives within the same MPE category, narratologists can gain new insights into narratives that would not be obvious without the categorization. As cognitive scientist Steven Pinker notes about categorization, we gain the ability to draw

useful inferences about members of a category, "We can observe some of its properties, assign it to a category, and from the category predict properties that we have *not* observed" (How the Mind Works 307). These three dilemma stories share the narrative anatomy of a character or characters' internal conflict of possible worlds, as outlined by Marie-Laure Ryan. They also share a similar moment where the narrative constrains the possible outcomes to a dichotomy where the character/s are forced to choose between vastly different outcomes. What might not be expected are other similarities in these storyworlds that are not obvious without their juxtaposition within the same MPE category because of their similar plot content. One example of such a commonality is a shared manner in the way space is constructed in each of these storyworlds, where each of the three dilemmas unfolds within an enclosed space. By comparing the spatial similarity of these three dilemma narratives, it is possible to begin to make useful inferences about the category of dilemma narratives as a whole.

Spatial immersion represents a key concept in understanding the nature of how dilemma may relate to spatialization. Marie-Laure Ryan highlights two key elements of spatial representation in a storyworld: the first is that of topography and the second is atmosphere. On the first, she notes, "To create a global and lasting geography, the text must turn in its favor the linearity of its medium . . . guiding them [readers] from viewpoint to viewpoint and letting them discover one by one the salient features of the landscape" (Narrative as Virtual Reality 123, 124). A textual world that values topological immersion would contain reference points that cue the reader to create a definitive cognitive map of the story's setting. In his book Story Logic, narratologist David Herman adopts theories from cognitive psychology proposed by cognitive scientists Barbara Landau and Ray Jackendoff that deal with the language and cognition of spatialization: "Landau and

Jackendoff have described places as *regions* occupied by *landmarks* or reference objects, and *paths* as the routes one travels to get from place to place" (278). Herman argues that readers forming mental imagery of a storyworld map space similarly by conjuring representations of regions, landmarks, and paths. Regions and subregions clearly exist in each of the three dilemma narratives explored in this chapter. For "Defender of the Faith" the region is Missouri, and the subregion would be Camp Crowder; for "Delicate Edible Birds," the region is the French countryside outside Paris and the subregion is the farm somewhere between Orleans and Bordeaux; and for "St. Lucy's" the region is the Toowoomba area and the wilderness surrounding it, and the subregion is the school itself.

The other distinction Ryan notes regarding spatial immersion is "atmosphere." She mentions the "salience of highlighted features" of the landscape that create a sense of the space if not the orientation of it; among the examples she gives, via a passage from a Robbe-Grillet novel, are wet asphalt, cold, bare black branches, and wind blowing through leaves (124). By combining both atmospheric and the topographic cues, a text can vary greatly in the degree to which it cues the reader to create a sense of spatial immersion. The three dilemma narratives discussed above all vary tremendously in this regard. By examining stories that rely on the same magnetic plot elements to generate suspense, like the three stories studied here, literary scholars can make observations that might not otherwise be obvious or even noticeable.

In "Defender," textual reference to space appears so scarcely that it almost seems omitted entirely, as when Marx chats with Captain Barrett about Grossbart's eating habits. The only textual cue relative to any spatialization occurs in a dialogue tag when Barrett looks out a window (Roth 387). Presumably they're in Barrett's office, but it's impossible to tell for sure. Only two clear pathways exist in the story—one from the barracks to the

synagogue, and the second from Barrett's office to the shooting range when Marx and the Captain take a jeep to confront Grossbart. There aren't enough textual cues to draw any concrete conclusions about the orientation of any of these places. It might be safe to say that the narrative relies on a post-WWII American readership to draw on fairly accurate schemas in forming an image of a generic military base on which to set the characters.¹⁵

"Delicate Edible Birds," delineates space much more clearly. The story opens in Paris, which, Ryan would likely argue ranks among the most immersive toponymical place names due to the wealth of schematic material available to the reader whether in personal experience, pop culture, or both. The immediate locating of the story in its first sentence grounds the narrative spatially, and the text's description sets the scene in a specific Paris: "The arches in the facades were the curve of a throat, the street corners elbows, and in the silence, Bern could almost hear the thumpings of some heart deep beneath the residue of civilizations . . . Paris seemed so gentle as it awaited the Germans" (Groff 118). The protagonists quickly beat a path away from Paris into the countryside when Lucci arrives with Germans on motorcycles hot on his heels, and he exclaims, "Oh, Berenice, I have it. The best photo of the war. Nazis goose-stepping through the Arc de Triomphe" (121). This famous landmark presents the reader with a textual cue to form a very specific mental image of that landmark as the reporters flee along a path into the countryside away from the Arc de Triomphe.

