The Ozark Historical Review

Volume 46

Department of History
J. William Fulbright College of Arts and Sciences
University of Arkansas

2018

The Ozark Historical Review

Board of Editors

Nikolay Antov
Elizabeth Markham
Steven Rosales
Rembrandt Wolpert (Chair)

Volume 46

Published annually by the Department of History
J. William Fulbright College of Arts and Sciences
University of Arkansas

2018

©2018 DEPARTMENT OF HISTORY, UNIVERSITY OF ARKANSAS, FAYETTEVILLE

ALL RIGHTS RESERVED

PRINTED IN THE UNITED STATES OF AMERICA

ISSN 2325-4211 (ONLINE)

ISSN 2325-4238 (PRINT)

SET IN 11/13.5 CYCLES ELEVEN AND FRUTIGER NEXT

Contents

ANNE ELISE CRAFTON
Talking With Dragons: How Dragons Reveal the Hero's Heart 1

COLIN DOEGE
Out of Orbit? European Space Collaboration in a Post-Brexit Europe 43

Contributors 77

Talking With Dragons: How Dragons Reveal the Hero's Heart

Anne Elise Crafton

> What came about brought to nothing
> The hopes of the one who had wrongly hidden
> Riches under the rock face. First the dragon slew
> That man among men, who in turn made fierce amends
> And settled the feud. Famous for his deeds
> A warrior may be, but it remains a mystery
> Where his life will end, when he may no longer
> Dwell in the mead-hall among his own.[1]

When asked to recall the image of a Dragon, many would envision only the sort of animalistic, mute creature from such contemporary popular culture as *Game of Thrones* or *How to Train Your Dragon*. Over centuries of cultural retelling and globalization, the Dragon has become a recurring image across myriad forms of media. However, today's image neglects the vast mythic history of Dragons that composes a pillar of European cultural history. Mythic stories are the backbone of self-identification and the symbols within such tales are extremely telling of a culture's priorities. Specifically, in northern Europe the melting pot of mythic elements has been repeatedly stirred by authors desiring to create stories inherently native to their people. Thus, tropes such as enchanted woods, Dragons, or powerful rings, are easily identifiable

[1] Seamus Heaney, *Beowulf: A New Verse Translation*, 1st Bilingual Edition (New York, NY: Farrar, Straus / Giroux, 2000), lines 3058–3065.

as essential to the region. In order to understand the cultural history of northern Europe, it is necessary to analyze not only the transformations of literature but also of myth.

Perhaps the most well-known mythic element has been the old foe of northern European heroes, the great and terrible Dragon. Quite different from the voiceless beasts of contemporary stories, mythic Dragons dwell deep in the realm of European consciousness. From the Anglo-Saxon manuscript of *Beowulf* to J. R. R. Tolkien's *The Hobbit*, Dragons are found across time and continue to fascinate readers of all ages.[2] As a symbol now universally known for greed, deception, and danger, the Dragon has been permanently embedded in European cultural history and remains a popular trope among authors of fantasy to this day. Their roles in mythic narratives have dramatically transformed over the centuries in direct relationship to historical changes in the real world in which they are imagined.

Scholars of northern European literature and culture have largely ignored Dragons, either for their supposedly primitive reputation or for their association with the modern fantasy genre. There have been, however, many who have studied the dragon-slaying myths of the Mediterranean and Near East.[3] Calvert Watkins' highly detailed linguistic study on the Dragon in the Indo-European cultural sphere comes the closest to an anthropological examination of the Dragon-hero encounter. However, Watkins' interests lie with the philological ties between various myths rather than the philosophical. Even scholars who discuss European fairy stories, such as Michael Drout or David Harvey, relegate the Dragon to a single chapter or mention among their voluminous works.[4] However, the impact of the Dragon on the northern European consciousness invites further study. To unpack the secrets of the Dragon's hoard would be to approach the European cultural heart from a fresh perspective. To understand this relationship

[2] J.R.R. Tolkien and Christopher Tolkien, *Beowulf: A Translation and Commentary: Together with Sellic Spell*, trans. and comm. J.R.R. Tolkien and Christopher Tolkien (Boston, MA: Houghton Mifflin Harcourt, 2014); J.R.R. Tolkien, *The Hobbit: Or, There and Back Again* (Crows Nest: George Allen & Unwin, 1937).

[3] Calvert Watkins, *How to Kill a Dragon: Aspects of Indo-European Poetics* (New York, NY: Oxford University Press, 1996).

[4] Michael C. Drout, *Rings, Swords, and Monsters: Exploring Fantasy Literature* (Audible: Modern Scholar, 2008); *Singers and Tales: Oral Tradition and the Roots of Literature* (Audible: Modern Scholar, 2014); David Harvey, *The Song of Middle Earth: J.R.R. Tolkien's Themes, Symbols and Myths* (London: Allen & Unwin, 1985).

and assess the changes in the structure and meanings of myth in Western culture, this study aims to contextualize key developments in the portrayal of Dragons from the early medieval to the modern era and analyze the development of northern European self-reflection within the Dragon-hero encounter. Though Dragons are only one mythic element among many, they provide insight into the crucial role that such elements play in developing cultural character and inheritance.

Through examination of the different examples of northern European mythic art and literature, the Dragon becomes evident as a significant trope. Each work reflects a step in the development of the Dragon's overarching character, and every author recycled and contributed to the tropes found in the medley that is folk literature. A close analysis of each work will reveal the process by which the Dragon has become so central to fantastic fiction. The *Beowulf* manuscript provides the earliest written example of a northern Dragon, though the tale combines centuries of oral tradition. This *draconitas*, a beast with human emotions, gave future authors the bones with which to brew the soup of Dragon tales, to use Tolkien's metaphor from his article, "On Fairy Stories."[5] The Biblical influence of the medieval image of Dragons cannot lightly be put aside, as images found in bestiaries and in saints' lives, such as that of St. Margaret, have a clear Satanic inspiration. This study will therefore compare and examine the Dragon of the Book of Revelation from the Bible with later characteristics imbued into the element by medieval authors. Later contributions, such as Richard Wagner's *Ring* cycle, Tolkien's extensive works, and John Gardner's *Grendel* will also be thoroughly considered as continuations of the legendary genre. These latter works purposefully sought to create a national or philosophical heritage, which they accomplished through Faerie and heroic encounters with the supernatural. Such a distinct choice reveals strong cultural ties to not only the idealized northern European hero but to his great reptilian foe as well. Through close readings of each iteration of the Dragon, the overall pattern of development and specific character shines through as bright as the Dragon's extensive hoard. The Dragon's character is a contrast to the ideal European hero; the development of the Dragon can thus be highly insightful for how northern Europeans perceived their peak examples of heroism. The hero's morality and character becomes defined against the Dragon's amoral ways, in which

[5] J.R.R. Tolkien and Christopher Tolkien, *The Monsters and the Critics, and Other Essays* (Boston, MA: Houghton Mifflin Harcourt, 1984).

the protagonist's quality is illuminated by the creature's depravity. By shining a light onto the transformation of Dragons, it will be possible to see the European champion all the more clearly.

This study's main terms of reference in secondary literature are thus mythological studies, as they create a framework that reveals the significance of such tropes to Europe's essential narratives; works such as Sir James Frazer's *The Golden Bough* and Alan Dundes' compilation of essays, *Sacred Narrative; Readings in the Theory of Myth*, are particularly helpful with their definitions of mythic elements.[6] Frazer's extensive work, though considered by some to be outdated (his reference to rituals as "primitive," for example), was one of the first to identify common cross-cultural themes in mythology. Tolkien's academic research on *Beowulf* and the nature of fairy stories is also foundational to the cross-cultural scope of this research; Tolkien's analysis in "On Fairy Stories" provides a springboard to address the question of the ultimate purpose and utility of mythic paradigms. Even without his fictional contributions to the genre, Tolkien's academic work left an impressionable mark on the field and revitalized literary research on both Beowulf and mythic stories. These works, combined with primary source analysis, will provide the historical backdrop for the study's analysis.

If You Thought Myths were Insignificant, You were Mythtaken

Defining myth has long been a source of contention among scholars. In contemporary terms, the word often describes something as primitively untrue or a mere superstition. As Lauri Honko notes, the term has become heavy with emotional overtones that often imply an inherent spuriousness in the stories it describes.[7] However, when understood as a multidimensional manifestation of cultural expression, myth can be seen as transcending notions of truth and reality. Thus, its contribution to both global and local culture cannot be easily explained away by the notion that myth is a falsehood believed only in the past. In his

[6] James George Frazer, Robert Ackerman, and Robert Fraser, *The Golden Bough: A Study in Magic and Religion*, Revised 2002 (Basingstoke: Palgrave, 2002); Alan Dundes, ed., *Sacred Narrative, Readings in the Theory of Myth* (Berkeley: University of California Press, 1984).

[7] Lauri Honko, "The Problem of Defining Myth," in *idem*, *Sacred Narrative*, 41.

essay "The Problem of Defining Myth" Honko delineates several key characteristics of mythological stories that lend themselves to a comprehensive definition. Primarily, myth can be described as a form of symbolic expression, an integrating factor of man's adaptation to life, a charter of behavior, and a marker of social relevance.[8] He also proposes that the interaction between the audience and a story composed of formulaic aspects can trigger cultural possession. In other words, stories made up of repeated elements or type scenes can be familiar to an extent that the audience feels it can claim possession of that story, even if it is only a new arrangement of old elements. Mythic stories can also be understood as representations of the ideal so that those partaking in reality may have a model. For example, it is assumed that the casual listener may not have the opportunity to slay a Dragon of their own but, in the case of confrontations with negative qualities or characters, they ought to embody the likes of St. George or Siegfried. The hero of a particular myth emulates the qualities that are valued within the ascribing culture and in their victory they conquer the threat against their community's survival. Myth can, therefore, be described as a form of creative expression that has been elevated to demonstrate models of behavior and institutions.

Mythic stories are a genre of literature that serve as building blocks for a perceived shared culture. Myths can be multiform and currently exist primarily in retellings or written representations of oral traditions. Thus, elements within myths can be reused to invoke inherently native settings and themes. Mythic tradition can also be constitutive in its amalgamation of social, religious, and political life. Drout suggests that it is the epic tradition within this matrix that creates shared culture.[9] Mythological studies endeavor to find meaning within symbols used repeatedly throughout a culture's vast canon. According to the *Mythological Studies Journal*, "Mythological Studies explores the understanding of human experience revealed in mythology and in the manifold links between myth and ritual, literature, art, culture, and religious experience."[10] Harvey explains that mythological studies are a search for the symbols that represent the most essential nature of the

[8] *ibid.*

[9] Drout, *Singers and Tales*.

[10] Fujio Mandeville, "What is Mythological Studies?," *Mythological Studies Journal* 5 (2014), accessed November 20, 2017, http://journals.sfu.ca/pgi/index.php/pacificamyth/index.

human condition and that "the myth collectors or the myth writers were trying to preserve part of the culture or interpret the cultural tales within the field of literature."[11] Mythic elements are intimately tied to traditions and ancient oral associations so that a mere mention of the element brings to mind previous incarnations of the trope.[12]

The human brain is especially proficient at identifying patterns made by cultural repetition. In his lecture series, "Oral Tradition and the Roots of Literature," Drout describes how traditional stories are not simply entertainment but a means of creating a shared consciousness.[13] The repetition of the multiform, or elements within, creates a connection between the audience and the tradition itself, leading to a communal identity.[14] The mythic tradition allows individuals to use elements for their own purposes, but ultimately the author anticipates cultural awareness of the element's mythic associations. Calling upon a well-known element allows for an author to play with formulaic associations within the mythic tradition. For instance, in Homer, the phrase "swift-footed Achilles" serves as a marker of all that the character embodies and calls the audience to remember what Achilles has done to achieve such a title.[15] This is equally as effective in moments when Achilles is marked as "swift-footed" but does not fulfill this epithet; the audience recognizes that this moment is out of character and thus it is made all the more dramatic. Likewise, when an author describes a Dragon-hero encounter there are myriad expectations placed on the type scene that any passive partaker in the northern European tradition could recall. The author participates in the tradition by either reiterating long-standing expectations or reversing them in order to surprise their readers. In contemporary vernacular literature, it is highly popular to take an image, such as the Dragon, long associated with negative characteristics and adapt the narrative so that the element becomes the protagonist. After the deconstruction of the mythic element and the popularization of Dragons as features of a magical world, the image has become reversed. Thus, a friendly Dragon, a philosophical Grendel, or a troll might find sympathy in a modern novel. This is seen in the creation of children's media such as *Dragon Tales*. Similarly, the

[11] Harvey, *The Song of Middle Earth*, 15, 19.
[12] Drout, *Singers and Tales*.
[13] *ibid.*
[14] *ibid.*
[15] *ibid.*

Flight of the Conchords song, "Albi the Racist Dragon," depicts an evil Dragon who becomes friendly after an encounter with a previous victim.[16] This too, however, depends on centuries of tradition so that the new interpretation may reflect against the old.

Within mythological stories lie persistent elements that denote their mythic setting. A cohesive definition of a mythic element is elusive, as it seemingly overlaps with the fantastic and the childish. A simplistic definition includes any element in a narrative that is mythical or constructed, though this is far too broad to serve any practical purpose. With such guidelines anything imagined, such as childhood fears or lies, could be considered mythic, which borders on the absurd. Perhaps a more specific interpretation is that a mythic element, like the Dragon, is a distinguishing motif found throughout a culture's literary and artistic histories but not in its physical one. Likewise, a literary trope can be defined as a figurative or metaphorical use of an image or word. Though mythic elements are clearly a major part of any civilization's physical history, especially in terms of constructing national ideologies and character, they are not truly of this world. A mythic element may change in a few small details, but overall is reliably consistent throughout a culture's literature. Elements such as Dragons, objects of power, magic, and Germanic deities are as identifying as a crest for the North Sea cultural sphere. The Dragon is one of the most well-known elements and presents an interesting quandary for the scholar: what is so significant about a Dragon that gives it such a literary wealth?

Here be Dragons

Dragons are ubiquitous in mythic literature, found in works from the epic poetry of *Beowulf*, to various hagiographies, Wagner's operas, Tolkien's mythologies, and to Gardner's novel, *Grendel*.[17] While there is evidence of a gradual shift from beast to a distinct personality, the

[16] Home Box Office, ed., *Flight of the Conchords: The Complete Collection*, (Compact Disc) (Home Box Office Inc., 2010).

[17] Mary Clayton and Hugh Magennis, eds., *The Old English Lives of St. Margaret*, vol. 9 (Cambridge, Cambs.: Cambridge University Press, 1994); John Masefield, *St. George and the Dragon* (London: W. Heinemann, 1919); Richard Wagner, *Der Ring des Nibelungen* (Bayreuth Festival, 2010 and Hong Kong, SAR: Naxos Digital Productions, 2010–2012); John Gardner, *Grendel*, 1st Edition (New York, NY: Knopf, 1976).

Dragon's *modus operandi* has remained remarkably similar over the centuries. Gardner's postmodern Dragon is still recognizable as the same type of character found in St. George's *passio*. Dragons typically behave as expected, fulfilling old stereotypes with minor tweaks that are passed on to the next generation of storytellers. Just as a feast scene is part of the formulaic expectations in mythic literature, so a Dragon confrontation can be employed as a dramatic episode for the hero. Dragons stand apart from the individual narrative, employed as a quality of the encounter with fate destined for the doomed hero. When the northern European protagonist must grapple with his own destiny or experience a sudden shift in his path, a Dragon is likely involved.

Remarkably, the hero and Dragon interact not just through physical, but verbal conflict as well. As they navigate conversations full of threats, exposition, and deceptions, certain truths are revealed that drastically alter the narrative. Whether a hidden history is revealed or overarching philosophical motives discussed, these truths guarantee that the even if the hero survives the encounter, they will never be the same. Storytellers employ encounters with Dragons as the climactic episode of confrontation with the hero, when he must accept his lot and conquer an unwarranted force of destruction. Dragons have gradually been chosen as a symbol of the underbelly of mankind, the manifestation of the depravity of greed and lies. William Alfred has theorized that the Dragon symbolizes chaos in that it prevents wealth from circulating by guarding treasure in a hoard.[18] Ultimately, Dragons serve as a foil for humanity, a reflection against which the protagonist shines. In the face of a beast consumed by wickedness, the hero either defeats that which terrifies his community or dies tragically alongside his foe. Regardless, fate finds its resolution.

This study focuses only on Dragons of northern European origin, despite the rich history of Mediterranean, Asian, Near Eastern, and Indic Dragons. The Mediterranean Dragon can be defined as a *draco* or *drakon*, a beast that resembles the European Dragon but remains a distinct creature.[19] This *draco* remains a mindless creature in Mediter-

[18] Watkins, *How to Kill a Dragon*, qtd 317.

[19] For more information on the Dragons of the Mediterranean and Near East, see Louis Moulinier and Joseph Fontenrose, "Python: A Study of Delphic Myth and Its Origins," *Phoenix* 15, no. 4 (1961): 242, doi:10.2307/108673 and the works of Russian linguists V. V. Ivanov and V. N. Toporov (Vsevolod V. Ivanov, Vladimir N. Toporov, and Boris A. Uspenskij, eds., *Ketskij sbornik* (Moscow: Nauka, 1968–)). Scholars

ranean sources and lacks the distinct traits of a developing character. Although the region employs this symbol in many of its myths and literature, it is not a singularly defining element. Its form is largely land based and occasionally poly-headed, as with the Hydra. On the other hand, the Asian Dragon, such as the Chinese Luck Dragon, is entirely separate from the northern European counterpart. As well as being separated by countless miles, the two elements are employed in nearly opposite instances. The Chinese Dragon is a symbol of luck, auspicious powers, and strength as well as control over torrential forms of water. As bringers of rain, Dragons are regarded as symbols of abundance and wealth. Their appearance is usually depicted as an immense snake-like creature with four legs and miniscule wings. In China, to be compared to a Dragon is a high compliment meant to refer to strength and outstanding qualities.[20] For instance, in *Woman Warrior*, Maxine Hong Kingston describes her narrator seeking the immense and revered strength of Dragons rather than their destruction.[21] Other Dragons, such as Indic, Iranian, Meso- American, aboriginal, etc., have been studied at length by intrepid scholars and linguists. However, despite evidence of linguistic ties between the Indo-European stories the overall characteristics are quite distinct.[22] As such, these Dragons are culturally apart from the northern European Dragon despite their modern intermingling. Other Dragons are certainly worthy of their own lengthy examination. However, in order to discuss the ways in which northern Europeans perceive themselves through their creations, this project will focus solely on the elements from that region. For the purposes of this study, primary sources will also be limited to mythic literature rather than fantasy literature. Although modern fantasy, such as the Young Adult *Inheritance* series, is heavily associated with mythic elements and Dragons, the genre often employs such elements for the sake of appearing mythic despite being a limited Secondary World.