¹⁵ In cognitive psychology, schematic material is knowledge that is typical or frequent for a particular situation, such as common objects that might appear in a hospital room or what might be found in the interior of a car. See Reisberg 244.

¹⁶ Ryan explores the immersive schematic value of specific toponymic place names in *Narrative as Virtual Reality*, suggesting that names of real places, especially famous ones, like Paris or New York, carry the most immersive potential due to their prominence in popular culture (128).

As they travel into the French countryside, the text grows more general, adopting more atmospheric qualities than topographical: "dampness burned from the ground . . . oaks that drooped over the avenue . . . a number of parties in the fields huddled over blankets spread with food" (123). As the reporters progress, they begin to be more deliberate in their flight: "They went down that insignificant road from Paris, until it emptied out, at last, into one of the major southbound arteries, to the northeast about sixty miles south of the city" (125). The text grows increasingly vague as the reporters get farther from Paris, perhaps echoing the sense of uncertainty inherent in the situation. By the time they arrive at the farmhouse, they could be anywhere in the French countryside between Orleans and Bordeaux.

At the farm, the text presents brief descriptions of the kitchen where they eat dinner, and there is a vague pathway between the house and the stone barn where the reporters are confined. It is certainly relevant to note that the dilemma does not fully materialize until the reporters are confined within the stone walls of the barn. Here, they have no choice but to wrestle with the main dilemma — the magnetic plot element that drives the narrative.

"St Lucy's" opens as the wild pack of wolf girls arrives at the school to be habituated to human society. The title itself does some work by encoding parochial imagery upon which the narrator follows up in the opening few lines: "We tore through the austere rooms, overturning dresser drawers, pawing through the neat piles of the Stage 3 girls' starched underwear, smashing light bulbs with our bare fists" (Russell 323). This descriptive language, combined with script material concerning boarding schools and institutional Catholic indoctrination, does surprisingly effective work in cueing rich spatial imagery of the text's opening setting.

In the fourth paragraph, the narrator explains how the pack of girls were brought by a deacon and "four burly woodsmen" from the woods to St. Mary's: "We ran past the wild apiary, past the felled oaks, until we could see the white steeple of St. Lucy's rising out of the woods. We stopped short at the edge of a muddy lake" (326). The reader is presented cues with which to form a mental pathway from the undefined wildness of the woods, through various stages of direct description to clear landmarks surrounding the steeple of St. Lucy's.

The narrator describes the grounds of St. Lucy's in detail, perhaps to capture the sense of wonder the girls may feel in their new environment, "A low granite wall surrounded St. Lucy's, the blue woods humming for miles behind it. There was a stone fountain full of delectable birds. There was a statue of St. Lucy. Her marble skin was colder than our mother's nose, her pupilless eyes rolled heavenward" (326, 327). Unlike the farmer's stone barn, the low granite walls of St. Lucy's are more a symbolic demarcation than a true obstacle: "Physically, we were all capable of clearing the low stone walls. Sister Josephine left the wooden gates wide open" (328). The desire of the girls' wolf mother for them to be civilized is what compels them to remain, but the stone wall marking the barrier between the untamed woods and the austere rooms and steeple of St. Lucy's forms a combination of a physical and psychological enclosure that plays host to the dilemma the girls face as they grapple with the process of becoming civilized humans.

Though all three texts seem to prioritize a differing depth of spatial immersion, both topographically and atmospherically, they all contain a conspicuous commonality that seems salient as the setting for a dilemma narrative—an enclosure. Though the text never directly references a fence surrounding Camp Crowder in "Defender of the Faith," a reader's understanding of an army base will likely intuitively provide one, especially when

direct references are made to Grossbart's requiring a pass from Marx to leave the base. In "Delicate Edible Birds," the stone barn presents a clear obstacle preventing the protagonists from leaving the space where the dilemma develops. And in "St. Lucy's," the girls are compelled to remain within the low stone walls that demarcate the wilderness from their new civilization and to face the dilemma that comes with it. This pattern seems to dovetail with the requirement that a dilemma narrative constrains the character's options to a temporal point where they are forced to engage the dilemma by choosing one option over the other. Spatial confinement in these three stories helps to force the issue. Marx can't escape Grossbart, due both to his obligation as his sergeant and their necessary spatial proximity on the base. Bern and the male reporters can't escape from the barn and are each forced into their choice, both by time constraints with the Nazis approaching, hunger, and spatial confines of the barn's stone walls. The girls at St. Lucy's are similarly confined, albeit psychologically, and forced to remain within the walls of the school grounds to wrestle with the process of their cultural conversion. This similarity in spatialization within these dilemma narratives wouldn't be observable without their categorization. Other dilemma narratives I have examined show a similar pattern in their spatialization, supporting the idea that an enclosed space is likely a common element in them: "Where Are You Going, Where Have You Been?" by Joyce Carol Oates, "The Ledge" by Lawrence Sargent Hall, "Leg" by Steven Polansky, "The Stucco House" by Ellen Gilchrist, "Undertow" by Jennifer C. Cornell, and "Xmas, Jamaica Plain" by Melanie Rae Thon. The examination of dilemma as a magnetic plot element category allows for other similar properties of category members to be observed, producing sharper inferences as each of the magnetic plot elements is studied in greater detail.

Cognitive Value of Dilemma:

As I developed this heuristic for recognizing the magnetic plot elements (sex, death, danger, goals, power, wealth, violence, conflict, deceit, transgression, betrayal, revenge, mystery, dilemma, stranger, quest) I did so mindful of the fact that any attempt to make large claims about universal plot elements must be sensitive to considerations of culture, gender, time periods, and any number of other specific concerns literary scholars of different specializations may raise. Postcolonial scholar Patrick Colm Hogan addresses this same issue in *The Mind and Its Stories*, and my attempt at identifying a way to categorize these magnetic plot elements as universals approaches the issue from a similar angle. Hogan writes, "Literature, or more properly, verbal art – is not produced by nations, periods, and so on. It is produced by people. And these people are incomparably more alike than not. They share ideas perceptions, desires, aspirations, and emotions" (3). I've identified the above magnetic plot elements with this in mind. I suspect one would be hardpressed to find a human culture whose people didn't concern themselves with sex, death, revenge, transgressions of group mores, etc. Anthropologist Donald Brown's list of human universals contains hundreds of entries that demonstrate a vast shared background of commonalities against which our differences may, at times, seem far more glaring than in reality. One commonality not on Brown's list is perhaps the most important universal — that of a shared evolutionary heritage. Each human being descends from a 350-billion-year lineage of survivors, all of whom lived to pass on useful traits to their progeny. Thus, it seems intuitive to me, and no accident, that each of the magnetic plot elements should represent high-value concerns from an evolutionary standpoint. Sex and violence, death and danger, mystery and revenge – we tell stories about these subjects, and are captivated

by them, and it's likely not a coincidence that these are the events that often tip the scales between life and death for us and for our offspring.

There seems to be some concurrence on this point from the growing number of scientists who have begun to study narrative with a scientific lens. In *Evolutionary* Psychology, Robin Dunbar writes, "Although attempts to explore the nature of drama and literature from an evolutionary perspective are still very much in their infancy, those that have been undertaken agree that the great themes of literature are invariably also the great themes of life – mate choice, parenting, survival, group cohesion, and the hero triumphing the face of adversity" (170). This seems to be for reasons that are intuitive: we care about things that matter in our own lives when we project ourselves into the fictional, illusory lives of others. Steven Pinker observes that we also tend to enjoy in fiction what we enjoy in life: "When the illusions work, there is no mystery to the question 'Why do people enjoy fiction?' It is identical to the question 'Why do people enjoy life?' When we are absorbed in a book or movie, we get to see breathtaking landscapes, hobnob with important people, fall in love with ravishing men and women, protect loved ones, attain impossible goals, and defeat wicked enemies" (How the Mind Works 539). Fiction offers people the opportunity to explore modal universes and does so most successfully when the fiction is attentiongrabbing and absorbing, cueing suspense at the outset and immersing the reader throughout.

It is not entirely metaphorical that John Gardner describes fiction as "the uninterrupted dream" in *The Art of Fiction*. Some of the scientific theories of the nature of fiction show clear parallels between the function of fictional worlds and dream worlds. Psychiatrist and sleep specialist Robert Stickgold has studied dreams and their effects on memory consolidation, confirming that subjects use dreams to help process new skills

learned in the real world in order to better fortify new neural pathways by running simulations of those new skills in their dreams (Stickgold et al. 850). This is echoed in research by Matt Wilson, an MIT neuroscientist who states the following in a NOVA documentary about dreaming:

When you think about the challenge that animals, that we as humans and the brain in general faces, it is the unknown of the future. And in REM [sleep], we may have the opportunity to step into that future world with no risk, because the consequences are simply things don't work out as you might have expected, and then you wake up. So these states may be what are essential for allowing us, as individuals, to reach our maximal level of potential. ("What Are Dreams")

This type of evolutionary free pass is nearly identical to the suspenseful modal universes of fiction, where an avatar flirts with dangers and challenges wicked enemies. From both cognitive abilities—dreaming and fiction—one can logically conclude that our brains possess built-in biological processes to simulate and learn from virtual worlds. We do so each night, both to process new information from our immediate environment and from our hypothetical future environments. In addition to the types of evolutionary pitfalls that people tend to dream and write about—like danger, sex, and violence—it would also seem that dilemmas have particularly large evolutionary stakes that people find magnetic for their mimetic value.