What sets a Dragon apart from a mindless, fire-breathing beast? For future purposes, the *character* element will be defined as a

Emile Benveniste's *Dictionary of Indo-European Concepts and Society* (Chicago, IL: HAU Books, 2016) and Louis Renou's *History of Vedic India* (New Delhi: Sanjay Prakashan: Sanjay Prakashan, 2004) have also done considerable work on the Indic and Iranian Dragon encounter.

[20] AMNH, "Asian Dragons," March 23, 2018, accessed March 23, 2018, https://www.amnh.org/exhibitions/mythic-creatures/dragons-creatures-of-power/asian-dragons/.

[21] Maxine Hong Kingston, *The Woman Warrior* (Ipswich, MS: Salem Pr, 2014).

[22] For more information, see Watkins, *How to Kill a Dragon*.

"Dragon," while the *animalistic* figure will be denoted by "dragon." While a story may include dragons as creatures, it does not necessarily feature a mythic element. For example, in J.K. Rowling's *Harry Potter* series, dragons are simply a feature of a magical world without voice or higher intelligence. Modern fantasy stories often include dragons to enforce the accepted list of fantastic elements, many of which were established by Tolkien. A mythic Dragon is often an unchanging character within the narrative, but a *character* nonetheless; its established qualities will retain their defining traits reliably throughout the work. Though the culturally accepted image of a Dragon has gradually changed over the millennia, it rarely develops as a character within a mythic tale. That being said, the modern image is an evolution of the strict list of characteristics commonly known today. A typical Dragon is expected to be greedy, proud, subtle, deceiving, nearly omniscient, and often depicted in relation to a highly prized treasure. Watkins believes that the Dragon's propensity to guard treasure represents a form of Chaos.[23] In its fierce protection of the hoard, it keeps wealth from circulating, "the ultimate evil in society in which gift-exchange and the lavish bestowal of riches institutionalized precisely that circulation."[24] Primarily however, a true mythic Dragon ought to be capable of higher intelligence and human emotions if not comprehensible speech. Additionally, the Dragon is generally not the consistent antagonist throughout the work; it will rarely participate in a hero's odyssey anywhere apart from its own home, forcing the adventurer to journey to it for the episodic confrontation. This can either be a critical plot juncture or the hero's final moment. Thus, the Dragon functions as a definitive character among mythic narratives, both accessible and reliable for European audiences.

Furthermore, an encounter with the Dragon is usually the climactic episode of a narrative, the stunning confrontation after a series of smaller adventures. Tolkien said in his famous *Monsters and the Critics* lecture that "it is an enhancement and not a detraction … that [Beowulf's] final foe should be not some Swedish prince, or treacherous friend, but a dragon: a thing made by imagination for just such a purpose."[25] Once the hero encounters the Dragon, the story experiences

[23] For more information about the linguistic ties between Dragon myths within the Indo-European Influence, see Watkins, *How to Kill a Dragon*, 300.

[24] *ibid.*

[25] Tolkien and Tolkien, *The Monsters and the Critics, and Other Essays*, 128.

a shift in tone and purpose. In fact, Dragon confrontations result in revelations of difficult truths that always lead to the death of the hero. Whether the truth is the hero's inescapable mortality or hidden identities and motives, this truth is the catalyst of doom. Remarkably, while the Dragon element is commonly associated with deception, it is also the bearer of the truth of reality. In some Old Norse tales, the curse of a ring-Dragon transfers directly to its slayer. According to Fontenrose, Ivanov, and Toporov, the destruction of the Dragon represents a "symbolic victory of growth over stagnations … and ultimately a victory of rebirth over death."[26] Similarly, the hero destroys chaotic behaviors and allows order to prevail within their community. It is by slaying the Dragon that the hero symbolically destroys the blackest sides of humanity and is able to come to grips with the nature of the world around him.

Þæt wæs yfel wyrm![27]

Though the oral tradition of Dragons stretches far beyond any written evidence, *Beowulf* exhibits one of the earliest northern examples of such an iconic element. Although the original date of composition is a source of contention among scholars, the oldest surviving manuscript has been dated between c. 975–1025 CE. *Beowulf* remains the earliest known written epic in a Germanic language and has been studied for centuries for clues regarding culture, faith, oral tradition, and literature. In fact, its Christian author has presented problems for some critics, who complain that he taints the pure pre-Christian tradition with his religious commentary. However, the text's very existence is evidence of a slowly transitioning culture; a society with both Christian and pre-Christian influence that clearly values each tradition to the extent of permanently recording them. Despite the early conversion and official adoption of Christianity by the monarchy, the heroic Germanic tales were clearly in heavy circulation. Tolkien states that, "For [the *Beowulf* poet], Christianity had risen as a light over shadowed places, and in that light he could reverence the stark bravery of Nordic pagan idealism at its best."[28] Poetry such as "The Wanderer" or inser-

[26] Watkins, *How to Kill a Dragon*, 299.
[27] Old English: "That was an evil dragon!"
[28] Tolkien and Tolkien, *The Monsters and the Critics, and Other Essays*, 130.

tions of Othere and Wulfstan into Boethius indicate a reluctance to release a heroic pre-Christian past for a Christian future; however, the post-conversion Anglo-Saxon literature seeks to justify their past by inserting explicitly Christian references into ancient tales. Similarly, Christian narratives were adapted with a distinctly Anglo-Saxon flair to make them all the more palatable for their audience. For example, the *Beowulf* manuscript also contains an adaptation of the deuterocanonical text of *Judith*. The story reads remarkably similar to Germanic warrior poems of pre-Christian days although it depicts the triumph of the Hebrews over the Babylonians. In the same way, the *Beowulf* poet looks back on the days of yore with a Christian framework and inserts commentary within the narrative.

Beowulf is primarily an epic poem about the confrontation between the might of heroism and the supernatural. The story opens with a description of the rise and slow decline of a Danish kingdom. The realm is plagued by repeated attacks from a monstrous being, Grendel, but the Danes can do nothing to hinder him. Beowulf comes to their aid slays the monster. He eventually returns home to Geatland where he ascends to the throne. However, despite his peaceful reign, the kingdom is attacked by a provoked Dragon who threatens to destroy all that has been built. Reluctantly, Beowulf gathers a troop of his thanes and goes to face the beast.[29] His companions are revealed to be cowards when they abandon their lord in his fight. All appears to be lost. Fortunately, Wiglaf turns back and it is with his aid that the Dragon is slain. Regrettably, Beowulf dies of his wounds in the Dragon cave and is satisfied in knowing that at least his kingdom will be safe and the hoard will provide for his people. The poem ends with a lengthy eulogy in which the people anticipate a future without the protection of their lord and remember his strength.

Beowulf, the Geatish hero, must encounter a great beast that results in his downfall. Though this Dragon is not capable of speech, he presents to the king the difficult truth of his mortality. Beforehand, Beowulf seemed invincible; he easily defeats Grendel and expands his kingdom as an undefeated monarch. The repeated moniker "He was a good king" indicates a powerful, generous, and mighty lord. However, the Dragon is his Achilles heel, as it were. The beast presents the tragedy

[29] Thane: One who in Anglo-Saxon times held lands of the king or other superior by military service; originally in the fuller designation cyninges þegn, 'king's thane, military servant or attendant.' *Oxford English Dictionary*.

of an inescapable fate and is thus a test of heroic mettle. Unlike his previous trials, Beowulf is forced to rely on another to defeat the Dragon and ultimately faces his death. The Dragon represents death and long-awaited, or overdue, fate, in which he and Beowulf must equally partake. This can be seen in the Dragon's repeated association with burial and the dead; living in "the steep vaults of a stone-roofed barrow" where he both "dominates the dark" and "guarded a hoard."[30] The master, descended from the race whose treasure the Dragon guards, had disturbed a past long dead in sending his servant to retrieve a part of the hoard. In his desire to possess the treasure of his ancestors, the master has awakened the doom of the kingdom and his lord. In fact, Beowulf recognizes this before he even approaches the Dragon: "[Beowulf] well knew that linden boards would let him down and timber burn. After many trials, he was destined to face the end of his days in this mortal world; as was the dragon, for all his long leasehold on the treasure."[31] Even as he looks upon the barrow, Beowulf is filled with unfamiliar dread, "sensing his own death. His fate hovered near, unknowable but certain."[32] Here the Dragon is distinctly tied with the doom of the hero and becomes the overdue confrontation with mortality.

Though this Dragon lacks many of the wily characteristics found in later versions, he clearly experiences human emotions such as rage, fury, envy, and pride. The Dragon's anger, awoken by the thieving servant, was a "rage ... the people of that country would soon discover."[33] The poet describes the Dragon imagining the destruction of those who would dare trespass his barrow and how he felt a "virulent hate" as he destroyed the land.[34] In fact, the Dragon's traits are a mirror image of Beowulf's qualities that have led him to success. Where Beowulf uses a berserker violence to defeat the enemies of mankind, the Dragon has only a destructive force. Beowulf faces his fate with courage and pride whereas the Dragon hides in his barrow to feel secure.[35] When Beowulf reluctantly ascends to the kingship after the death of his kin,

[30] Heaney, *Beowulf*, lines 211–214. A barrow can be defined as a heap of earth over a burial mound.

[31] Tolkien and Tolkien, *Beowulf*, lines 239–244.

[32] *ibid.*, lines 2420–2421.

[33] Heaney, *Beowulf*, lines 219–220.

[34] Ibid, line 2319.

[35] Ibid, lines 2322–2323.

the Dragon greedily hoards simply for the sake of accumulating wealth and power. For the Anglo-Saxons, an essential trait within a good lord was liberal generosity; gift giving is a repeating motif found throughout literature as a sign of the profound bond between thane and king. Beowulf is repeatedly cited as a generous lord. In fact, it is his generosity that inspires Wiglaf's adamant loyalty; Wiglaf's family dwells on lands given to them by Beowulf himself. The thane claims that he is willing to die for his lord because he knows that Beowulf would do the very same in return. Beowulf also has no intention to keep the Dragon treasure for himself. Instead, his final moments are spent thanking God that the treasure will go to his people. On the other hand, a lord, or figure of power, who hoards their wealth and refuses to bequeath favor was seen as both isolated and tyrannical. Just as Alfred suggests, the Dragon prevents the circulation of wealth by merely sitting on wealth for the mere sake of its shine.[36] It exists as a foil against Beowulf's true generosity. Here the Dragon embodies this negative image of an avaricious lord that is ultimately defeated by Beowulf.

The Dragon exists completely apart from Beowulf's adventures and flourishing kingdom and only enters that world when he is disturbed by a thief. His existence does not merit explanation by the author for the Dragon belongs to the same mythic realm as Beowulf. A feature of an accepted magical reality, the character simply appears when disturbed. In fact, it is not the mere presence of men but the theft of a miniscule portion of his wealth that angers the Dragon. His only response is that of violence and retribution against entire villages rather than the individual at fault. John Hill writes that "as with Grendel's initial raid, the enflamed arrival of the dragon-gaest, unanticipated, carries no tension - only destruction and a darkening of mood."[37] The story suddenly turns sour at the mention of a creature whose motivation is hoarding greed and whose only action is violence. Thus, Beowulf must face the Dragon as his final confrontation with cruel fortune. He is obligated to muster a small band of brave thanes to make the journey to his doom. Ultimately, everything that he had gained - his men, strength, and sword - abandon him. The tragedy lies primarily in the unavoidable nature of his fate; although Beowulf has accomplished superhuman feats in the past, he cannot conquer the Dragon. It is his acknowledgement that the con-

[36] Watkins, *How to Kill a Dragon*, qtd 317.

[37] John M. Hill, *The Narrative Pulse of Beowulf: Arrivals and Departures* (Toronto: University of Toronto Press, 2008), 75.

frontation will be his last that inspires emotion in the audience. There is no doubt that this is Beowulf's key moment; the old hero confronts fate and the evil of the world for the sake of mankind. Rather than living on as a great king, Beowulf chose to epitomize heroism in his acceptance of responsibility and ultimate sacrifice. As Hill states, "Beowulf is then the poem's supreme guardian against, and the exterminator of, terror."[38] The hero must fade with the Dragon so that mankind can live up to his example while mourning his loss. Thus, this ancient text indicates the beginnings of the long tradition of Dragons, and the encounter with such a character being the pinnacle of the hero's career, the chief deed for the greatest of heroes.

Beowulf is the hero of heroes, the greatest Geat to have walked the Earth. When the anonymous Anglo-Saxon poet chose to record the pre-Christian tale, he clearly deemed him a representation of the noble past. The audience sympathizes with Beowulf most keenly despite the myriad characters described by the author. He is miraculously strong, an unbelievable swimmer, a noble wanderer, and the greatest king his domain has ever seen. Seemingly without fault, Beowulf stands as the pinnacle of human achievement. The Dragon, therefore, is his ultimate foe. Despite his earthly triumphs, Beowulf must inevitably grapple with the reality of his own mortality embodied by the Dragon. The Dragon's wanton violence and possessive greed are the antithesis to a healthy community. It is thus the king's direct contrast of qualities that can defeat the evil. In his acceptance of the coming battle, Beowulf embodies the heroic quality of self- sacrifice for a magnificent death. Mourned and celebrated, the late king is eulogized as the ultimate example of strength and might. Yet, if even this pinnacle of manhood must fade, let him do so gloriously and in a final moment of triumph. The audience can imitate Beowulf's charge not only for death and glory, but for the people they must protect.

Beowulf has so far succeeded on the back of his might and fairness to his people; prosperity had been brought about by peace and generosity. *Þæt wæs god cyning* (That was a good king)![39] Remarkably, the goal is not to steal the Dragon's hoard but to restore peace to the kingdom. The destructive force of a raging Dragon and the symbols of greed and fate must be confronted by the hero. However, the truth is revealed

[38] *ibid.*, 6.

[39] Old English: "That was a good king."

in the course of the fight: Wyrd, or fate, is inescapable. His past triumphs are nothing, his thanes desert him, and Beowulf is forced to grapple with the inevitability of his own doom. He dies not the slayer of a Dragon, but a participant in the great fight against anti-Saxon values. The Dragon and the hero lay as parallel corpses; the best man, the mythical acme of humanity, has left Middangeard along with the representation of evil so that weaker humans may rise to his example. A typical Anglo-Saxon message, this reveals that although man may reach his pinnacle in life, he cannot escape the same death that awaits all. The hero has grown beyond his immediate community to represent all that humanity could achieve but grapples with the same difficulties as the rest. The poem ends unhappily with mourners bewailing the fate of their ruler-less kingdom and imparts the reader with a melancholic but emotional thrill.

Curious St. George

As Europe became the stronghold of Western Christianity, the Dragon took on various religious attributes and became a repeating figure in hagiography.[40] Just as early myths describe pre-Christian heroes to emulate, a saint's life describes an ideal to which the Christian layperson aspires. A reader of Juliana's *passio* may never grasp a demon by its throat as she did, but they can certainly use her vigorous example in their confrontations with quotidian temptations. As both entertainment and religious commentary, hagiography allowed for a continued literary tradition of Dragon-hero encounters. The natural association of the reptilian Dragon with the tempting Serpent of the Garden of Eden tied the character intimately with the Devil. Moreover, the Biblical book of Revelation depicts Satan as a "great red Dragon" that is eventually defeated by the returning Christ.[41] In this way, Christ's actions reflect the hero's triumphant defeat of the violent threat against His people. Post-conversion, Anglo-Saxon scribes often retold Biblical stories through their own cultural lens. Similar to the *Beowulf* scribe's adaptation of a pagan past through a Christian perspective, poets might reimagine Biblical or apocryphal stories within their cultural tradition. In the impressive poetic adaptation of Genesis into Old English, the poet de-

[40] The writing of the lives of saints.
[41] Rev 12:3–9 NKJV

scribes an encounter similar to the Dragon-hero conflict. A poem remarkably written in the vernacular tongue instead of Latin, "Genesis" indicates that even within the first centuries of conversion northern European authors were connecting the characters of the Dragon and the Devil. Similarly, although Jesus Christ is ultimately victorious over the Satan-Dragon, it brings about a new world in which nothing is as it was.

There is evidence of an early association with the*wyrm* and demonic figures, as displayed in "Solomon and Saturn I." This poem repeatedly describes Satan as "the Dragon of hell" and the Word of God as the enemy of Dragons.[42] Solomon asserts that "sometimes [demons] slither like venomous serpents, stinging a fierce beast or biting field cattle, or morph into mighty, death-dealing dragons."[43] In other Germanic cultures, there was a strong association with Satan and Loki as serpentine, draconic figures of mischief.[44] Loki's symbol, intertwining serpents, was a direct parallel to the Serpent of the Garden of Eden. Such connections were often drawn in the early days post-conversion in order to enable an ease of transition. As hagiography, whether *passio* or *vita*, grew more prevalent, Dragons appear with increasing frequency in direct confrontation with holy saints. As figures meant to be the purest example of Christian holiness, warrior-saints who battled Dragons emulated both Christ's ultimate defeat of the Devil and the pagan hero who grappled with the dark. Though victorious in the moment, the saints often faced gruesome deaths due to their proclamation or dedication of the truths revealed within their confrontation. Typically, this truth was the power of Christ, which enables holy men and women to challenge a Dragon. After a saint-Dragon encounter, the saint would use their victory as a testimony of their holiness and call for the immediate conversion of witnesses or would-be victims. In texts spanning from early Christianity to the late Middle Ages, saints such as St. Benedict, St. Margaret (also known as St. Palagia), St. Theodore, St. Martha, various local saints, and, most famously, St. George encountered Dragons in the midst of their holy lives.