In *How the Mind* Works, Steven Pinker notes, "Life is like chess, and plots are like those books of famous chess games that serious players study so they will be prepared if they ever find themselves in similar straits. The books are handy because chess is combinatorial; at any stage there are too many possible sequences of moves and countermoves for them all to be played out in one's mind" (Pinker 542). Pinker also relates that the moves people process as social creatures are combinatorial as well, and far more complex:

Spouses may be faithful or adulterous. Friends may be false friends. Allies may assume less than their fair share of the risk, or may defect as the finger of fate turns toward them . . . The intrigues of people in conflict can multiply out in so many ways that no one could possibly play out the consequences of all courses of action in the mind's eye. Fictional narratives supply us with the mental catalogue of the fatal conundrums we might face some day and the outcomes of strategies we could deploy in them. (543)

If we consider Gardner's metaphor of fiction as "the uninterrupted dream," his metaphor seems far less metaphorical; rather, the fictional simulation of a narrative would seem closely linked to the evolutionary free-pass we have built-in to our neocortex when we dream. Our reason for being drawn to high-stakes evolutionary drama in narratives may be in large part that we use these situations to teach us to process complex, high-value evolutionary situations without consequences. It would follow that dilemma would be highly ranked among these types of situations that lend themselves both to dreaming and to fictional narratives.

When Robin Dunbar frames society as a battleground between an individual's short-term, selfish interests, and their long-term gains through cooperation, one can easily understand how internal conflict inevitably occurs (172). This conflict within the individual represents the heart of the literary dilemma as well. Fictional dilemmas provide a perfect place to test these waters without harm. When readers place themselves amongst ravishing lovers in breathtaking landscapes—to borrow Pinker's terms—they also find that these fictional storyworlds are replete with adulterous fictional lovers and disingenuous fictional friends. The nature of a dilemma in a piece of fiction is that the answer for the character is never an easy one. Dunbar notes that this also echoes reality. Making a choice that pits one element of the psyche against another, like a wish for short-term gain versus a long-term need like an obligation, demands tremendous cognitive power. "Forgoing one's immediate interests, in order to gain a greater benefit in the long-term is not that easy and would seem

to require high levels of cognitive control; something that may be a distinctly human trait, one that takes a considerable amount of time to develop" (173). And the outcome is never assured. Determining whether to blow the whistle on a corrupt yet powerful boss in the real world requires a tremendous amount of cognitive capital. This may take practice, and some deep-seated recognition of this need to test possible social dilemmas may play a role in drawing readers to the dilemma as a plot element.

Dilemmas, then, not only belong on any list of magnetic plot elements but represent a high-value place on it. Our most difficult decisions are often the most consequential. Dilemmas represent the point of divergence between drastically different possible worlds. They represent key moments of decision where the solution may not have a correct answer. The same cognitive capital that Dunbar references may be the very force that drove our neocortical expansion in the first place. Our very neurological method of testing the waters of modal universes may be the reason we can reason. Those who failed to do so well in our past fell by the wayside in favor of those who navigated difficult social and environmental landscapes with skill, and at times, luck. It would be small wonder, then, that people are drawn to situations that test their skills as social animals, offering the opportunity to learn the most important answers before the test is given.

Epilogue: Cross-Disciplinary Applications for Future Study

It's no small reason that many structuralist narratologists so furiously pursued a universal grammar of plot content. The potential avenues for study that branch from a definitive framework of plot grammar are neither few nor insignificant. Just as I derived this model by pooling relevant information from multiple divergent disciplines of study – from linguistics, structuralism, cognitive narratology, and evolutionary psychology – the potential avenues for study stemming from the theory range from distant reading in the digital humanities to cognitive poetics, cognitive linguistics, evolutionary psychology, anthropology, literary studies, and narrative craft, to mention only a few. The basic structure of plot grammar offers a foothold and a standard for the objective study and cross-comparison of an infinite number of plots.

Though the current study makes no pretense toward scientific methodology itself, it is both informed by several scientific fields and offers the potential of serving as a basis for the scientific study of literature to several different ends. The incipient field of distant reading, founded by Franco Moretti, offers countless possible outlets for employing plot grammar as an algorithm to help probe massive numbers of fictional texts. Similar techniques have already been used to chart story shapes using content analysis to map the emotional arcs in thousands of fictional texts. In their study based on Kurt Vonnegut's method of charting good or ill fortune for the protagonist, Andrew Reagan and his colleagues at the University of Vermont's Computational Story Lab make the case that, "Advances in computing power, natural language processing, and digitization of text now make it possible to study a culture's evolution through its texts using a 'big data' lens" (1). Similarly, if computer scientists can find ways to adapt natural language processing to recognize specific magnetic plot elements, their constraints, and resolutions, thousands of

story plots of all length and genre could be analyzed and compared objectively, offering similar insights to the six common emotional arcs Reagan and his team have already discovered. Studies of this nature have the added benefit of scientific validity in that they can propose hypotheses, develop a specific methodology for testing them, and can be both falsifiable and replicable.

Another potential avenue for testing plot grammar is the field of cognitive poetics, where the testing of suspense, like the studies performed by Moritz Lehne and Katrin Riese, is done against the participants' subjective rating of "suspenseful" or "unsuspenseful" passages in narratives. Successful digital mapping of fictional plots, such as the kind described above, could lend another layer of objectivity to the study of suspense in cognitive poetics. Additionally, proper digital mapping of a specific plot's grammar to correspond to specific linguistic cues could be a useful tool for specialists in cognitive poetics to test emotional affect, especially as it relates to suspense. Cognitive scientists could expand Riese's work testing pupillary response to larger groups of research subjects in order to learn about the strength of certain physiological reactions to specific suspense cues. Researchers could then compare the results against psychometric models or other factors, like Big 5 personality traits, age, gender, etc. Similarly, neurologists could expand Moritz Lehne's fMRI studies to encompass emotional affect by determining how specific narratives trigger neurological responses in certain areas of the brain. A study could use a revenge narrative, for example, to track the strength of activation of the amygdala, orbitofrontal cortex, and dorsal striatum at specific points in the narrative, offering a potent tool for learning about the neurology of emotions and the various ways different subjects might respond to the same narrative cues.

Cognitive linguists could apply this model of plot grammar to more carefully map how certain words, groups of words, or textual representations of plot elements cue suspense for readers. A study of this nature might reveal gaps in the way A.I. systems process natural language. For example, an A.I. may be easily able to correlate the word "sexy" and "dress" to a sex plot merely through content analysis. However, it might very easily miss subtler cues like the presence of a female character that a male narrator mentions in a non-sexual way that might cue a human reader to infer the possibility of a sexual encounter. Norming multiple human interpretations of specific plots against an A.I.'s interpretation of plot grammars could help programmers to build more accurate scripts that contain a better map of human emotional experiences. This, in turn, could lead to even more effective distant reading, as well as A.I. systems that are more in tune to interaction with people.

Anthropology and evolutionary psychology could also benefit from an objective analytic tool for plot content. Cross-cultural comparison of both oral and written narratives could more specifically aid in comparing narratives across categories, especially in evolutionary psychology, where the selective nature of the magnetic plot elements would allow for comparison of narratives that deal with specific historically selective behaviors — transgression of social mores, regulation of sexual behavior, conflict resolution, etc.

Studying narrative plots this specifically, using universal categorical elements, might also lead to greater refinements in the study of cultural universals, like that of Donald Brown.

Multiple fields of literary scholarship can make use of this mode of analysis as well.

Comparing narratives within the categories, as shown in this thesis's study of three dilemma narratives, can help to uncover patterns, differences, and commonalities of narratives that incorporate similar plot elements. The example of all three of the dilemma

stories examined here having similar spatial components—i.e. an enclosed space—was both an unexpected and surprising observation that warrants further analysis of other narratives heavily focused on dilemma. Doubtless, many future discoveries await literary scholars who adopt this type of objective analysis of plot content.

Similarly, of use to literary scholars and students of craft alike, a comparison of narratives with similar plot content can reveal differences that would not otherwise be salient. In 2016, for a conference presentation from which I cribbed the title of this thesis's preface, I did a comparative analysis of plot content between Nathan Englander's 2011 story "What We Talk About When We Talk About Anne Frank" and the Raymond Carver story that inspired it, "What We Talk About When We Talk About Love." Englander based his story on his memory of the original Carver story, which, when Englander composed his story, he claimed not to have consulted until after "Anne Frank" was already mostly written (Perrotta & Pitlor 326). While the plot content was similar, other notable differences helped to reveal subtle contrasts in the two authors' styles. Carver, for example, was deliberate in segregating descriptive (non-narrative) elements in discrete sentences: "She was a bone-thin woman with a pretty face, dark eyes, and brown hair that hung down her back. She liked necklaces made of turquoise, and long pendant earrings" (138). In comparison, Englander's style proved more economical, as he preferred to mix descriptive elements (here, the big black hat) into sentences that advanced the narrative using action verbs: "And right then he takes off that big black hat and plops down on the couch in the den" (Perrotta & Pitlor 41). Similarly, Englander was much quicker to cue the conflict, which serves as the primary magnetic element of both stories. Englander's opening sentence cues the conflict that permeates the narrative, while Carver sets the scene through the first four paragraphs before he presents the first clear cue to conflict. This distinction is