[42] *Solomon and Saturn I*, trans Craig Williamson, (Philadelphia: University of Pennsylvania Press, 2017), line 32.

[43] Ibid, lines 197–200.

[44] Paul Carus, *The History of the Devil: With 350 Illustrations* (Mineola, NY: Dover, 2008), http://www.sacred-texts.com/evil/hod/hod14.htm.

St. George has become one of the most well-known saints in Western Christianity. He is the patron saint of England, Catalonia, Georgia, Portugal, Malta, Gozo, Palestinian Christians, the Romani people, the protector of Bulgaria, Beirut, and Lebanon as well as of many others who honor his name. It is difficult to find an English church without imagery of either St. George or his Dragon. Despite the fact that George was a Greco-Roman Tribune whose earliest *passio* describes his adventures primarily taking place in Africa, northern Europeans latched on to his story with fervor. There are traces of English veneration predating the Norman invasion. No less than two sites in England alone claim to be the location of the famed Dragon-St. George encounter. The tomb of St. George, supposedly martyred in 303 CE in Lydda, attracted the attention of early European crusaders. A military and aristocratic cult soon developed; Richard the Lionheart is recorded to have been the first to have introduced the saint to England. As wandering crusaders brought back myriad stories of his illustrious life to Europe, his list of deeds grew exponentially. By the 1340s, England had declared St. George the patron of the Order of the Garter and by the fifteenth century he had surpassed Edward the Confessor and St. Edmund as the country's patron saint. The earliest written evidence of St. George's encounter with the Dragon is found in Jacobus de Voragine's early thirteenth–century *The Golden Legend*.[45] The Italian chronicler and archbishop of Genoa compiled one of the most popular collections of lives of the greater saints of the Middle Ages. St. George can be found among the myriad saint lives described; the popularity of this particular collection contributed to the widespread acceptance of the insertion of the Dragon. De Voragine's story emulates both Revelation and traditional mythic Dragon-hero confrontations in its attempt to establish St. George as a holy warrior-saint who can overtake pagans as the archetypal hero.

Germanic kingdoms also latched onto the saint with fervor. In the ninth century, Abbot Hatto established St. George's church in the monastic island of Reichenau. There, relics have been found in abundance as generations of monks and pilgrims brought new finds to the monastery. On the same island, a set of poems and hymns known as the *Georgslied* were penned in Old High German. Hermann of Reichenau wrote the *Historia sancti Georgii* in the mid-eleventh century, which has unfortunately been lost. Other sites dedicated to St. George include

[45] Jacobus de Voragine, *The Golden Legend*, trans. William Granger Ryan (Princeton, NJ: Princeton University Press, 1993).

St. George's Abbey in the Black Forest as well as the city of Freiburg im Breisgau. Emperor Maximilian in the late fifteenth century chose St. George as his personal tutelar. The widespread saint can also be found on several coats of arms across Germanic territories. However, St. George remains most prominently honored in England, India, and Georgia.

De Voragine's *The Golden Legend* became the accepted origin of St. George's Dragon encounter as it spread throughout Christiandom. In this account, the Roman Tribune George was traveling to the city of Silena, in the province of Lybia, and came across a vast lake that housed a poison-breathing Dragon. The Dragon would make a daily journey to the city and curse its citizens with its poison. In order to appease the Dragon, the city routinely placed two sheep near the lake as an offering. However, the city quickly ran out of sheep and grew desperate. It was decided that a lot would be taken for a young man or woman to take the place of one of the sheep. This was sufficient to abate the Dragon until the king's only daughter was chosen as Silena's sacrifice. In the king's refusal to let his child go, the city suffered several days of miserable attacks from the enraged Dragon. Finally, the princess was chained and offered to the Dragon to fulfill their contract. St. George finds the princess and, despite her warnings, vows to fight the beast. He conquers the Dragon and binds its poisonous maw with the princess's girdle. St. George then beseeches the town to convert to Christianity, claiming it was only through Christ's power he had been able to conquer the Dragon. The warrior-saint continued to perform miracles of military might until his ultimate martyrdom by Emperor Diocletian for his refusal to renounce Christ. Later adaptations of this *passio* describe St. George as a warrior educated in a Faerie court in central England. The English and German tales retain the original story but also describe a second Dragon encounter on Dragon Hill in Dunmore Heath, Warwickshire. According to local legend, the hill's conspicuously bare top is "where the [Dragon's] blood ran out and nothing'll grow on it since,

not so much as a thistle."[46] Here, St. George defeats the Dragon but dies soon thereafter due to exposure to his poison.[47]

The Late Middle Ages bear witness to the slow transition from mute to verbal Dragons. Even de Voragine's thirteenth-century foe embodies human rather than animalistic qualities. The wrath, vengeful spirit, and ultimately cowardly nature of the Dragon reminds the audience of the character of Satan. Rather than purely animalistic, this Dragon is bestial, or demonic. A true creature of vengeance, St. George's Dragon wreaks havoc against the city that failed to fulfill its contract. Just as the fallen angel may be a destructive force in his prime, he is no match against a saint armed with the true power of Christ. In rather explicit symbolism for an individual's grapple with temptation, St. George conquers the Dragon by not only defeating him with military strength but by permanently closing his mouth. The Dragon is powerless without access to his poison and becomes a cowardly beast. Likewise, the Devil's poisonous words become powerless against Christians armed with Biblical truth. In fact, George binds the Dragon with the princess's girdle. This lends itself towards interpretation as the Belt of Truth described in Ephesians 6:10–14. The Dragon is thus rendered helpless in the face of the truth of Christ.

A saint is meant to be a representative of the ideal hero in faith; they reach the highest aspirations of divine holiness and become elevated as an intercessor between a believer and God. While the composer of a *passio* may not expect his readers to remain pure virgins or be martyred for their faith, it is enough to translate the experiences of the saint into daily life. St. George exists in the mythic past of Christian sainthood. Later saints often looked back on the early centuries of Christian persecution as the days in which sainthood was at its peak. St. George was an ideal figure for veneration as both a Christian Roman soldier and a martyr of the infamous Diocletian. As a mythic hero, St. George encounters the Dragon in a formulaic episode that reveals narrative-shaping truths. Thus, St. George embodies the paramount qualities of a medieval saint as well as a traditional Dragon slayer. De Voragine's *passio* describes the

[46] Thomas Hughes, *The Scouring of the White Horse: Or, The Long Vacation Ramble of a London Clerk and What Came of It; And, the Ashen Faggot, a Tale for Christmas* (London: Macmillan, 1892), 128.

[47] Jannifer Westwood and Jacqueline Simpson, *The Lore of the Land: A Guide to England's Legends, from Spring-Heeled Jack to the Witches of Warboys* (London: Penguin Books, 2006), 20.

Dragon encounter as the first of many merit-proving events. It is thus in this skirmish that St. George initially proves his mettle as a warrior-saint. In the confrontation with the Dragon, St. George employs his faith and military virtue as weapons against a threat to the community. Not only does he slay the Dragon, but he cows and humiliates his foe by leading him tethered through the city. It is his actions that permanently close the poisonous maw against further damage. Most significantly, it is in the confrontation that the truth of his holiness is revealed. The citizens of Silena have witnessed a testament to the veracity of St. George's faith and willingly accept it. However, it is the same evidence of his faith that eventually leads to the warrior's gruesome death.

On the other hand, in later English adaptions St. George dies after a poisonous blow from the Dragon. In an addition highly similar to *Beowulf*, this indicates a purposeful shift towards familiar tropes. Here, St. George remains a martyr, but it is his sacrificial quality that shines as an example to believers thereafter. Regardless, St. George stands on a holy pedestal. He defeats the chaotic, demonic plague that had stricken the city through his intimate relationship to God. In this way, he is among the truest of medieval heroes and represents the acme of humanity. For if St. George can achieve this peak, so too can the average believer conquer their own Dragons through their faith. This demonstrates the centrality of the Christian faith as well as the persistent remnants of the past within the Middle Ages. Just as in the early days of conversion missionaries would adapt local practices towards Christianity, so does the Dragon-hero encounter shift towards a distinctly religious center. This episode became perhaps the most iconic moment of St. George's *passio*. It dramatically shifts the narrative from a depiction of an itinerant disciple to that of a warrior-saint. In some interpretations, this is George's final moment. The Dragon encounter is thus employed as a marker of power and saintliness in which the saint reveals his true colors.

St. George's patronages stretch across Europe, Africa, the Middle East, and Asia. His image is continually invoked as a patriotic symbol. For instance, England's St. George's Day is celebrated as a day of national pride. Similarly, posters made for World War I depicted the English St. George slaying a German-coded Dragon. One such poster states that "Britain Needs You at Once," associating the English citizen

directly with the persona of St. George.[48] Even in the early twentieth century the saint was depicted as the acme of humanity to which the average man must aspire. Here, the Dragon represents the country's enemy at the time, which is not only an abstract concept of violence but a specific group of people. This image would not be possible or culturally relevant, however, without the centuries of cultural retelling of the saint as the hero that defeats the Dragon.

The Sound of Siegfried

Centuries later, Richard Wagner, the nineteenth-century German composer, would pick up the same thread in his nationalistic series of operas, the *Ring* cycle. Following the contemporary trend of claiming direct cultural descent from Germanic heroes such as Beowulf or King Alfred, Wagner encouraged a revitalization in the Dragon apart from Christian hagiography. In fact, an early version of the *Ring* cycle's story can be found in lines 884–914 of *Beowulf* retold by the bard in the Danish mead hall, Heorot. Picking up themes of *Beowulf*, the *Nibelungenlied*, and traditional Germanic folklore, Wagner wove together a mythic opera for the nineteenth century. In this, he became a participant in the effort began in the early eighteenth century to find what it truly meant to be German. Roderick Cavalerio traces this movement in which philosophers, artists, and linguists sought to find what set them apart from their neighbors.[49] The Grimm brothers had attempted to define the illusive qualities and had concluded that it was in traditional folk tales that the purity of national identity lay. Cavaliero describes how the Grimms "were on a quest for the authentic voice of a Germany which told of a strong, more enduring Germanic power, rooted in its glorious past, the age of Minnesingers and alchemists seeking gold."[50] They depicted a Germany in which its people lived in fear of the forests and yet found heroes to conquer even the greatest of foes. Even in distant Scotland, the philosopher Thomas Carlyle believed that Germany was a "nursery for lesser deities … not gods but

[48] Spottiswoode & Co. Ltd, "Britain Needs You at Once," accessed March 24, 2018, http://loc.gov/pictures/resource/cph.3g11248/.

[49] Roderick Cavaliero, "Genius, Power and Magic: A Cultural History of Germany from Goethe to Wagner," *German Studies Review* 1 (2015): 128–170.

[50] *ibid.*, 84.

they determined the destiny of human affairs and were designated as heroes."[51]

Wagner himself used mythic elements to tackle the supernatural, psychological drama within the movement of self-definition. However, his attempts are complicated; despite his strong distaste for anything he perceived as distinctly non-German, his operas adapted traditions from across the North Sea cultural sphere. In his works, the German heroes, as described by Carlyle, surpass the gods and bring supernatural rationality to the world once again. Cavalerio describes this as a "creation of the new Valhalla, created by Wagnerian man not Wagnerian gods, making *The Ring*, a farrago of dubious politics and morality, [a part of] the national saga."[52] Wagner used traditional mythic elements to describe a Germany in which myth has not only been surpassed but also fulfilled by the German man. Here, heroism can be defined as the ability to supersede the need for the pseudo-pagan past and yet simultaneously a culmination of qualities found idealized in the literature of days gone by.

Wagner took mythic and folk elements and incorporated them into a story that attempts to define German national character. In the third installment of the *Ring* cycle, *Siegfried*, the titular character has been raised by the scheming dwarf, Mime, in order to steal Wotan's powerful ring. This ring is currently in the possession of the giant-turned-Dragon, Fafner. His greed for Wotan's ring transformed him into a tangible image of avarice and forced him to live as an exiled, bitter creature. Due to many complications concerning contracts and greedy mistakes, Siegfried is the only man who can forge the broken sword Nothung and slay Fafner. In an attempt to understand the nature of fear, the hero rushes off to confront the Dragon. The beguiling Dragon converses freely with Siegfried, especially concerning the ways of the world and fate. In the baritone traditionally reserved for operatic villains, Fafner tells the fair hero about his transformation from man to Dragon due to his desire for the ring. He also reveals Mime's hidden scheme to take the ring for himself, even at the cost of Siegfried's life. These truths transform the narrative and give new purpose to Siegfried's quest. The Dragon is of course killed and Siegfried goes on, eventually to his tragic death in *Götterdämmerung*.Though this Dragon is not Siegfried's final

[51] *ibid.*, 5.
[52] *ibid.*, 288–289.

foe, his information is the catalyst for a new quest. Wagner's Dragon fits the later image of a lizard devoured by greed and deceit, but is also the bearer of revelation for the hero. The mythic elements in these operas are meant to recall the distinct Germanic character, and a Dragon is uniquely suited for such a role.

A highly nationalistic series, *Der Ring des Nibelungen* was Wagner's attempt at an inherently German tale. While Victorian contemporaries romanticized the Anglo- Saxons in an effort to establish an ethnic national pride, Wagner pulled from other tales in his efforts. In his borrowings from Norse, Icelandic, Danish, and other Germanic tales he created an idealized German hero in Siegfried. Siegfried is blonde, valiant, and strong; he lets no dwarf or god manipulate his life. His human dominance reigns secure throughout the opera; he is the pinnacle of humanism. He is a man brought up purely for the purpose of slaying a Dragon and lives entirely without fear. This is in direct contrast to Fafner, a giant consumed by greed, cowardice, and lethargy. The Dragon hides in his barrow wallowing in the consequences of his theft of Andvari's ring. On the other hand, Siegfried's brash behavior allows him to see what he desires and take it for his own. Siegfried has no interest in the weapons or hoard of the Dragon, only that the beast can be killed in order to remove any potential of experiencing fear. The conflict was meant to be his highest moment and a stepping stone to greatness. However, it takes an unexpected turn during the lengthy conversation between Fafner and Siegfried. The hero soon realizes that he has come into contact with an alarming aspect of nature unlike any he has encountered: a devourer. Just as the Dragon embodies the hoarder and consumer of wealth so too does he embody the bestial qualities of the hagiographic Dragon. He is a giant transformed into an ungodly representation of avarice, not dissimilar to the demonic Dragons described in saints' lives. Fafner is not only a physical consequence of greed but a container of truth. It is his knowledge of Wotan's ring, prophecies, and manipulation that dramatically change the narrative. After Siegfried slays Fafner he consumes his blood, representing an assimilation of his opponent.[53] He has defeated the avarice of mankind and eradicated fear from his life.

This confrontation reveals that Siegfried has become Wagner's model German hero. In his defeat of the Dragon, a quintessentially

[53] Robert Donington, *Wagner's Ring and Its Symbols: The Music and the Myth*, 3rd Edition (Robert Donington, 1976), 197.

native but negative element, he has destroyed an aspect of German life that has potential to ruin communities. A fearless, ruddy hero thus can defeat the gods and magic themselves; a man rules triumphant in this moment. Even in their conversation, the human overcomes the supernatural Dragon. Wagner sought a pure, unadulterated hero; his nationalism had led him to a search throughout myth in order to identify unifying characteristics of Germanic peoples.[54] This reflects post Enlightenment humanism that prioritizes the rationality of mankind over dependence on religious tradition. Meanwhile, nationalism was on the rise across Europe. As people groups sought to define themselves by seemingly apparent "native" qualities, they glorified mythic heroes as pure examples of their nationhood. Harkening back to "pagan," pre-Christian days, Wagner depicts humanity without the influence of God. To him, the Dragon-slaying and treasure-gaining serves to identify Siegfried as the archetypal mythic hero with whom an audience can empathize. The precedents for such an arc can be found in mythic literature and opera.

Years earlier, Mozart had attempted a similar object in his only German opera, *Die Zauberflöte*. In an attempt to identify his protagonist as a distinctly German hero, Mozart opens the opera with a Dragon-slaying. Likewise, Wagner purposefully gathered mythic sources, inevitably leading to the downfall of the hero, in which a measure of deceit is always involved. Siegfried, the pinnacle of humanity, must also exit the world that has no place for him. He has defeated magical features, aided and overwhelmed the gods, and won the unconquerable woman for his own. He has become the myth that was meant to be receding and must therefore also end. This allows for Wagner's philosophical message of the primacy of German people to flourish; the average man can now aspire to Siegfried's greatness without fearing his rule. The ideal German, Siegfried, defeats various supernatural symbols of other people groups and religions. Rather than simply conquering the Devil Siegfried overcomes anybody who dares to come in his way. This is a secularized saint life that draws on pre-Christian narratives to emphasize the abilities of mankind to accomplish their own supernatural feats. For Wagner, the German people are idealized in Siegfried and although they cannot attain his perfection, they are the closest on earth to doing so. Their idealized qualities of strength, valor, and brash humanism are perfected in

[54] Nancy Benvenga, *Kingdom on the Rhine: History, Myth, and Legend in Wagner's Ring* (New York, NY: Anton Press, 1983), 34.

the operatic hero. Unlike the Nibelung dwarf, coded with anti-Semitic stereotypes, the German can conquer all that is in their path without fear. The audience must also defeat greed and the old gods in favor of human strength.