one that could easily serve as a basis for comparison across individual stories, genres, or even time periods, as one factor that may influence the difference between the initial appearance of the first magnetic plot element is a difference in the market for short fiction between the 1970s, when Carver published, and 2011 when Englander's story was published. The prospect of mapping how magnetic elements appear across narratives and comparing how that changes over time may also be explored using distant reading and computational power. As Reagan, Moretti and many others have noted, we are nearing an era where computing power will allow scholars to make inquiries of texts and whole bodies of texts that were previously inconceivable. In the near distant future, the only limitations will be the quality of the algorithms we use as tools of inquiry and the extent of the imaginative questions we choose to ask of the collection of the fictional narratives humanity has amassed since the earliest symbolic representations of the spoken word. I envision the theory outlined in this thesis as but one of these new algorithms, albeit a powerful one, that will allow scholars to ask better questions, get better answers, and advance the study of human intelligence and its inextricable relationship to the fictional narratives that are both birthed by and give birth to our phenomenal cognitive force.

Works Cited:

- Abbott, H. Porter. "The Evolutionary Origins of the Storied Mind: Modeling the Prehistory of Narrative Consciousness and Its Discontents." *Narrative*, Vol. 8, No. 3 pp. 247-256. 2000.
- Aristotle. *Poetics*. Project Gutenberg, 2008.
- Barthes, Roland. "An Introduction to the Structural Analysis of Narrative." *New Literary History*. Vol. 2, No. 6, pp. 237–272, 1975.
- ---. *S*/Z. Hill and Wang, 1974.
- Bezdek, Matthew, R. Gerrig, W. Wenzel, J. Shin, K. Pirog Revill & E. Schumacher. "Neural Evidence That Suspense Narrows Attentional Focus." Neuroscience, vol. 303, pp. 338–345, 2015.
- ---. W. Wenzel & E. Schumacher. "The Effect of Visual and Musical Suspense on Brain Activation and Memory during Naturalistic Viewing." *Biological Psychology*, Vol. 129, pp. 73–81, 2017.
- Bloom, Howard. *Global Brain: The Evolution of Mass Mind from the Big Bang to the* 21st *Century.* John Wiley & Sons Inc., 2000.
- Bosmia, Anand, C. Griessenauer, V. Haddad & Tubbs, S. "Ritualistic Envenomation by Bullet Ants Among the Sateré-Mawé Indians in the Brazilian Amazon." *Wilderness & Environmental Medicine*, Vol. 26, No. 2, 2015, pp. 271–273.
- Boyd, Brian. On the Origin of Stories: Evolution, Cognition, and Fiction. Harvard University Press. 2009.
- Brown, Donald. *Human Universals*. Temple University Press, 1991.
- Bruner, Jerome. Acts of Meaning. Harvard University Press, 1990.
- Burroway, Janet. Writing Fiction: A Guide to Narrative Craft. Longman, 2003.
- Buss, David M. Evolutionary Psychology: The New Science of the Mind. Routledge, 2016.
- ---. Handbook of Evolutionary Psychology. John Wiley & Sons, 2005.
- Caracciolo, Marco. "Literary Proto-Humans Cognition and Evolution in London's Before Adam and Golding's The Inheritors." *Orbis Litterarum*. Vol. 71, No. 3, pp. 215–239, 2016.
- Carroll, Joseph. Evolution and Literary Theory. University of Missouri Press, 1995.
- ---. Literary Darwinism: Evolution, Human Nature, and Literature. Taylor & Francis, 2004.

- ---. "Literature and Evolutionary Psychology." *The Handbook of Evolutionary Psychology*. Edited by David M. Buss. John Wiley & Sons, 2005.
- ---. Reading Human Nature: Literary Darwinism in Theory and Practice. Suny Press, 2011.
- Carver, Raymond. What We Talk About When We Talk About Love. Vintage Books, 1989.
- Chatman, Seymour. *Story and Discourse: Narrative Structure in Fiction and Film.* Cornell University Press, 1978.
- Chomsky, Noam. Reflections on Language. Pantheon, 1975.
- ---. *Syntactic Structures*. Moulton & Co., 1957.
- Cooke, Brett and Frederick Turner. *Biopoetics: Evolutionary Exploration in the Arts.* Paragon House, 1999.
- Cosmides, Leda & J. Tooby. "Cognitive Adaptations for Social Exchange." *The Adapted Mind Evolutionary Psychology and the Generation of Culture*. Edited by Barkow, J. Cosmides, L. & Tooby, J. Oxford University Press, 1996.
- ---. and J.B. Bedaux. *Sociobiology and the Arts*. Amsterdam, 1999.
- Daniels, Peter T, and William Bright. *The World's Writing Systems*. Oxford University Press. 1996.
- Dalke, Rachel. "The Business of Romance Novels in the U.S. and the World." *Ohio State University Honors & Scholars e-Portfolio*. Date unknown, u.osu.edu/dalke6hseportfolio/ files/2016/04/The-Business-of-Romance-Novels-Presentation-1t534ld.pdf
- Dunbar, Robin; Barrett, Louise; Lycett, John. *Evolutionary Psychology: A Beginner's Guide*. Oneworld Publications, 2007.
- Easterlin, Nancy. *A Biocultural Approach to Literary Theory and Interpretation*. Johns Hopkins University Press, 2012.
- ---. *After Poststructuralism, Interdisciplinarity and Literary Theory*. Northwestern University press, 1993.
- Fludernik, Monika. Towards a 'Natural' Narratology. Routledge, 1996.
- Gardner, John. The Art of Fiction: Notes on Craft for Young Writers. Alfred A. Knopf, 1984.
- Gallup, Andrew C., J. Haleb, D. Sumpter, S. Garniera, A. Kacelnikb, J. Krebsb, and I. Couzin. "Visual Attention and the Acquisition of Information in Human Crowds." *PNAS*. Vol. 109, No. 19, pp. 7245–7250, 2012.
- Genette, Gerard. Narrative Discourse: An Essay in Method. Cornell University Press, 1980.

- Golding, William. The Inheritors. Harcourt, 1955.
- Goodall, Jane. *Through a Window*. Houghton Mifflin Company, 1990.
- Gottschall, Jonathan, and David Sloan Wilson. *The Literary Animal: Evolution and the Nature of Narrative*. Northwestern University Press, 2005.
- Groff, Lauren. "Delicate Edible Birds." *The Best American Short Stories* 2010. Houghton Mifflin Harcourt, 2010.
- Hawkins, Jeff. On Intelligence. Times Books, 2004.
- Herman, David. *Story Logic: Problems and Possibilities of Narrative*. University of Nebraska Press, 2002.
- Hill, Wycliffe A. The Art of Dramatic Plot Building. Publisher Unknown, 1921.
- ---. The Plot Genie Index. The Gagnon Company, 1931.
- Hogan, Patrick Colm. *The Mind and Its Stories: Narrative Universals and Human Emotion*. Cambridge University Press, 2003.
- Homer. *The Odyssey*. Translated by A. T. Murray, Harvard University Press, 1919.
- Jack, Katharine M. & L. A. Isbell. "Dispersal in Primates." *Behaviour*. Vol. 146, pp. 429–436, 2009.
- Jackson, Russell & D. Calvillo. "Evolutionary Relevance Facilitates Visual Information Processing." *Evolutionary Psychology*. Vol. 11, No. 5, pp. 1011-1026, 2013.
- James, Erin. *The Storyworld Accord*. University of Nebraska Press, 2015.
- Keen, Suzanne. Empathy and the Novel. Oxford University Press, 2007.
- Klein, Stanley, L. Cosmides, J. Tooby & Sarah. Chance. "Decisions and the Evolution of Memory: Multiple Systems, Multiple Functions." *Psychological Review*. Vol. 109, No. 2, pp. 306–329, 2002.
- Kurzweil, Ray, How to Create a Mind. Viking, 2012.
- LaFrance, Adrienne. "The Six Main Arcs in Storytelling, as Identified by an A.I." *The Atlantic*. 12 July 2016. theatlantic.com/technology/archive/2016/07/the-six-main-arcs-in-storytelling-identified-by-a-computer/490733. Accessed 10 March 2018.
- LaPlante, Alice. Method and Madness: The Making of a Story. W. W. Norton & Company, 2007.
- Lehne, Moritz, P. Engel, M. Rohrmeier, W. Menninghaus, A. M. Jacobs & S. Koelsch. "Reading a Suspenseful Literary Text Activates Brain Areas Related to Social Cognition and Predictive Inference." *Plos One.* 6 May, 2015.