This message was embraced and later celebrated by the Weimar Republic and the Nazi regime as representing the zenith of humanity within the German people. These later audiences received Wagner's message that the gods and outside influences must yield the stage to humans in "hopes that the latter will succeed in putting things right."[55] Wagner's ideal Germanic hero, identified primarily in his Dragon-slaying, thus became known as an artistic rendition of the Nazi interpretation of the racial apex of mankind. Not only asserting their own characteristics but defining themselves by displaying what they are not was highly appealing to the Nazis. Wagner's own anti-Semitic views can be found throughout the *Ring* cycle. He derogatorily based the Nibelung dwarfs on Jewish stereotypes; the conniving dwarf Mime can be easily seen as a representation of the anti-Semitic belief that the Jewish people are inherently greedy and untrustworthy.[56] These sentiments are also found in Fafner. His greed and tendency to sit on wealth lead to his ultimate demise at the hand of the ideal German hero. Wagner, in an attempt to create a national superlative, wove his prejudices into stories that were in fact borrowed themselves from other cultures. A precursor to Nazism, this type of national, or racial, pride is especially evident in this particular Dragon-hero encounter.

In a Hole in the Mountain There Lived a Dragon

During and after the World Wars, another author made attempts to construct a national mythology from Germanic texts. A young man steeped in Dragons, language, and the mythic past changed the world when he began to tell stories about a fictional world called Middle Earth. J. R. R. Tolkien's myriad works completely reinvented the fantasy genre and take their root in stories from across the North Sea cultural sphere. Born at the end of the Victorian Era, Tolkien was a remarkably conservative man who nevertheless made tremendous leaps in the medievalist

[55] Benvenga, *Kingdom on the Rhine*, 165–166.

[56] Marc A. Weiner, *Richard Wagner and the Anti-Semitic Imagination* (Lincoln: University of Nebraska Pres, 1995).

and literary communities. Fortunately for him, his scholarly training came at the forefront of the revitalization of medieval studies. When his peers were dedicating themselves to the Classical world, Tolkien was poring over Old English, Norse, and Icelandic grammar textbooks. As a young man, he had fought in World War I and saw the turmoil that would later come to define him.[57] He witnessed his peers die in droves around him at the Battle of the Somme and lost all but one of his closest friends. However, unlike other writers of the day, Tolkien retreated into the mythic past for comfort. While his contemporaries, such as T.S. Eliot or Rupert Graves, were attempting to shake off the influence of mythic heroism, Tolkien sought to find any remnant of valor in humanity. Even while he lay in the hospital stricken with trench fever, Tolkien dreamed of a mythology for England.[58] His myriad complicated languages found a home in Middle-Earth, the supposed mythic past of the British Isles. Tolkien's legendarium was meant to give England an epic entirely its own; he thought little of the Welsh-French Arthurian tales and believed that *Beowulf* was the most relevant epic for England. Yet even that was inherently a Danish tale, merely recorded in Old English. Picking up on the contemporary trend towards nativism and yet seeing that English culture was largely an amalgamation of many others, Tolkien desired something that was purely his own. Tolkien therefore used his extensive breadth of knowledge in northern European language and mythic history to construct a story for his people.

Tolkien participated in the latest developments of scholarship in the late nineteenth and early twentieth centuries. The overarching mood of the Anglo-Saxon and Germanic scholars of the day was about looking into a Germanic past to find qualities that a modern audience could embody. For some, this took on a racial element. A resurgence in Anglo-Saxon studies had come as a late Victorian effort to epitomize their supposed racial qualities. An obsession with Alfred the Great and his cohorts took aristocrats by storm while they attempted to claim di-

[57] John Garth, *Tolkien and the Great War: The Threshold of Middle-Earth* (London: Harper Collins, 2011).

[58] In a 1951 letter, Tolkien wrote: "I was from early days grieved by the poverty of my own beloved country: it had no stories of its own … I had a mind to make a body of more or less connected legend, ranging from the large and cosmogonic, to the level of romantic fairy-story … which I could dedicate simply to: to England; to my country." J.R.R. Tolkien, *The Letters of J. R. R. Tolkien: A Selection. Compiled by Christopher Tolkien*, ed. Humphrey Carpenter (London: Harper-Collins, 2006), 140.

rect descent from their race. Largely, this concept was paired with the height of the rampant imperialism of the British Empire. In a sense, this helped some to justify their conquests by demonstrating their supposed superiority in cultural and racial descent. The term Anglo-Saxon came to be culturally associated with the supremacy of the British monarchy and people of Caucasian European ancestry.

Tolkien himself believed there was a great pride to be had in being a descendent of the Germanic tradition. However, although Tolkien deeply regretted how scholars alienated Germanic studies after the World Wars, he abhorred Nazi beliefs.[59] For Tolkien, the mythic past held a wonder that the technology-ridden modernity lacked. He looked at mythic literature as holding truly native qualities. As a revolutionary scholar of *Beowulf*, it would have been impossible for Tolkien to have not been influenced when writing his own works. He saw *Beowulf* as one of the prime examples of heroism in mythic literature. Tolkien also drew on texts such as the Finnish *Kalevala*, Icelandic sagas, the *Nibelungenlied*, and myriad languages to construct an idealized picture of an early medieval mythic realm. Of the utmost importance was to communicate the mythic heroism in his works, although he chose to adapt traditional ideas for a unique perspective.

Many elements of Tolkien's universe can trace their history back to medieval texts, including his many Dragons. His first published fiction, the children's book *The Hobbit*, features a Dragon-hero confrontation at the climax of the drama. The book follows Bilbo Baggins, a diminutive Hobbit, on his unexpected adventure employed as 'the burglar' of Thorin's Company. Thorin Oakenshield reluctantly hires the Hobbit at the recommendation of Gandalf to help the dwarves reclaim their homeland from Smaug the Terrible. Along with twelve dwarves and a disgruntled wizard, Bilbo encounters immense spiders, wood Elves, and the Dragon that stole Thorin's inheritance. They eventually reach the Lonely Mountain and the ruins of Erebor, only to find the Dragon

[59] After being asked by German publishers if he was of Aryan descent, Tolkien called Nazism a "wholly pernicious and unscientific race-doctrine," and mocked the original letter by replying as if they had asked about the original meaning of the word. He said "I am not of Aryan extraction: that is Indo-iranian...but if I am to understand that you are enquiring whether I am of Jewish origin, I can only reply that I regret that I appear to have no ancestors of that gifted people...if impertinent and irrelevant inquires of this sort are to become to rule...then the time is not far distant when a German name will no longer be a source of pride." Tolkien, *The Letters of J. R. R. Tolkien*, 37–38.

still alive. Bilbo is sent into the hoard to spy on the Dragon and steal treasure; however, it is this theft that arouses Smaug and leads to the riddling talk between the Hobbit and his foe. After Smaug correctly assumes that the Company was aided by Men of Esgaroth, he leaves the mountain and destroys the nearby town. He is slain by the grim Bard, but at great cost. Nonetheless, Elves, Men, and Dwarves turn to the Dragon hoard and crave its wealth. It is only the arrival of mutual enemies that stops a confrontation driven by greed. The novel's climax is the terrible battle of Elves, Men, and Dwarves against the Orcs and Wargs of Dol Guldur and Gundabad. Thorin and two Dwarf princes of the Company are slain, but Bilbo safely returns to the Shire laden with Dragon gold.

Fully aware of the long mythic history of the Dragon, Tolkien ensured that the conflict would embody all that an audience might anticipate. Many scholars today have recognized that his childhood fascination with Dragons contributed greatly to his participation in the genre. Caroline McAlister's children's book, *John Ronald's Dragons: The Story of J. R. R. Tolkien*, artistically describes how Tolkien imaged a world of Dragons as an escape for the dreariness of reality.[60] In a beautifully illustrated book she follows the theme of Dragons throughout Tolkien's life. The natural association with the legendary author and the famous mythic foe becomes even clearer when examining his many works. In *The Hobbit*, the Dragon Smaug follows the script of his predecessors as a mythic element. When Thorin's Company is trying to find a way to defeat the Dragon, they point out that only heroes can directly confront a Dragon "but warriors are busy fighting one another in distant lands, and in this neighbourhood heroes are scarce."[61] Even Smaug falsely believes that he has killed all "the warriors of old and their like is not in the world today."[62] This is a recognition of the explicit Dragon-hero encounter, which Tolkien then purposefully reconstructs to toy with the trope. Rather than describing a traditional scene in which the hero destroys the Dragon himself, Tolkien sends the meek Bilbo to first engage in a battle of wits. Once the company reaches the Lonely Mountain, Bilbo manages to steal a cup and enrage the Dragon. In their next encounter, the Hobbit and the Dragon engage in a tete-a-tete, because "no

[60] Caroline McAlister, *John Ronald's Dragons: The Story of J.R.R. Tolkien* (New York, NY: Roaring Book Pres, 2017).

[61] Tolkien, *The Hobbit*, 22.

[62] *ibid.*, 238.

dragon can resist the fascination of riddling talk and of wasting time trying to understand it."[63] Here, Bilbo embodies both elements of the thief and hero, fulfilling his purpose within the company. His heroic qualities find life in the courage it takes for a small creature, unused to the heroic realm, to confront a Dragon. However, in their conversation, Smaug taunts Bilbo repeatedly and plants mistrust in the dwarves' honesty and motives. This drives the company apart and precipitates the climactic Battle of Five Armies.

However true the Dragon's remarks may have been, their delivery as half-truths planted seeds of mistrust within Bilbo's heart. His later actions of hiding the Arkenstone, Thorin's birthright, are directly influenced by the words of Smaug. Though the Dragon is killed by Bard of Esgaroth, his words ultimately lead to the death of the novel's hero, Thorin. The Dragon's victim is not Bilbo, as he is not the hero; Bilbo is the bourgeois protagonist who comes to understand the heroic world, but he never becomes the mythic hero. When the dwarves complain that he awoke the Dragon by stealing the cup, Bilbo scoffs "I was not engaged to kill dragons, that is warrior's work, but to steal treasure. I made the best beginning that I could."[64] Thorin, on the other hand, is the noble prince exiled from his homeland. His actions follow that of the mythic hero; the dwarf's wandering life is reminiscent of the exiled Wanderer in the Anglo-Saxon heroic elegies, the Wandering Jew, or the hidden identity motifs of medieval romantic ballads. Thorin's downfall is thus a direct result of the Dragon encounter. His yearning for the Arkenstone and the Dragon treasure, a desire avoided by Beowulf and Siegfried, propels him to battle against armies of men and Elves. Here, Thorin is the hero fallen from heroic glory and ideals. Tolkien also emulates *Beowulf* by having a thief disturb the Dragon. Although Tolkien later claimed in a letter that he had not intended to duplicate the Dragon encounter to such a great extent, the texts are remarkably similar. He admits that perhaps he subconsciously derived the scene from *Beowulf*, but that was only due to his intensive work on the subject. He wrote, "though it was not consciously present to the mind in the process of writing, in which the episode of the theft arose naturally … It is difficult to think of any other way of conducting the story at that point. I fancy the author of *Beowulf* would say much the

[63] Tolkien, *The Hobbit*, 223.
[64] *ibid.*, 232.

same."[65] In *Beowulf*, the thief is forced by his master to retrieve part of the hoard of his ancestors. Bilbo recreates this scene when he reluctantly agrees to 'burgle' the treasure of Thorin's grandfather, Thror. Bilbo even steals a two-handled cup just as *Beowulf*'s thief did. Bard, the descendent of the great defender of the city of Dale, uses an ancient arrow to slay the Dragon though not without the destruction of Laketown. He too embodies the qualities of the heroic world and fulfills the ideals when Thorin fails. Bard is a true hero; it is for this reason that he is the one to deal the Dragon's death blow. Here, Tolkien employs multiple heroic tropes in several characters, and it is only through their joint effort that the Dragon is slain. It is the combination of Thorin's heroism, Bilbo's 'every-day' bravery and Bard's nobility of character that slays the Dragon. Similar to Wiglaf's intervention in *Beowulf*, the hero, i.e. Thorin, cannot defeat his foe alone.

Tolkien follows traditional patterns for the many other Dragons in his mythic stories. In fact, Tolkien felt as though he was improving upon scenes from Beowulf, saying "But the whole problem of the intrusion of the 'dragon' into northern imagination and its transformation there is one I do not know enough about."[66] Nevertheless, despite his protests of having little technical knowledge of Dragons, Tolkien wove myriad types into his stories. In his *The Silmarillion*, Ancalagon the Black, the first of the winged Dragons created by the devil-figure Morgoth, is slain by Earendil in the War of Wrath. Earendil is later doomed, or honored, never to return to Middle Earth and to sail the skies as a star for all eternity. Glaurung, Father of Dragons, is slain by the tragic hero Turin Turambar. During the encounter, it is revealed by the twisted Dragon that Turin has unknowingly married his sister and, after Glaurung is slain, Turin takes his own life. Repeatedly throughout the legendarium, a Dragon encounter spells the inevitable doom for the hero. Whether they sacrifice their lives defeating their enemy or they are driven mad by truths revealed, the hero stands no chance of a quiet ending. Tolkien's Dragons draw on both pre-Christian and Christianized images in order to construct his ultimate fantasy of what a Dragon ought to be. As a staunchly devoted Roman Catholic, Tolkien was deeply familiar with hagiography. He was well aware of the Biblical influence on the Dragon motif and incorporated the same trend into his own myths. They are embodiments of evil created by Morgoth, the works' Satan figure, and

[65] *idem*, *The Letters of J. R. R. Tolkien*, 31.
[66] *ibid.*, 134.

are capable only of destruction and guile. As creatures of a substitute Devil, they emulate the demonic Dragons of hagiography. Just as St. George conquered the bestial demon, so Tolkien's heroes expel Morgoth's hateful influence from the battlefield.

Smaug has many of the characteristics that Tolkien himself loathed. Like the ever-hoarding aristocracy, the Dragon sits on the wealth in his domain and remains isolated. The beast viciously took his gold from those unable to defend themselves, not unlike the rich who mercilessly take advantage of the poor. Upon missing the cup that Bilbo initially stole, Smaug felt "the sort of rage that is only seen when rich folk that have more than they can enjoy suddenly lose something that they have long had but never before used or wanted."[67] For Tolkien, this was one of modern society's gravest crimes. Having grown up desperately poor, he resented those with stagnant wealth. He instead admired the ideals of the Anglo-Saxon lords who shared their wealth generously with their thanes. From his perspective, the aristocratic class was abusing their position to harm the middle and lower classes of England. Although Tolkien believed that a class system and monarchy were essential parts of a functioning society, he saw the true enemies as those who abuse their God-given position. Bilbo, Tolkien's Victorian bourgeoisie, confronts and mocks this arrogant behavior so that paragons of the Heroic Age, Thorin and Bard, may defeat it. Bilbo is also a direct contrast to the greed of Smaug and later the armies of Dwarves, Elves, and Men. Even in the comparisons of their 'waistcoats', Smaug's diamond to Bilbo's bright but plain fabric, they are seen to be entirely opposite. In fact, Smaug's confidence in his diamond-encrusted belly becomes his downfall; he fails to account for a large gap in his scales that is perfect for an arrow strike. Although Bilbo is clearly of the well-off middle class, he has no attachment to wealth for the mere sake of it. Like any good Hobbit, he freely gives gifts and prioritizes simple comfort over money. These are Tolkien's ideal English qualities.

Bilbo is a part of his community of both Hobbits and the heroic world; as a respected member of society, he enjoys personal connections and as an observer of the ways of heroes he emulates their behavior when necessary. The Dragon is part of this mythic world that seems apart from the Shire, but he is defeated by its homegrown values. Thus, Tolkien's ideal hero may be revealed as not simply a great warrior of the

[67] Tolkien, *The Hobbit*, 229.

Heroic Age but a person of courage who does what they must in order to defeat evil. Certainly heroes and warriors are found throughout *The Silmarillion, The Hobbit,* and *The Lord of the Rings*, but the most endearing protagonists are diminutive and hardy. It is Bilbo's resistance to greed and power over others that allows him to remain untarnished by the Dragon hoard. Unlike the Dragon who is violent for the sake of it, malicious, and slothful, Bilbo strikes only when pressed. It is his simplicity that directly contrasts the drama of the heroic world found in Thorin and the Dragon. Likewise, it is his simple desire for comfort that enables his immunity to the draw of the hoard. His courage in the unknown and his stalwart hope in the goodness of everyone is what prevents catastrophe. Tolkien sends a message to his readers that a true English hero can be of common stock and successful even in the heroic world if they hold true to hope and courage in the face of monsters.

The Dragon – Author Encounter

Tolkien's contribution to the academic sphere revolutionized medieval, language, and literature studies. However, he is most remembered for his remarkable reinvention of the fantasy genre. By focusing his fiction in a pseudo-medieval world, Tolkien brought the medieval back into the forefront of popular culture. In particular, the mid-late twentieth century saw an explosion of fantasy literature and related activities. Role playing table top games, such as Dungeons and Dragons, or Live Action Role Play that imitate Tolkien's legendarium came to be a part of the fan subculture. Suddenly hundreds of thousands of readers were poring over Tolkien and similar authors. It had become popular literature rather than simply the interest of medieval scholars. Since then, fantasy has largely been defined by the example set by *The Lord of the Rings*.

Participating in the growing interest in medievalist studies, the American scholar John Gardner took traditional themes and set them in a contemporary reality. Although Gardner himself is American, he grew up heavily entrenched in European culture; his ancestors had migrated from England to become farmers and kept many of their traditions. His mother was an English teacher who would often read Shakespeare to her children. However, of his long English ancestry, "the John Gardner of our time never knew these details. However, his attraction to myth, to the old and archetypical played out in human character, was

clearly spawned on fertile ground."[68] Barry Silesky, in his biography *John Gardner; Literary Outlaw*, records how Gardner's first engagement with myth was a children's fable titled "Dragon, Dragon."[69] The story describes "a distinctly contemporary dragon … with the conflicted consciousness of a contemporary adult," and is "informed by [Gardner's] engagement with medieval myth."[70] This was Gardner's first literary entanglement with mythic Dragons but it was his 1973 *Grendel* that presented the world with his interpretation of the element. A medievalist himself, Gardner purposefully inserted literary commentary within his adaptation. In his novel, he was able to contribute to *Beowulf* and mythic criticism through narrative instead of essay. Indulging this attraction, Gardner rewrote *Beowulf* from the perspective of Grendel, the hero's first foe. The novel is meant to speak to contemporary problems and, according to Kenneth Mason, "to describe luxation we must face simply by virtue of living in the latter decades of the twentieth century."[71] Its careful structure of twelve chapters, each coinciding to both zodiac and Aristotelean virtues, demonstrates Gardner's engagement with a larger sphere of spirituality.[72] Critically acclaimed and loved by literary scholars, the novel presents an interesting twentieth century perspective on the nature of heroism and the Dragon encounter.

The story follows Grendel's perspective throughout the first half of *Beowulf*. One of the many challenges Gardner faced was the problem of telling a story from the point of view of a character that dies in the first half. Nevertheless, the story has Grendel meet every character of significance from the original poem, including the Dragon himself. Primarily, the novel follows Grendel's search for self-identification. He digests qualms of morality, the purpose of individuality, and the very notions of heroism. Grendel also becomes both entranced and conflicted by the arrival of the Shaper, a singer who gives poetic meaning to the brutality of the Danish life. Grendel initially scoffs at the proclamation that Hrothgar's brutes could be called heroic but is eventually captured

[68] Tolkien, *The Hobbit*, 9.

[69] Barry Silesky, *John Gardner: Literary Outlaw* (Chapel Hill, N.C.: Algonquin Books of Chapel Hill, 2004), 93.

[70] *ibid.*, 93, 223.

[71] Kenneth C. Mason, "Of Monsters and Men: Sartrean Existentialism and John Gardner's Grendel," in *Thor's Hammer*, ed. Jeff Henderson (Conway, AR: University of Central Arkansas Press, 1988), 101.

[72] Barry Fawcett and Elizabeth Jones, "The Twelve Traps in John Gardner' s Grendel," *American Literature* 62, no. 4 (1990): 634, doi:10.2307/2927072.

by the idea that, perhaps, meaning can be made within the disorder. In his quest to find meaning in the seemingly chaotic universe, Grendel approaches the Dragon that will later fight Beowulf. The Dragon claims omniscience and infinite wisdom, yet his inherent bitterness clouds his judgement. His wisdom is applicable only for himself, not for the grasping mind of a would-be philosopher. The Dragon's winding words are condescending as the monster attempts to understand the purpose of his life. Throughout their conversation, Grendel attempts to wheedle useful information out of the Dragon, but instead receives a lesson on the nature of the universe. The Dragon scoffs at Grendel's desire to abandon his war on humans and says:

> Ah, Grendel! You improve them, my boy! Can't you see that yourself? You stimulate them! You make them think and scheme. You drive them to poetry, science, religion, all that makes them what they are for as long as they last. You are, so to speak, the brute existent by which they learn to define themselves. The exile, captivity, death they shrink from – the blunt facts of their mortality, their abandonment - that's what you make them recognize, embrace! You are mankind, or man's condition: inseparable as the mountain climber and the mountain.[73]

In this moment, the Dragon becomes the central antagonist in *Beowulf* and the manipulative force behind all actions against humanity. The Dragon urges Grendel to continue to wage his war with Hrothgar, even if it seems foolish. He neglects, however, to tell Grendel that this will result in his gruesome death and the novel's protagonist meets his end when he takes the Dragon's advice to heart.

Grendel is not simply a modern reimagining of an ancient text. It is an example of Gardner's dalliance with the implications of the Jean-Paul Sartre philosophy. The Sartre philosophy stems from the idea that a person's existence is before their essence. In short, individuals cannot be defined by themselves but instead by the projection of another.[74] For example, the Dragon proposes that the Danes can only define themselves against the brutish attacks of Grendel while Grendel can define

[73] Gardner, *Grendel*, 72–73.

[74] *Jean-Paul Sartre*, in *The Stanford Encyclopedia of Philosophy*, Fall 2013, ed. Edward N. Zalta (2013), by Thomas Flynn, https://plato.stanford.edu/archives/fall2013/entries/sartre/.

himself as mankind's enemy. A self- pronounced detester of existentialism, Gardner intended his novel to expose the dangers of such a nihilistic worldview; particularly, in that the Sartre philosophy is a precarious model for life.[75] In fact, it is in accepting this philosophy that leads Grendel to his gruesome death. Throughout the novel Grendel despairs of the mechanization of the universe and declares that it is all meaningless. At first, he is dedicated to the philosophy that nothing but himself matters; after a bull attacks him he realizes that the world moves on mechanically, and that "the world was nothing ... I understood that, finally and absolutely, I alone exist."[76] He lacks the imagination to see the possibility of significance in an individual's actions.

Marie Nelson describes the reinvention of Grendel from a mute monster into a protagonist of both monstrous and human qualities.[77] Shifting from a bestial figure to a would-be philosopher, Grendel encompasses the highest and lowest of humanity. He grapples with the very nature of heroism, strangely attracted and yet repulsed by the seeming simplicity of the mindset. However, despite this, Grendel is not a hero in the word's truest sense. In fact, he finds Beowulf's belief in heroic ideals to be deeply disturbing, musing that "he was insane" to hold to such a truth.[78] Jealous of the arrival of Beowulf, the Danish thane Unferth resolves to supersede his example by defeating the monster himself. During his confrontation with, and subsequent humiliation of the Dane, Grendel dismisses the aspiring hero's motivation. Unferth argues that "the hero sees beyond what's possible. That's the *nature* of a hero. It kills him, of course, ultimately. But it makes the whole struggle worthwhile."[79] Grendel chooses not to honor this worldview and purposefully shames Unferth by refusing to allow him a heroic death. Instead of fulfilling the role of a champion of the Heroic Age, Grendel is the modern hero seeking truth in a nihilistic world. He stands outside the mead hall, attracted to the songs of glory and battle but skeptical of their validity. However, it is his rejection of the heroic ideals that leads him to his demise.

[75] Mason, "Of Monsters and Men," 101–102.

[76] Gardner, *Grendel*, 22.

[77] Marie Nelson, "John Gardner's Grendel: A Story Retold and Transformed in the Process," *Journal of the Fantastic in the Arts* 18, nos. 3/17 (2007): 431.

[78] Gardner, *Grendel*, 142.

[79] *ibid.*, 89 .

Gardner's Dragon is a manipulative, deceptive, and bitter character. Some have speculated that he might speak for Gardner, particularly in his derision for a simplistic existentialist philosophy. However, Gardner himself said that "the Dragon looks like an oracle, but he doesn't lay down the truth ... he tells us the truth as it appears to a Dragon ... that is the materialistic point of view."[80] The Dragon's primary advice is for everyone to find a hoard of gold and mind it. Whereas the Shaper assigns life to a bloody reality and allows man to have reason for hope, the Dragon encourages men to fall to the nihilism of greed. Leonard Butts suggests that Gardner's Dragon is an "aspect of human nature that cannot be ignored but should not be trusted."[81] In this way, the Dragon can be understood as a physical embodiment of the characteristics that would destroy humanity. For Gardner, this means avarice, nihilism, and existentialist fatalism. The Dragon may eventually be slain by the heroic ideal, but his attitude remains a threatening influence.

Not merely a representation of greed but of a malicious enforcer of fate, the Dragon influenced the supposed free will of the protagonist. Once again, it is the Dragon-hero encounter that dramatically changes the narrative. A seeker of truths, Grendel is Gardner's ideal twentieth-century philosophical hero. The enemy becomes a character that hides meaning behind serpentine schemes that strip Grendel of his potential. In fact, even in the violent confrontation between Beowulf and Grendel the monster can only see the Dragon in his foe. Before the hero tears Grendel's arm he is seemingly transmogrified into the Dragon, his

> fingers sting like fans, his eyes gleam red, his tongue spits bright fire. While Beowulf violently asserts that heroism is the only mode of human survival, Grendel's worldview crumbles. Grendel hears the Dragon's words swirling about his ears, whispers of dust and randomness.[82]

It is in this moment that Grendel realizes the Dragon's pseudo-Sartre philosophy is a destructive force. Whereas Grendel is constantly searching and seeking absolution, the Dragon supposedly possesses all knowledge yet refuses to enlighten others. Like a materialistic lord, this Dragon hoards knowledge and refuses to bequeath his vast wealth

[80] Mason, "Of Monsters and Men," 106.

[81] Leonard C. Butts, *The Novels of John Gardner: Making Life Art as a Moral Process* (Baton Rouge, LA: Louisiana State University Press, 1988), 92.

[82] Gardner, *Grendel*, 69.

to others. The negative aspects of deception and bitterness are coupled with arrogance to create a picture of the worst aspects of deities and fate. For Gardner, the Dragon is the antithetical image of the truest heart of mankind that is aware of its flaws yet seeks redemption regardless.

Gardner represents the rupture moment for the Dragon symbol. After centuries of typified behavior and expectations, the author becomes aware of the implicit philosophies and rejects them. Gardner recognized that the Dragon represented the opposite of the hero. As a mythic element of greed and unpleasant truths, the Dragon was altogether too explicit for him. Rather than wholly participating in the traditions of the mythic element, the author once again adapts the Dragon for his own purposes. Here, however, the purpose is to detach himself from the rules established by the past. Gardner fundamentally dislikes the implicit philosophy of the Dragon. Whereas in tales previous the Dragon represents an unpleasant reality to be defeated, here the Dragon symbolizes the lies of the universe. There is no truth to be gained within the deceits spilling from his mouth, and it is the belief in his words that leads Grendel to his death. *Grendel* shows the decline of the textual rulebooks. If the Dragon is the foil of the hero, then in Gardner the foil can no longer function because the hero has become aware of it. In other words, the Dragon no longer wholly reflects the idealized northern European because the author and community are aware of the process.

True, Gardner participates in the tradition in his rejection of the longstanding rules. However, it is at this moment that the Dragon begins to become a more animalistic trope in fantasy literature. The rejection of the element allows it to be reinterpreted. Dragons simply become an attribute of a magical world rather than the antithesis to the mythological self. Similarly, the fantastic genre was largely shaped by Tolkien's example. Authors spilled rivers of ink attempting to create worlds similar in depth and clarity to that of Middle Earth. For this reason, many of the tropes found within Tolkien's works have now become genre stereotypes. The pseudo-medieval setting, Elves, Dwarves, Dragons, and magic are no longer remnants of a mythic past but simply markers of a magical world. Alternatively, dragons become a part of a rational, natural world; they are categorized as an animal species within the fictional universe. *Dragonology* by Ernest Drake puts forth a pseudo-scientific study of the dragon genus as if they were a part of

the natural world.[83] For example, friendly dragons often appear in children's literature and popular culture. It is their presence rather than their traditional characteristics that tells the audience that the world described is imaginary. The dragons featured in the popular series *Game of Thrones* are animalistic creatures that merely represent the returning of magic to the fictional world rather than concepts of abstract villainy. Likewise, the dragon encounters featured in *Harry Potter and The Goblet of Fire* are obstacles in a sporting event rather than transitional moments of revelation for the mythic hero. This disruption of the mythic element implies a radical shift in the purpose of the Dragon. It is no longer the ultimate reflection of mankind's highest hero, but a mere abstract representation of a magical realm. This is the image that dominates popular culture today, but it too relies on centuries of cultural heritage. Without the prioritization of the Dragon, it would not have survived as so prevalent a trope.

Conclusion

Dragons to this day remain a significant feature of mythic and pseudo-mythic literature. In *Beowulf*, the Christian author interjects the pre-Christian description of the Dragon with Biblical allusions. The Christian motifs implanted in the Dragon have led to the current image known today. These elements transformed the Dragon from a mythical beast, perhaps symbolizing death and the unknown, into a deceiving character with human traits. References to Satan in the Biblical book of Revelation as a "great red dragon ... that serpent of old" were also combined with the pre-Christian Dragon so that it became a far more malicious creature.[84] In Wagner, the Dragon exemplifies the consequences of greed and pride. Drawing from mythic representations and supplying anti-Semitic stereotypes, Wagner constructed a Dragon antithetical to his ideal hero. As the enemy of Siegfried, Fafner opposes the intended representation of the "native" German people. Not only is Siegfried able to conquer such serpentine vices, but he demonstrates that Germany ought to as well. Tolkien combined images of his predecessors to create the "most specially greedy, strong, and wicked worm

[83] Ernest Drake and Dugald Steer, *Dr. Ernest Drakes Dragonology Handbook: A Practical Course in Dragons* (Cambridge, MA: Candlewick Press, 2005).
[84] Rev. 12:3–9 NKJV.

called Smaug."[85] Smaug is the best of both worlds for Tolkien: a monstrous lizard and a subtle liar. Tolkien was well versed in medieval images of Dragons as well as Biblical ones and incorporated multiple influences into his mythology. Gardner employs the Dragon as the mythic enemy of both his protagonist Grendel and the hero Beowulf, but the novel exists in a meta space. It is fully aware of the tropes laid down beforehand and purposefully uses them to communicate a message about rejecting accepted philosophies. Nevertheless, while a Dragon is ultimately framed by an accepted set of characteristics each author uses such a defined element for their own purposes. It is the shared cultural history that connects various interpretations of Dragons across literature as well as settings within a historical context that sets individual incarnations apart.

Although the presence of myth enhances a story, it cannot last. Within the Secondary World of the narrative, mythic components are an accepted part of the natural state of being. However, they are supernatural in the sense that they must be confronted; they do not truly belong in what ultimately becomes a world of men. These stories describe how the world of mankind came to be and thus the mythic elements must fade, however tragic it may seem. In *Beowulf*, for example, all of the fantastic components fade. The monsters and the hero must die. Gardner aptly wrote that "the hero sees beyond what's possible. That's the *nature* of a hero. It kills him, of course, ultimately. But it makes the whole struggle worthwhile."[86] This passing makes their world a place for mankind, with Beowulf as a heroic example and the monsters as truths to be confronted. According to Tolkien, "[*Beowulf*'s author] is concerned primarily with man on earth, rehandling in a perspective an ancient theme: that man, each man and all men, and all their works shall die."[87] The hero is destined to be a model, a human that has become supernatural in their victory over the mythic. They are the best of humanity but they must fade so that the audience can look to their example. Wagner's operas continually show episodes of mankind defeating mythic elements. However, Siegfried must also tragically die and leave the world ready for his successors. Tolkien's works tackle the tragic fading of myth, or Faerie, after the tradition of *Beowulf*. With extreme attention to detail, Tolkien constructed an elaborate frame nar-

[85] Tolkien, *The Hobbit*, 23.
[86] Gardner, *Grendel*, 89.
[87] Tolkien and Tolkien, *The Monsters and the Critics, and Other Essays*, 119.

rative and allowed his Elves to leave so that Middle Earth could become pseudo-mythic history. Though his mythic elements are not necessarily all destroyed by man, many of them confront each other. The Elves clash with Sauron, the Dwarves battle the Wargs, and the Hobbits destroy the ring. Moreover, although Gardner's protagonist is mythic, he is sacrificed for the brutal reality of mankind so that heroes such as Beowulf can reach their zenith. One of the most mournful themes found throughout mythic literature is the fading of mythic aspects. The myth must make way for man.

Perhaps one of the most important questions that plague the scholar is that of the reasoning behind mythic elements. Many readers condemn such works for the ignorant barbarian past or the naive years of childhood. Mythic elements surely cannot be in "serious literature" for intellectual adults. Many historians dismiss the monsters in *Beowulf* as distractions from the knowledge to be gained about Anglo-Saxon culture, but the monsters are equally as informative, if not more so. While removing myth from a story might make the literature more "historical," it makes it enormously less powerful as a narrative. Without mythic elements there is no elevation of spirit or possibility of the highest peak to which mankind can aspire. Heroes within mythic stories show communities what they could and ought to be. Most significantly, it is in the conquering of their mythic foes that their true character can be revealed.

Mythic scholarship has seen a shift in the past decades in that mythic elements are regarded as not only important but, in fact, essential to cultural understanding. Mythic components are highly reflective of a culture's priorities and self-image. The European Dragon is uniquely distinct so that its presence implies cultural relevance. In fact, elements such as the Dragon are extremely important and informative; fantastic elements reveal what a culture values and spends time developing. Not only that, but simply how mythic elements are treated demonstrates a culture's ideals and self-perceptions. Authors across the millennia have used mythic elements to create pictures of the epitome of humanity. Heroes in such texts go above and beyond normal human capacity and they demonstrate this through their encounters with the fantastic. The hero becomes a mythic element himself, but he is the myth of one who has reached the highest that humanity can attain. He becomes a banner, a claim to a community's worth as a people group. Political movers are able to cling to these

well-known images to inspire not only themselves, but their followers. The cultural history of Europe has thus been shaped by Faerie stories and geopolitics, mythic heroes and battles, and Dragons and kings. The Dragon is in itself a reflection of northern Europe, essential to the understanding of who northern Europeans believe they ought to be. They have created their champions as pinnacles of their notions of self-identity, but there are no heroes without monsters.

Out of Orbit? European Space Collaboration in a Post-Brexit Europe

Colin Doege

List of Abbreviations

BEPS British Election Panel Study
COPERS Commission préparatoire européenne de recherches spatiales
ECSE European Coal and Steel Community
EDA European Defense Agency
EEC European Economic Community
ELDO European Launcher Development Organization ESA European Space Agency
ESRO European Space Research Organization
EU European Union
GMES Global Monitoring for Environment and Security LAS Large Astronomical Satellite
MP Member of Parliament
TEU Treaty of the European Union
UK United Kingdom
UKIP United Kingdom Independence Party

Introduction

European integration, an experiment in unity and cooperation, was not born from a concentrated, unified effort to unify the continent. Rather, the European Union (EU) rose from a variety of agencies, organizations, and treaties spanning decades of renegotiation and uncertainty. The EU's present status is the product of an ongoing work-in-progress; the Union's member states did not set out to create one of the world's most ambitious projects in international cooperation. From overlap in membership among the Union's piecemeal progenitors, common policy goals between cooperating states led to an increasingly shared

mission in many, but not all, areas. However, no matter its present reach across the continent, the EU is not the only vehicle for cooperation on the continent. Independent organizations must balance their loyalties between the monolithic EU and its own objectives. Cooperation and coexistence is an imperative, but in an era of Euroscepticism defined by the United Kingdom's coming departure from the EU, organizations can no longer take finding an effective path forward through the 21st century future for granted.