- LoBue, Vanesa. & D. Rakison. "What we fear most: A developmental advantage for threat-relevant stimuli." *Developmental Review*. Vol. 33, pp. 285–303, 2013.
- Lucas, George, director. Star Wars Episode IV: A New Hope. Twentieth Century Fox, 1977.
- Martin, Richard P. "Festivals, Symposia, and the Performance of Greek Poetry." *Companion to Ancient Aesthetics*. Edited by Penelope Murray and Pierre Destree. Wiley Blackwell, 2015.
- Matsuura, Koichiro. "The Making of Literate Societies." *EFA Global Monitoring Report: Literacy for Life.* UNESCO, 2005.
- Melville, Herman. *Moby Dick; or The Whale.* Harper & Brothers, 1851.
- Miall, David. "Anticipation and Feeling in Literary Response: A Neuropsychological Perspective." *Poetics.* Vol. 23, pp. 275-298, 1995.
- Moll, Henrike. S. Kane & L. McGowan. "Three-year-olds Express Suspense When an Agent Approaches a Scene with a False Belief." *Developmental Science*. Vol. 19, No. 2 pp. 208–220, 2016.
- New, Joshua, L. Cosmides & J. Tooby. "Category-Specific Attention for Animals Reflects Ancestral Priorities, Not Expertise." *PNAS*. Vol. 104, No. 42, pp. 16598-16603, 2007.
- Oatley, Keith. "Fiction: Simulation of Social Worlds." *Trends in Cognitive Sciences*. Vol. 20, No. 8, pp. 618-626, 2016.
- ---. Such Stuff as Dreams: The Psychology of Fiction. Wiley-Blackwell, 2011.
- O'Toole, Garson. "There Are Only Two Plots: (1) A Person Goes on a Journey (2) A Stranger Comes to Town." *The Quote Investigator: Exploring the Origins of Quotes*. Date unknown, quoteinvestigator.com/2015/05/06/two-plots.
- Perrotta, Tom. & Heidi Pitlor. The Best American Short Stories 2012. Mariner Books, 2012.
- Peterson, Jordan B. Maps of Meaning: The Architecture of Belief. Routledge, 1999.
- Pinker, Steven. The Blank Slate. Viking, 2002.
- ---. How the Mind Works. W. W. Norton & Company, 1997.
- ---. The Language Instinct. William Morrow & Company, 1994.
- ---. *The Sense of Style*. Penguin Books, 2014.
- Propp, Vladimir. *Morphology of the Folktale*. University of Texas Press, 1968.
- Rabkin, Eric S. *Narrative Suspense: When Slim Turned Sideways*. University of Michigan Press, 1973.

- Reagan, Andrew J., L. Mitchell, D. Kiley, C. M. Danforth & P. S. Dodds. "The emotional arcs of stories are dominated by six basic shapes." *EPJ Data Science*. Vol. 5, No. 1, pp. 1–12, 2016.
- Richardson, Brian. *Unnatural Voices*. The Ohio State University Press, 2006.
- Riesberg, Daniel. Cognition: Exploring the Science of the Mind. W. W. Norton & Company, 2013.
- Riese, Katrin, M. Bayer, G. Lauer, and A. Schacht. "In the eye of the recipient: Pupillary responses to suspense in literary classics." *Scientific Study of Literature*. Vol. 4, No. 2, pp. 214-232, 2014.
- Roth, Philip. "Defender of the Faith" *The Best American Short Stories of the Century*, edited by John Updike and Katrina Kenison, Houghton Mifflin, 1999.
- Russell, Karen. St. Lucy's Home for Girls Raised by Wolves: Stories. Vintage Books, 2007.
- Ryan, Marie-Laure. Narrative as Virtual Reality. Johns Hopkins University Press, 2001.
- ---. Possible Worlds, Artificial Intelligence, and Narrative Theory. Indiana University Press, 1991.
- Sapolsky, Robert. "The Influence of Social Hierarchy on Primate Health." *Science*. Vol. 308, pp. 648–652, 29 April 2009.
- Schank, Roger. *Tell Me a Story: Narrative and Intelligence*. Northwestern University Press, 1990.
- Schaub, Michael. "E.L. James has a new 'Fifty Shades': 'Darker' from Christian's point of view." *The Los Angeles Times*. 10 October 2017.
- Scholes, Robert. Structuralism in Literature. Yale University Press, 1974.
- Shepherd, Alex. "Minutes: News & Notes." *The New Republic*, 14 Mar. 2016, newrepublic.com/minutes/126677/it-aint-dont-know-gets-trouble-must-big-short-opens-fake-mark-twain-quote. Accessed 14 March 2018.
- Shklovsky, Viktor. "Art, as Device." *Poetics Today.* Vol. 36, No. 3, pp. 151–174, 2015.
- Stickgold, Robert; Walmsey, EJ; Tucker, M; Payne, JD; and Benevides, JA. "Dreaming of a learning task is associated with enhanced sleep-dependent memory consolidation." *Current Biology*, Volume 20, Issue 9, May 2011, 850-855.
- Todorov, Tzvetan. Grammaire du Decameron. Mouton. 1969.
- Tolkien, J. R. R. The Hobbit: or, There and Back Again. George Allen & Unwin, 1937.
- Vandiver, Elizabeth. "Introduction to Homeric Epic." *Iliad of Homer*, The Teaching Company, 1999.

- "What Are Dreams." NOVA. Produced and Directed by Charles Coville, WGBH, 2011.
- Wilson, Edward O. Sociobiology: The New Synthesis. Harvard University Press, 1975.
- Wilson, Michael. "Chimpanzees, Warfare, and the Invention of Peace." *War, Peace, and Human Nature: The Convergence of Evolutionary and Cultural Views*. Edited by Douglas P. Frye. Oxford University Press, 2013.
- Zunshine, Lisa. *Why We Read Fiction, Theory of Mind and the Novel*. The Ohio State University Press, 2006.