The European Space Agency (ESA), an independent, highly successful organization with close EU ties, faces an especially serious dilemma. Deeply rooted in the postwar array of supranational organizations which preceded the EU, the ESA owes its success to states shared with the EU. Because of the so-called Brexit, the United Kingdom's (UK) stake as a founding ESA member and continually reliable partner for European space collaboration is at risk. Caught squarely in the middle of this messy separation, the ESA's continued success will depend not only on the precedent set by common Union membership but also on the ESA's self-determined and proven strategy. The ESA possesses a long history as a uniquely independent organization in Europe, from its early days gestating alongside the EU's predecessors into its modern negotiations with the greater bloc. Its unique orbit, intersected by both the dominating opinions coming from the Union in Brussels and voices from outside the EU's ken, cuts its own path among the players of European integration. As integration faces severe doubts from both within and abroad, highly effective but low-profile examples of cooperation, like that of the ESA, can remind the continent of integration's variegated past in the face of a seemingly black and white future.

Analyzing and understanding the ESA's distinct role amidst Brexit negotiations offers a similarly unique perspective on the Eurosceptic narrative dominating Europe. Between the lines of Brexit lies an underutilized example of what Europe has already achieved cooperatively. The ESA's role in Europe's future is not necessarily restricted to a detached, purely scientific voice. Rather, its half century of fruitful partnerships between European powers set a precedent for how an uncertain continent can right itself and press forward with the European dream. From its early days, the ESA overcame strong doubt and harsh odds; a third player in space science, caught geographically and temporally in the middle of the Cold War, was an ambitious project on its own. Exacerbating the task were the early rumblings of British

Euroscepticism manifesting in the state's domestic and international politics. However, the Agency's predecessors overcame their humble, contested origins before consolidating into the ESA as it is known today. If the ESA is to continue its rich, cooperative legacy, that very history is central to its continued success. Reflected against the Agency's past struggles with a similarly balky United Kingdom, the future of the tripartite relationship between the EU, the ESA, and the UK possesses far more precedent than either the media or field-at-large have established. As the UK continues its split from the European Union, its past and present relationship with the ESA set a unique example on collaboration centered beyond both the EU's seat in Brussels or state capitals across the continent.

Literature Review

Kazuto Suzuki's 2003 book, *Policy Logics and Institutions of European Space Collaboration*, tackles the political realities of cooperative European endeavors through the lens of European space science. With a comprehensive analysis of the modern European Space Agency's formation, history, and present combined with a thorough analysis of Europe's intranational space programs, Suzuki works to establish a new approach to the policy logics of European space cooperation. Rather than applying a strict, historically appropriate international studies model which prioritizes the rationality and independence, the piece questions the neorealist approach's assumptions on mechanisms of international cooperation and expands the ability of transnational mechanisms of cooperation to exercise effective agency.

The crux of Suzuki's argument is a rejection of neorealist assumptions about international organizations, particularly when applied to space policy. The author defines neorealism as characterized by three qualities; states are rational, seek to protect their autonomy, and the key importance of intergovernmental bargaining. Decisions resulting from this framework would naturally seek to benefit the individual state over prioritizing international cooperation. Working on collaborative projects may not necessarily be the best route for a nationalistic government, nor may collaboration on a sensitive and inherently security-focused field like space science fit the narrative of national security. In his analysis, Suzuki acknowledges the efficacy of these assumptions in analyzing past frameworks; however, his focus instead rests on how

"... the changes in policy logics and institutions are closely linked" over time.[1] Using the model set by the European Space Agency's evolution alongside the EU from the twin agencies ELDO and ESRO, Suzuki details the interplay between the neorealist approach and a more international mindset to illustrate the medley of factors that have created the modern European Space Agency's niche between its member states and the European Union. As an independent, international organization, the ESA must deal with an extensive network of regulations and policies from both its member states and the EU. Though the ESA is an independent organization, its funding, objectives, and contract practice are the product of its member states' space policies and the objectives put forth by the European Commission. *Contracting for Space: Contract Practice in the European Space Sector*, edited by Leslie Jane Smith and Inigo Baumann, offers a collection of expert perspectives on the evolution and practices of Europe in space. The 2011 book offers "... a guide to the complex regulatory background of space projects and an analysis of typical legal problems."[2] While procurement policies and contract practice are the titular focus of the book, its participating authors offer a diverse array of perspectives on the relationship between the ESA, its member states, and the EU. Gunilla Stjernevi and Eleni Katsampani's essay, "Space Contracting within the Framework of the European Space Agency," offers the unique perspective of two ESA lawyers on the ESA's legal status.[3] Further pieces describe the cooperative structure necessitated by the European model; otherwise, project funding would likely run amok and create harmful overlap between the three collaborating levels of European space policy. Thus, *Contracting for Space* establishes the ESA's "... own mandate in the format of intergovernmental cooperation" in the Treaty on the Functioning of the European Union.[4]

[1] Kazuto Suzuki, *Policy Logics and Institutions of European Space Collaboration*, (Burlington, Vermont: Ashgate Publishing, 2003): 7.

[2] Lesley Jane Smith and Inigo Baumann, ed. *Contracting for Space: Contract Practice in the European Space Sector,* (Burlington, VT: Ashgate Publishing, 2011), 1.

[3] Gunilla Stjernevi and Eleni Katsampani, "Space Contracting within the Framework of the European Space Agency," in *Contracting for Space: Contract Practice in the European Space Sector,* ed. Lesley Jane Smith and Inigo Baumann (Burlington, VT: Ashgate Publishing, 2011), 169–181.

[4] Bernhard Schmit-Tedd, "The Relationship between the EU and ESA within the Framework of European Space Policy and its Consequences for Space Industry Contracts," in *Contracting for Space: Contract Practice in the European Space Sector,*

European space policy, despite its unique status as a topic that brings together European national politics, integration, and science policies, is not a widely researched topic. As Suzuki introduces his book, he touches on the "… scarcity of social scientific research on European space collaboration," especially for a non-European researcher.[5] As this work approaches a similar field, its sources are similarly varied and draw from a wide range of publications over an extended period. Additionally, in its examination of Brexit and the United Kingdom's role in European space policy, the work makes thorough use of works regarding British politics and the origins of the ruling Conservatives' Euroscepticism. Though these works are not explicitly writing on European space policy, their content weaves the fabric of the ESA's complex relationship with its national and supranational partners in a post-Brexit Europe.

Historical accounts of European space policy are key to characterize and support the ESA's current mandate. R. Lüst's 1965 article in the journal *Science*, "The European Space Research Organization," describes the conditions under which the ESA's predecessor organizations, ELDO and ESRO, were created and their original objectives for operation. Written in 1965, the piece demonstrates what was intended for the twin organizations before any major hiccups could intervene.[6] John Walsh's 1967 article in the same publication details a very different picture and illustrates the early problems created by Europe's launcher wing. Though ESRO did not lack problems, ELDO's cost overruns and dysfunctional oversight nearly caused the United Kingdom to withdraw from the organization, as "… ELDO was then engaged with building a launcher with nothing specific in view for it to launch."[7] As the UK's ongoing departure from the EU remains a pressing issue, the organization's past trials reconciling with the island state offer a rare precedent for the uncharted waters of Brexit. The later foundation of the ESA cleaned up much of the mess left by ELDO, and the then-new organization promised to reconcile the legal status of Europe's space

ed. Lesley Jane Smith and Inigo Baumann (Burlington, VT: Ashgate Publishing, 2011), 29.

5 Suzuki, *Policy Logics and Institutions of European Space Collaboration,* 8.

6 R. Lüst, "The European Space Research Organization," *Science* 149, no. 3682 (1965): 394–397.

7 John, Walsh, "ESRO: Space Sciences Research in Europe Suffers Growing Pains," *Science* 158, no. 3798 (1967): 244.

cooperation and to detail the obligations of each ESA member state. Rüdiger Freiherr von Preuschen's 1978 article, "The European Space Agency," provides a key analysis of the ESA's starting legal framework and reinforces the importance of reaching a "… common European position," a key facet echoed by recent, specialized works in the field.[8]

Adapting the past problems and resolutions in the ESA's history to its modern issues regarding the UK's decision to leave the European Union requires a thorough understanding of the so-called Brexit's origins in British politics. As the ESA developed through its predecessor organizations, the UK's skeptical approach to European integration parallels the issues and attitudes overcome by the ESA. Though the UK has since succumbed to its Eurosceptic urges in an unprecedented split from the EU, the attitudes which drove the British to leave the bloc are not without past evidence. As Britain's political parties gradually made Euroscepticism a partisan issue, the resulting rift in public and electoral opinion offered plenty of hints towards the present Brexit crisis. The ESA's current relationship with the island state is built upon decades of successful cooperation and accommodation of the UK's wavering commitment towards Europe and will be dependent on this tested relationship in the coming years. As the ESA's future with the UK is dependent on the direction intended by the now-Eurosceptic Conservatives, the perspective set by the literature of British Euroscepticism is invaluable to determining what precedent may be applied to Theresa May's promises for a hard Brexit.

Support for Eurosceptic policies and actions among Britons manifested unexpectedly in the United Kingdom's party system. A cursory overview of the parties' respective platforms may lead one to expect a simple, clean-cut divide between anti and pro-Europe parties. However, the reality inside Parliament is far more nuanced than the seemingly binary issue may suggest. Beginning in the 1970s, as European integration mustered additional support, analysis of Eurosceptic factions in the United Kingdom illustrated integration as an issue which uniquely associated with party ideologies yet still split opinion like a nonpartisan issue. Contemporary events, headlined by the intensely Eurosceptic United Kingdom Independence Party's rise to power as an influential third party, and preexisting research suggested that British parties could expect electoral support from a consistently Euroscep-

[8] Rüdiger Freiherr von Preuschen, "The European Space Agency," *The International and Comparative Law Quarterly* 27, no. 1 (1978): 54.

tic platform. Despite UKIP's ascent into mainstream politics, little research is available to process how the rising party's success correlated with and possibly affected Britain's surprise 2016 vote to leave the European Union.

Past analysis has examined how Euroscepticism has simultaneously destabilized the Conservative Party while bringing relative stability to Labour. When emphasizing Conservative disorganization during the European Union's early days in the 1990s and early 2000s, research hypothesized a future breakaway from traditional Conservative politics over the Euro issue. Contemporary research builds upon these threads in their analysis of the new United Kingdom Independence Party (UKIP), a party which overtly makes British nationalism over integration a key platform plank. As the United Kingdom pursues its exit from the European Union, the steady emergence of European relations as a partisan issue will necessarily build upon these established hypotheses while examining from where British parties and politicians can derive support in a post-Brexit era.

Questions surrounding the United Kingdom's place in an increasingly integrated postwar Europe are as old as the efforts to bring the continent together. Associating Euroscepticism with party divides is demonstrably a more recent endeavor, however.[9] In his 2003 paper "The Shotgun Marriage: Managing Eurosceptical Opinion in British Political Parties 1972-2002," David Baker of the University of Warwick illustrates the increasing divide created in British political parties as a product of increasing European integration. The piece hypothesizes and demonstrates that the enduring Eurosceptic dissent within the Conservative (Tory) and Labour parties often cuts across party lines on matters of Britain's place in an integrated Europe. Baker approaches the question of party platform management from both the Conservative and Labour perspectives, demonstrating the two parties' methods of managing dissent in their respective parties. Within this discussion, Baker contrasts the Conservative's devolution into factions with Labour's new reforms and unity. The piece utilizes votes from the 1971-72 and 1992-92 parliamentary sessions on the respective European Communities Bill and the Maastricht Treaty[10] as a focal point for its

[9] David Baker, "The Shotgun Marriage: Managing Eurosceptical Opinion in British Political Parties 1972–2002," (paper presented at the EUSA Eighth Biennial International Conference, Nashville, Tennessee, March 27–29, 2003).

[10] Baker, "The Shotgun Marriage."

analysis. The votes are then sorted by their association with their respective party platforms. Baker compares the number of dissenting members of Parliament (MPs) between the two votes. From this analysis, Baker derives support for his argument, showing that the Conservatives have been increasingly split between pro and anti-Euro MPs while the number of dissenting, anti-Euro MPs increased between the two votes. Using this data, Baker posits that future Conservative Party divides will occur along the same, intensifying lines as the earlier votes.

Split opinions within parties both affect and are affected by electoral support. As Baker demonstrates, Conservative MPs increasingly voted in favor of Eurosceptic policies in the 1992 vote on the Maastricht Treaty. Geoffrey Evans, in his article "Euroscepticism and Conservative Electoral Support: How an Asset Became a Liability," compares the increasingly Eurosceptic appearance of the Conservative Party to public opinion on both an aggregate and individual level.[11] Evans addresses the increasing levels of Euroscepticism in the Conservative party and asks how this change affects the party's electoral support. The piece hypothesizes that, despite approaching the average sentiments of Britons, the Conservative Party is ultimately losing electoral support on an individual level. The argument revolves around data taken from the British Election Panel Study (BEPS). The study randomly selected British voters to respond to their attitudes on issues related to European integration as well as their interpretation of major political parties' preferences on the same topics. Evans then compares this data to the parties' own self assessments to analyze whether Eurosceptic policies are an asset or a liability when gathering electoral support. Data begins in 1992, the year of the Maastricht vote, and proceeds through 1996.[12]

Using the BEPS data, Evans clearly demonstrates a divide between Conservative party self-identification and voter identification. Between 1992 and 1996, the Conservative Party was simultaneously perceived as increasingly pro-integration by Eurosceptics and increasingly anti-integration by pro-integration voters. The same data demonstrates no such disparity for liberal parties including Labour and the Liberal Democrat parties, lending evidence to the research hypothesis. Furthermore, Evans finds that integration has a statistically significant effect on voting intention even when other issues are

[11] Evans, Geoffrey. "Euroscepticism and Conservative Electoral Support: How an Asset Became a Liability." *British Journal of Political Science* 28, no. 4 (1998): 573.

[12] Evans, "Euroscepticism and Conservative Electoral Support," 3–4.

introduced,[13] demonstrating a lose-lose situation for Conservatives given voter perceptions. Evans concludes the piece with a suggestion that integration issues, given Britain's drift towards the continent at the time of its writing, suggests that a consistently clear Eurosceptic line could offer electoral support to a party platform.

Recent examinations of the British public's opinions on Euroscepticism continue and reinforce the conclusions Evans derived from the BEPS survey. By 2012, 20 years after the start of the BEPS survey, Euroscepticism had grown beyond anti-Euro policies towards favoring a referendum on Britain's space in the European Union. Thomas Raines's short examination "An island apart?" asks whether the United Kingdom has a place in the European Union at all. The work, citing a precedent of past Euroscepticism as examined in Evans and Baker, hypothesizes that a referendum is likely based on available demographic data.[14] Raines presents data taken from the 2012 Chatham House YouGov Survey representing the most recent data at the time of the article's printing. The data is presented in a graphical format, which is unfortunately not shared in the article. However, the full raw data is easily accessible from the Chatham House organization.[15] What Raines presents closely fits the narrative presented by earlier authors. Preexisting political geography does not correlate with Eurosceptic sentiments; Raines notes that traditionally non-Conservative Wales strongly supports leaving the European Union despite their political inclinations.[16] Furthermore, the Chatham House data shows that most Britons favored holding a referendum, reinforcing Raines's claim that Eurosceptic sentiments were approaching a climax.[17]

The results of the 2015 British General Election were widely expected to shock the British system and illustrate sharp divides between Eurosceptic and pro-Europe parties. Joachim Fritz-Vannahame illustrates in "Turbulent Times in the Disunited Kingdom" the sentiments which may drive voters to an unprecedentedly divided Parliament.[18]

[13] *Ibid.*, 587.

[14] Raines, Thomas. "An Island Apart?" *The World Today* 68, no. 5 (2012): 26–27.

[15] Chatham House, "YouGov Survey 2012: British Attitudes Towards the UK's International Priorities," July 2012, https://www.chathamhouse.org/publications/papers/view/184631.

[16] Raines, "An island apart?," 27.

[17] *Ibid*.

[18] Joachim Fritz-Vannahame, "Turbulent Times in a Disunited Kingdom," *spotlight europe* #2015/01 (April 2015).

Vannahame's title references a "disunited kingdom," an apt description for his research question asking how nationalist and anti-Europe party platforms will affect the traditional Labour-Conservative divide. He hypothesizes that the de facto binary party system of the past will give way to a plurality of parties defined by fragmented geopolitical ideologies. In his analysis, Vannahame utilizes two sources of data: the United Kingdom Electoral Commission for past election results and forecasts for the 2015 election, and Chatham House survey data from a 2014 YouGov survey for voter beliefs. The author makes special note of a new, highly Eurosceptic party unseen in the earlier research of Baker, Raines, and Evans. UKIP addresses the issues spelled out in earlier research into Euroscepticism and the Conservatives by promoting a platform centered around leaving the EU, with 90% of their members unambiguously favoring Britain's exit from the Union.[19] In addition to resolving earlier researchers' claims that a consistently Eurosceptic platform may net electoral success, Vannahame further reinforces the notion that voters are increasingly less likely to maintain strict left or right wing politics as offered by mainstream politics. Evidencing his hypothesis is data matching the trends in Evans's 1998 work, except alternate, nationalistic parties, as exemplified by UKIP, have left the two major parties clinging uneasily to uncontested power.

Continuing the threads left by both Vannahame and Baker is Emmanuel Mourlon- Durol's article "The UK's EU Vote: The 1975 Precedent and Today's Negotiations."[20] Written only two months after Vannahame's analysis, the piece analyzes the added wrinkle of an impending referendum on the UK's membership in the European Union, a vote made possible by unprecedented gains for Eurosceptic MPs in the 2015 election. Mourlon-Durol's research question asks whether the UK's 1975 referendum on the state's inclusion in the European Economic Community (EEC) is a valid comparison to Britain's current situation facing a British exit from the European Union (Brexit). The author hypothesizes that, as was seen following British skepticism 40 years prior, the pending referendum will, regardless of result, negatively impact Britain's position in Europe. Data from the 1975 referendum sourced from the UK national archives and key platform planks from the then ruling Labour Party are compared to the party platform of the ruling

[19] Fritz-Vannahame, "Turbulent Times," 3.

[20] Emmanuel Mourlon-Durol, "The UK's EU Vote: The 1975 Precedent and Today's Negotiations," *Bruegel Policy Contribution* 2015/08 (June 2015).

Conservatives and new, post-2015 minority parties. Mourlon-Durol successfully illustrates similarities between the European political climate between the two eras, but when comparing the party platforms, Mourlon-Durol finds a situation like the Conservatives' plight in the Evans article, where the Conservatives maintain a vaguely Eurosceptic platform which does not overtly advocate Brexit. Such a soft message does not align perfectly with the example of 1975, and Mourlon-Durol emphasizes that the outcome cannot be forecast by the past referendum. However, he does establish that the present referendum will likely leave Britain in a fractured state, in regard to both its foreign and domestic policies.[21]

While UKIP has only recently vaulted into the spotlight of political authority, its roots dive deeper than the surprise of the 2015 election may suggest. Roland Flamini, in the article "The UK Independence Party: Eurosceptics Rattle Cameron," dives in to UKIP's Eurosceptic origins in 1993.[22] Like other recent research into British Euroscepticism, Flamini's research asks how UKIP has managed to earn representation in traditionally Labour and Conservative strongholds. The author hypothesizes that these gains are made in part by presenting a consistently anti-Europe platform, the platform which, in 1998, Evans hypothesized would net parties political gains. Though Flamini builds upon this familiar thread, his analysis of UKIP's rise as a product of Conservative disorganization adds an additional layer to the preexisting field. The piece uses the voting results of a 2011 proposal to hold a referendum on Britain's EU membership as a focal point for his argument. Though the vote was defeated, Flamini notes that 81 Conservative MPs voted to hold the referendum in defiance of the government's instructions.[23] When placed in the larger body of work, this vote portents UKIP's gains four years later, and though Flamini wrote the article in 2013, he noted the existence of not only the internal pressure inside the Conservative Party but also the new external pressure being applied by UKIP. Using this vote as support for his hypothesis, Flamini builds a distinct narrative for UKIP within the established research discussing the Conservatives' failing, partly-Eurosceptic message.

[21] Mourlon-Durol, "The 1975 Precedent," 9.
[22] Roland Flamini, "The UK Independence Party: Euroskeptics Rattle Cameron," *World Affairs* 176, no. 2 (2013): 35.
[23] Flamini, "The UK Independence Party," 37.

While significant analysis is given to the Conservatives' mixed messages on European integration, Labour's position at the table has been less thoroughly examined. Evans's 1998 analysis of Euroscepticism focused primarily on the disparity between Conservative policies and public perception, but the study also takes note of Labour's policies and perceptions as well. Neither Evans nor future researchers place focus on Labour's message. Evans explains some of this away by contrasting Labour's stronger, easily perceived pro-Europe policies with the Tories' mixed messages.[24] Furthermore, the body of literature discussing British Euroscepticism consistently hypothesizes electoral success for firmly Eurosceptic parties, a position which Labour demonstrably does not follow. Some recent literature, notably Eunice Goes's book The Labour Party Under Ed Miliband, notes that Labour has lost some ground to UKIP and Eurosceptics. As the party adopts an increasingly international and pro-Europe tone, it risks alienating blue collar workers who would be better served by the economic protections offered by Eurosceptic parties.[25]

The body of literature examining British Euroscepticism is near-universally connected by the nature of the issue outside the traditional left-right power dynamic. From Baker's criticisms of the Conservative Party in the early 1970s to the party being caught unaware by UKIP's unprecedented entry to Parliament in 2015, the ability for a consistently Eurosceptic message to create political support has been hypothesized and well supported. In previous British general elections, both Labour and the Conservatives published a Eurosceptic platform. In 1974, Labour rode Euroscepticism to victory, promising to renegotiate the UK's position in the EEC. Though Labour's referendum did not lead to significant changes in the UK-EEC relationship, it gave an early precedent for Euroscepticism and electoral support. By the 1990s, the Conservatives had an opportunity to mirror Labour's earlier success but failed to properly unify party perceptions and objectives into a voting bloc. As recent literature suggests, particularly Mourlon-Durol and Flamini's respective works, the 2015 general election saw both the example set by Labour in 1974 play out as well as a new dynamic introduced by UKIP's ascension. Further research can continue the narra-

[24] Evans, "Euroscepticism and Conservative Electoral Support," 580.

[25] Eunice Goes, "Labour and the Politics of Belonging: One Nation." In *The Labour Party under Ed Miliband: Trying but Failing to Renew Social Democracy,* 146–172, Manchester University Press, 2016.

tive by examining how UKIP's influence swayed a narrow majority of British voters to accept Euroscepticism and Brexit.

The gap in modern research between the ESA and its partners provides the impetus for further research. Though Suzuki and *Contracting for Space* tie Europe's modern political context into its efforts in space science, the field is sparsely researched in a modern context. While the symptoms of Brexit have received considerable analysis over the last half century, their effects on Europe's space policy have received very little examination. During the ESA's formative years alongside the EU's predecessors, European space science was a true novelty. In its early years, the Space Race was as bipolar as the Cold War which spawned it; collective European entries into the field produced research and analysis into whether a collaborative entity could establish itself in such a divisive political climate. Scientific sources were rife with speculation with whether Europe could sort out the mess that was ELDO and create something even minorly successful. Amidst the ground floor of Euroscepticism, Europe's push into space earned considerable analysis from both scientific and political sources.

In a modern context, the ESA faces a comparable situation; major Eurosceptic voices, once again led by the UK, threaten Europe's now proven experiment in scientific cooperation. Research and analysis, however, has not caught up with the pace of events. Brexit, despite a massive body of literature suggesting that the 2016 referendum's results were more predictable than David Cameron may have thought upon promising the referendum to secure his government. In the present day, the ESA faces a unique opportunity to establish itself as an exemplar of European integration. Sitting between the EU and the rest of Europe, understanding the context of the Agency's success in a freshly Eurosceptic Europe is an unaddressed yet important subject in the midst of an uncertain decade. Learning from the example set by the ESA and understanding where the Agency intends to take itself offers a critically important way for Europeans to rebuild the identity of the continent. The cooperative dream of European integration has an opportunity to survive, but it will only do so through an understanding of its past trials and solutions, especially those in fields not often explored.

COLIN DOEGE

The European Space Agency: Europe's Cooperative Space for the Final Frontier

Present day Europe, when given a cursory inspection, appears as a continent rife with unsatisfactory experiments in international cooperation. A fresh wave of Eurosceptic voters and politicians dominate headlines by railing against the evils of integration, countering decades of steadily increasing cooperation. Lost in the scrum is the European Union's cooperative efforts with the longstanding ESA. Britain's exit from the Union, along with Eurosceptic movements across the continent, dominate news headlines while the ESA's decades long record of European cooperation risks becoming collateral damage. As the European Space Agency navigates a present fraught with uncertainty, the Agency's history, development, and adaptations illuminate the Agency's route through tumultuous times in Europe. Having already experienced and survived upheaval, reimagination, and even British Euroscepticism, the ESA's best model for a collaborative future may already be in place.

In the late 1940s, Europe found itself in an unenviable position. The Second World War saw much of the continent left in disarray, with both states and their citizens needing to rebuild from the streets up. Having dedicated all their respective resources to the war effort, prewar powers like Britain and France gradually came to terms with securing and bettering the home state over projecting power abroad, while Germany found itself sundered into occupation zones and subject to the will of foreign governments. Further compounding Europe's ills was the Soviet Union and the United States asserting dominance in world affairs. No single state possessed even a shadow of its prewar influence; caught between two nascent superpowers, no government could afford to step out on its own.

The following decade would treat Western Europe far kindlier than its predecessor. In response to the United States and the USSR dominating world affairs, the first seeds of European integration began germinating. Organizations like the European Coal and Steel Community (ECSE) and its successor, the European Economic Community, worked to carve a niche for Europe between the two superpowers. By 1964, integration projects even brought Europe into the burgeoning space research field with twin agencies intended to crack the superpowers' near monopoly on space science. Between the European Launcher De-

velopment Organization (ELDO) and the European Space Research Organization (ESRO), Western European states developed a novel approach to space science. Though the organizations were grounded in the political realities of the Cold War, the member states' framework created a space for a greatly expanded, cooperative future.

Serious talks for defining Europe's future in space began in 1961. Discussions held at the French-led "Commission préparatoire européenne de recherches spatiales" (COPERS) established a definitive plan outlining what would become ESRO, including possible research stations and an 8-year financial plan.[26] By the time of the conference, the Space Race had already started in earnest, and Europe remained left out on both scientific and explorative fronts. Though COPERS only laid out plans to establish ESRO, the effort's scope expanded to address all aspects just a year later to include proprietary launcher development through ELDO. Though the two organizations were functionally separate, they shared primary membership, headlined by West Germany, France, and the United Kingdom. Additionally, both shared similar 8-year timeframes and financial commitments.[27]

ESRO quickly established itself as a successful player in space research, thanks in part to its well-defined goals. Rather than attempting to pursue the superpowers to the Moon and back, ESRO eschewed putting Europeans in space and instead worked to independently design experiments and satellites. As ELDO could not independently develop a launch vehicle at the same pace as ESRO's experiment designs, early efforts were limited to preexisting launch technology. Using French and British ballistic missiles, early experiments demonstrated the necessity for ELDO to complete its objectives. Initial experiments could not exceed an 80-kilogram load, the maximum allowed by the British Skylark rocket. Independently launching satellite missions was not possible, and ESRO had to primarily rely on American launch technology and facilities. For the launch of ESRO I and II, the organization's first two satellite endeavors, the organization used the American Scout rocket system and launched from North America.[28] With these resources, the organization successfully launched its first satellite,

[26] "History of Europe in Space," *European Space Agency*, last modified September 13, 2013, accessed April 4, 2017, http://www.esa.int/About_Us/Welcome_to_ESA/ESA_history/History_of_Europe_in_space.

[27] *Ibid*.

[28] Lüst, "The European Space Research Organization," 394–397.

ESRO-2B, in 1968,[29] just four years after the organization's formation. Later that year, the companion satellite ESRO-1 launched,[30] demonstrating Europe's establishment as a player in space science.

Though the organization had to leave the European umbrella to complete its initial mission, the satellites heralded ESRO's arrival. A cooperative approach, distinct from the adversarial relationship perpetrated between the United States and the Soviet Union, helped to establish a European identity in the field. Furthermore, the launches demonstrated the organization's ability to overcome internal disputes. The 8-year plan laid out by the COPERS conference, agreed upon during the organization's creation, was not a rigid framework; rather, it established flexible budget guidelines intended to increase as agreed upon by member states. However, just one year before ESRO-1 and 2 successfully entered orbit, budget overruns and bureaucratic confusion threatened to break the young organization apart. Great Britain, in response to unevenly awarded contract work, threatened to abandon ESRO entirely and pursue its own domestic space program.[31] Europe's cooperative vision for space was already at risk of collapsing; Britain's exit would have meant losing a quarter of the organization's budget and severely hamstringing smaller members' ambitions. Seeing that ESRO's model was vulnerable to quarreling, the 1967 European Space Conference explicitly called for a more unified European space policy, one which would allow all member states to coordinate beyond the isolated development fostered by the ESRO and ELDO system.

Furthering calls to unify space policy was the ELDO's inability to get its objectives off the ground. While its research companion met expectations with its satellite launches and pressed through various national quibbles, the launcher organization yielded to disorganization and disagreements. The organizations' missions were intended to unite for the Large Astronomical Satellite (LAS) launch in 1970. The LAS was to exceed the size limits prescribed by repurposed national rocket technology while freeing Europe's ambitions from American launchers and launch sites. Intended for a launch range granted by as-

[29] "ESRO 2B," NASA's HEASARC: Observatories, last modified June 26, 2003, accessed April 8, 2017, https://heasarc.gsfc.nasa.gov/docs/heasarc/missions/esro2b.html.

[30] "History: ESRO-1 Satellite, 1968," *European Space Agency*, accessed April 8, 2017, http://www.esa.int/About_Us/Welcome_to_ESA/ESA_history/History_ESRO-1_satellite_1968.

[31] Walsh, "ESRO," 242–244.

sociate member Australia,[32] the LAS project was intended to leverage separate national rocketry programs into a unified project. Rather than operating under a strong central authority, individual states independently created portions of the launch rocket to amalgamate into the final product no later than 1970. By this time, ESRO expected to use European rockets to launch three to four spacecraft per year.[33] Such a goal was visibly unrealistic by 1967, however. Cost overruns on ESRO's portion of the LAS satellite cast an unappealing shadow on the research component, placing the objective of the endeavor in peril.[34]

Meanwhile, working for an increasingly doubtful experiment, ELDO's development model created undue inconsistencies and delays. Member states were to develop portions of the rocket independently; Britain would derive the first stage from its Blue Streak strategic missile, France was to develop the second stage, and West Germany was to develop the third stage.[35] The French second stage was already derailing the project timeline by 1965. Its fuel system did not provide the thrust necessary for a large experiment, and developing a higher thrust, alternately fueled rocket would not collaborate well with West German development on the third stage. Further complicating the situation was massive cost overruns exceeding $100 million. Despite the organization's flexible budget, major members, particularly Great Britain, once again balked at the cost. Britain even explored developing proprietary launcher technology derived from American designs for their domestic research.[36] While ESRO overcame similar odds, including a skittish Britain and decentralized administration, ELDO never achieved its stated goals. However, its dysfunction unintentionally had a positive consequence; scientific voices, from within the twin organizations and from the space science community at large, came together in favor of a centralized European effort in space. Britain, instead of leaving both groups, led calls for a centralized agency to combat what the British Interplanetary Society described as a "confused, unplanned, and ineffectual" effort in the field and even offered

[32] Lüst, "The European Space Research Organization," 395–396.
[33] *Ibid.*, 396.
[34] Walsh, "ESRO," 244.
[35] Victor K. McElheny, "European Launcher Development Organization: Its Changing Role." *Science* 148, no. 3678 (1965): 1705–1706.
[36] McElheny, "Changing Role," 1706.

to pay up to one fourth of the new agency's budget.[37] In place of unity within and between ELDO and ESRO, European science set its sights on taking what positive momentum the organizations generated and unifying Europe's vision for space under one roof.

In 1972, these advocates for a truly unified European space organization succeeded in their push to abandon the ELDO and ESRO model. Using ESRO's assets and projects as a nucleus, the European Space council decided to formally fold the two agencies together.[38] Officially formed in 1975, the now unified European Space Agency was to continue ESRO's preexisting scientific mission while pursuing new developments in independent heavy launchers. Furthermore, the cooperative mission of the ESA made adding new members, full or partial, simpler than the old binary model. Ireland officially joined in 1975, joining the core of West Germany, France, the Netherlands, Sweden, Switzerland, Italy, Denmark, Belgium, Spain, and the United Kingdom. By 1980, Austria would join the continental members, and Canada followed as a cooperating member.[39]

Adapting from ELDO and ESRO's structural problems was the ESA's top priority. While ESRO eventually found a comfortable middle ground, ELDO never amounted to much more than a financial drain. In response to the fractured efforts from the original organization, the ESA required member states to undergo "Europeanisation" of their national space programs.[40] First and foremost, Europeanisation would place commonly shared assets and facilities under ESA administration. Rather than seeing each project supervised primarily by the local government, the ESA would instead be the primary administrator. Cooperation would go through a centralized body, thereby addressing the central issues of the old model. Administrative reforms made the new cooperative model possible, and unlike its predecessors, the ESA was created with intent to coordinate the agency's endeavors and enforce financial commitments. Gone were the dysfunctions of the original LAS project; instead of relying on a haphazard combination of a former British strategic missile, an underpowered French booster, and a possibly unnecessary German third stage, any future ESA launch vehicle

[37] "Aerospace Notes," *Science News* 93, no. 5 (1968): 116.

[38] Rüdiger Freiherr von Preuschen, "The European Space Agency," *The International and Comparative Law Quarterly* 27, no. 1 (1978): 46–60.

[39] ESA, "History."

[40] Von Preuschen, "The European Space Agency," 49.

would have a uniformly European composition. Furthermore, any new national projects in space science started by ESA members would necessarily be open to agency member participation. New projects, rather than staying purely national, would instead operate under the greater ESA umbrella. Member states who have similar objectives or needed expertise could join in on the project. In addition to fostering a truly cooperative European space science community, this effort prevented project duplication while ensuring a coherent mission.[41]

The ESA inherited the ESRO's scientific plan and the ELDO's mission objectives. The union of the two notably produced the Ariane launcher development program. By the mid-1980s, the Ariane program would not only give Europe the domestic heavy launcher it had chased since the 1960s, but it would establish the ESA as an international, independent, and innovative player in space science. First described at the 1973 conference which affirmed the ESA's creation, Ariane developed a series of highly successful rockets close to both the acceptable budget and timeframe. The first launch in 1979 was a resounding success, and by 1981, the ESA at last launched its own satellites, the Marecs 1 and Meteosat, from a launch site in French Guiana.[42] Ariane developments continued to perform favorably throughout the 1980s, unquestionably establishing the ESA as a distinct third power in space. Beyond the original Ariane program, ESA member states even created a new frontier in launcher development: commercial launch vehicles. Building on Ariane's early success, France led ESA member states in the creation of a private company, Arianespace, to develop and market Ariane rockets for an international market. By 2000, Arianespace had established itself as a world leader in commercial launch technology with the Ariane 5 heavy launch rocket.[43]

The ESA was not alone in pursuing Europeanisation. Mechanisms of European cooperation similarly unified throughout the end of the 20th century. Efforts like the European Coal and Steel Community expanded into the European Economic Community in 1958, and despite some states' balking, notably the United Kingdom mirroring its threats

[41] Von Preuschen, "The European Space Agency," 50.

[42] M. Bignier, J. Vandenkerckhove, and G. M. Webb. "The Ariane Programme [and Discussion]." *Philosophical Transactions of the Royal Society of London.* Series A, Mathematical and Physical Sciences 312, no. 1519 (1984): 83–88.

[43] ESA, "History."

to go it alone in space science,[44] the EEC brought some unity to the continent's economic policies. Expansion continued throughout the 1990s, eventually culminating in the European Union. The ESA, both in core and newly added members, shared major members with the nascent EU, including France, West Germany, and the United Kingdom. Though the ESA is, by its self-defined structure, an independently functioning organization, cooperation with the EU as supranational organizations had too many mutual benefits to not embrace. Their relationship was formally codified at the joint 4th European Space Council. While this 2007 meeting was not the first official collaboration between the two, the meeting's result formally codified the ESA and EU's partnership. The resulting European Space Policy demonstrates the EU's support while encouraging the ESA to continue cooperative work with the Union. Especially relevant to this call is the EU's use of ESA satellites for defense purposes; the ESA's satellites are civilian by design and intent, and ensuring the Union's third party use of these instruments requires the ESA's full cooperation, including that of members not held in common between the Agency and the Union.[45]

The two entities' joint future is thoroughly discussed in the Space Policy. As the ESC concluded, further cooperation could provide great mutual benefits; the EU would have greater means to maintain its own security, while the ESA could benefit from the Union's political clout. Both the ESA and EU are major players in their respective areas, and further partnership would bring the European continent another step closer to true superpower level influence. However, rapid integration of the ESA into the EU would likely serve neither party. Over thirty years of proven success from the ESA evidences the strength of the preexisting model. The Space Policy emphasizes its commitment to the Agency's independence, noting explicity "… that the independence and reliability of ESA… contributes to the increasing role of Europe."[46]

[44] Mourlon-Durol, "The 1975 Precedent."

[45] Council of the European Union, "4th Space Council Resolution on the European Space Policy," Brussels, May 22, 2007, 5.

[46] Council of the European Union, "Space Policy 2007," 6.

Bridging the Channel: British Euroscepticism in the Age of Integration

As Europe has progressed towards integration, cooperation, and a unified purpose, it faced no small variety of challenges. Like the ESA's rocky path towards success, the road to the EU was not a smooth one, especially for the United Kingdom. Chief among the sceptics is the United Kingdom. While the British were threatening to collapse the continent's progress into space, their political dynamic threatened to sink the early European Community as well. The UK has consistently acted as an entity apart from continental Europe; its colonial adventures set it leagues apart from its continental rivals and established a mindset of British superiority that continues to inform British voters and is exploited by their leaders. World War II, despite bringing about the definitive end of the empire's supremacy, further maintained the distance between the Isles and the rest of the continent. Such distance, both literal and political, kept the UK as the last major power actively opposing Nazi Germany for some time. Furthermore, the UK solidified its relationship with its prodigal child, the United States, during the war. The "Special Relationship" between the two states gave the UK a unique relationship with one of the world's two superpowers.

As the continental states looked inward and increasingly pooled their resources, the UK began an ongoing internal conflict as to whether the state should circle the wagons with its regional peers or seek to reclaim the outwards projections of the British Empire. As early as 1942, before the end of the war was even on the horizon, the necessity of abandoning the old model was understood by Parliament. Sir William Beveridge's "Social and Allied Services," better known as "The Beveridge Report," called for an abandonment of the colonial adventure in favor of an extensive social programs system. Projecting power would necessarily take a backseat to remedying more local issues, with Sir Beveridge stating, "A revolutionary moment in the world's history is a time for revolutions."[47] While the UK would indeed use Beveridge's ideas to inform its social policies, memories of the Empire and its influence would not pass so easily. Though social programs were intended to replace the UK's former priorities, Prime Minister Clement Attlee

[47] Sir William Beveridge, "Social Insurance and Allied Services." (Report presented to Parliament, London, UK, November 1942.) https://sourcebooks.fordham.edu/halsall/mod/1942beveridge.html.

demonstrated the British split mindset with the infamous, disastrous Suez Crisis of 1956. While the rest of the continent was progressing towards the European Economic Community and the foundations of ELDO and ESRO, the UK was acting out its last fantasies of power.

This state of mind, torn between a new path and the trappings of old, typifies the contradictions of British politics that have continually manifested in the island state's attitudes towards European collaboration and British nationalism. Over the last half-century, the United Kingdom's partnership with Europe has been subject to immense scrutiny and politicization. The current crisis of Brexit, though it may be unprecedented for a state to depart from the EU, is the product of an ongoing process of politicized Euroscepticism. Brexit and its subsequent effects on the UK's position in European programs like the ESA is best seen through the precedents set by decades of tug of war between the Eurosceptic and pro-Europe agendas in Parliament.

Euroscepticism in British politics may seem like a binary issue at first glance, especially in the modern context of Brexit. David Cameron's promise of a referendum on the UK's EU membership played a role in solidifying his Conservative Party's power, while Labour has become the de-facto party of the pro-Europe camp. However, the roots of Euroscepticism are not inherently partisan between the two parties, despite the binary nature of the issue. Rather, its origins lie in the conflict between traditionalists seeking a return to an independently powerful Britain and those seeking to refocus the state's resources; Clement Attlee's failed gambles came under his Labour government, and the distrust in European cooperation, particularly in the ESA's predecessor organizations, was not yet a partisan issue. ELDO's failed launcher development program nearly drove the UK away from European space collaboration altogether and towards its legacy across the Atlantic in the United States.

The UK's Interplanetary Society, fearing that their state "… had been frittering away money on disjointed individual programs and pouring cash into international programs which have not been paying off," nearly broke away from ELDO in 1965.[48] Plagued by incompatible parts between the jointly developed sections of the launcher, the UK saw its domestically driven Blue Streak missile project stall under ELDO's model. While the launcher was unable to launch sufficient pay-

[48] "Aerospace Notes," *Science News* 93, no. 5 (1968): 116.

loads into orbit, the Blue Streak project was compatible with a jointly developed American project, the Black Knight rocket.[49] Originally developed for use as an antimissile system, the resulting Black Arrow rocket may have "... cost as little as 5% of the cost of an ELDO-A rocket launch." This cast serious doubt on the stability of ELDO in its existing state,[50] leading to the successful push for a unified space agency, the ESA, in 1975.

ELDO's ineffective and expensive development model gave the UK good reason to doubt the efficacy of European scientific cooperation. Money wasted in furthering the Blue Streak launcher stage left the UK to wonder whether a European partnership could even supplement its own programs. However, at this stage in UK's greater relationships with the rest of Europe, the Euroscepticism resulting from the ELDO/ESRO model were only a portion of the UK's greater issues with Europe and the EEC. The UK's dissatisfaction with failed French investments in launcher technology in the mid-1960s were only multiplied by the greater French opposition to admitting the UK to the EEC. Charles de Gaulle, in his strong-willed, nationalistic policies, repeatedly vetoed the UK's possible membership to the Community. Through both a conventional vote and the infamous "empty chair" policy, de Gaulle's political will prevented any possibility of British membership from 1963-1967. De Gaulle's "... geopolitical 'grand design,' which aimed to promote French sovereignty and grandeur," left little love for a potential rival across the English Channel.[51] Though the exploration of the Black Arrow launcher partnership with the US is only a small symptom of early British Euroscepticism, it informs the attitudes held by both voters and Members of Parliament in the coming decades of integration.

While the UK overcame its skepticism in space science and resisted the pull of the Special Relationship with the US, its politics remained awash with Euroscepticism. Roiled by conflict as to whether the UK should at last join the EEC now that the French no longer blocked the way, British politics acquired its partisan Eurosceptic flavor. Beginning in the 1970s, as European integration became an increasingly pressing issue, Eurosceptic factions became increasingly valued as a source of

[49] McElheny, "Changing Role," 1706.

[50] *Ibid*.

[51] Andrew Moravcsik, "Charles de Gaulle and Europe: The New Revisionism," *Journal of Cold War Studies* 14, no. 1 (Winter 2012): 54.

electoral support. Dissent within the Conservatives and Labour was met with differing responses; the Conservatives, once the pro-Europe party of the UK, anticipated greater support from Eurosceptics in the future and gave in to its anti-integration members by the time of Cameron's 2016 referendum. At the time of the UK's 1972 admission to the EEC, the Conservatives shepherded the way into the bloc, while Labour served as the party of contrary resistance. Labour's Eurosceptic 1974 general election manifesto, headlined by a strong push to renegotiate the UK's two-year-old membership with the EEC, even pushed the party back in to power the same year.[52]

Labour PM Harold Wilson wasted no time in following up on his party's manifesto with grandiose, sweeping demands for the EEC. Wilson sought special protections for the UK in exceedingly vague terms which emphasized British economic sovereignty from the economic bloc's rules.[53] Unsurprisingly, the demands resulted in little real action. However, Labour also ran on the promise of a popular referendum for EEC membership which Wilson followed through on in June 1975. Like the sweeping demands that his government made to the EEC, the referendum changed little; the results saw the stay vote win with 67.23% of the vote. Even Wilson's government was in favor of staying, despite the ineffectiveness of their attempted negotiations, as "Wilson exceptionally allowed government ministers to differ from the government recommendation and vote following their consciences," which resulted in a 16-7 vote in favor of remaining.[54]

Despite the demonstrated failure of Labour's objectives and a victory for Britons in favor of integration, the 1972-1975 period demonstrated the potential for political gains from a Eurosceptic agenda. Even though the 1975 referendum resulted in an overwhelming defeat for Eurosceptics, Labour's victory in Parliament on the platform illustrated the possible long-term electoral power of a Eurosceptic agenda. Following the Thatcher years in the 1980s, where Conservative politics appealed to the older sentiments of an independently strong Britain and austerity, the party attempted to pivot towards a Eurosceptic agenda and mimic Labour's past success. By the 1990s, the party put forth an increasingly anti-integration front. Following the 1992, 1994, and 1996 elections, the British Election Panel Study recorded voter percep-

[52] Mourlon-Durol, "The 1975 Precedent," 4.

[53] *Ibid.*, 5.

[54] *Ibid.*, 6.

tions and inter-party perceptions of Labour, Conservative, and Liberal Democrat attitudes towards integration. Geoffrey Evans' 1998 analysis of the data, "Euroscepticism and Conservative Electoral Support: How an Asset Became a Liability," noted a severe disparity between how the Conservatives viewed their Euroscepticism versus how voters saw the party.[55] The resulting disparity strongly affected the Conservatives' inner dynamics in the 1997 and 2001 elections and resulted in "vicious Conservative infighting." For the first time in recent history, it switched attention on inter-party dissent from Labour to the Conservatives.[56]

The Conservatives' internal dissent came full circle by 2015. David Cameron, in an effort to reinvigorate his party's appeal, promised a referendum on the UK's membership in the EU. His promise, like his Labour predecessors 40 years prior, appealed to a wide range of voters. In a contemporary Chatham House survey, 60% of voters favored a referendum, and only 24% outright rejected the proposal.[57] Labour's quixotic quest to renegotiate and reinvent the UK's position in Europe earned it electoral success for some time without the potential consequences of a non-integrated UK as a real possibility. Cameron's 2015 promise did indeed help his party stave off movement from the far right. The United Kingdom Independence Party, sprung up from the fertile ideology of an independent UK that was a tempting option even in the UK's early efforts in integration like ELDO and ESRO. Included with his promise was an admission that "… changes are necessary and acknowledging that public disappointment with the EU is at an 'all time high.'"[58] With the referendum in hand, Cameron's Conservatives returned to power, leaving European leaders with strong sense of uncertainty whether "… Cameron has a clear idea of what relationship he envisions with the EU because so much of what he says on the issue is intended to score points on the domestic political front."[59] Unlike Wilson's attempt to renegotiate the UK's membership after only two years of membership, Cameron put decades of continual integration with the EU on the line; targeted development aid, trade agreements,

[55] Geoffrey Evans, "Euroscepticism and Conservative Electoral Support: How an Asset Became a Liability," *British Journal of Political Science* 28, no. 4 (Oct. 1998): 577.

[56] Baker, "The Shotgun Marriage," 4.

[57] Fritz-Vannahame, "Turbulent Times," 2–3.

[58] Flamini, "The UK Independence Party," 37.

[59] *Ibid.*, 38.

the UK's future in European space science, and countless other projects offered far higher stakes than its only precedent could offer.

While the European Union and the Conservative government both anticipated a changed relationship following the referendum, the actual results severely shocked both camps. The 1975 referendum offers no precedent; a solid, 52% to 48% majority voted to leave the Union.[60] Cameron's gamble failed spectacularly. Like the 1975 referendum, where a large faction of Labour backed remaining, Cameron spearheaded the Remain campaign despite the considerable Eurosceptic support that his party had gained over time and in the 2015 general election. Following his faction's defeat, Cameron faced no choice but to step down, stating that "'... the country requires fresh leadership to take it in this direction."'[61] Cameron's replacement, former Home Secretary and longtime Conservative MP Theresa May, came to Downing St. to strike a conciliatory note between the Leave and Remain factions in her party; however, her attitude on Brexit is far less flexible and has stated unequivocally that "'Brexit means Brexit."'[62] May's hardline stance matches the rhetoric of the EU's own framework for leaving the Union, the 2008 Treaty of the European Union's Article 50. Article 50 gives the departing state two years to negotiate its exit from the time it invokes its exit.[63] In triggering the article on March 29, 2017, May expressed a desire to fully depart from the Union "... within the two-year period set out for withdrawal discussions in the Treaty."[64] With the clock still ticking towards the UK's departure, the

[60] "EU referendum: full results and analysis," *The Guardian*, accessed January 12, 2018. https://www.theguardian.com/politics/ng-interactive/2016/jun/23/eu-referendum-live-results-and-analysis?CMP=twt_b-gdndata.

[61] Heather Stewart, Rowena Mason, and Rajeev Syal, "David Cameron resigns after UK votes to leave European Union," *The Guardian*, June 24, 2016, accessed January 12, 2018, https://www.theguardian.com/politics/2016/jun/24/david-cameron-resigns-after-uk-votes-to-leave-european-union.

[62] Gavin Stamp, "Who is Theresa May: A profile of UK's new prime minister," *BBC News*, July 25, 2016, accessed January 12, 2018. http://www.bbc.com/news/uk-politics-36660372.

[63] European Union, "Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union." *Official Journal of the European Union* 51 (May 9, 2008): 43.

[64] Theresa May, Letter to Donald Tusk Triggering Article 50, March 29, 2017, accessed March 8, 2018. https://www.nytimes.com/2017/03/29/world/europe/theresa-may-letter-article- 50.html.nytimes.com/2017/03/29/world/europe/theresa-may-letter-article-50.html.

Union and its associated organizations like the ESA must retool and reframe their existing objectives in preparation for a United Kingdom separated from the continent by more than just the English Channel.

Close Orbits and New Satellites: The ESA and its Partners in the Present Day

Despite the United Kingdom's pattern of internal division and unevenly Eurosceptic politics, the ESA's joint relationship with the split-minded islanders and the greater European network strengthened alongside the EU's rise throughout the 2000s. Before the renewed winds of Euroscepticism began blowing across the continent, the relationship between European space science and its political structure only deepened. Acting on the terms of the 2008 TEU, the EU pressed ahead with the already fruitful relationship with the still-independent ESA in the coming years. Bolstered by the language of Article 189, the treaty tasked the Union to "… establish any appropriate relations with the European Space Agency," which could "… take the form of a European space programme."[65]

While the ESA already discredited the idea of dispersed authority in the ELDO and ESRO years, its status as an independent research organization did not naturally predispose its continued movement towards the Union and its predecessors; rather, the Union's expansion into the realms of space security and science worked its way into the ESA's sphere. Expanded cooperation between the two became necessary for both parties, especially given the core status of EU member states like France, Germany, and the United Kingdom within the Agency. Predominantly civilian projects fit within the past political framework, strategically focused objectives or the repurposing of existing programs require a reformed relationship. Of particular concern to the push for further integration is the Global Monitoring for Environment and Security (GMES) initiative. Formally adopted in a 2001 joint ESA-EU resolution, GMES is designed to assess the issues and hazards associated with global climate change and implement a system of strategic monitoring intended to aid in conflict resolution.[66] European defense initiatives as part of a greater European space strategy had

[65] European Union, "Consolidated versions of the Treaty on European Union," 131.
[66] Suzuki, *Policy Logics and Institutions of European Space Collaboration,* 199.

"... not existed in the History of European space collaboration" until the last 20 years of its history.[67] The start of the millennium radically shifted the ESA's objectives towards a dual mission with strategic value in addition to its well-established scientific origins.

The European Commission's 2007 objectives for the ESA, already established as a key definitional document for the ESA as Europe's outlet for space research and exploitation, also underscores the objectives outlined by the TEU and serves as a foundational document for the ESA's recent movement towards the Union and its joint objectives over national projects. The 2007 Communication firmly establishes the tone of their future relationship as an imperative, stating "... Europe cannot afford to lose out on securing the potential economic and strategic benefits of space" and clearly describing a relationship going far beyond scientific cooperation.[68] Spurred by the European Commission's expressed desire to pursue a new type of partnership, the 2007 document laid out the ESA's path towards the Union through "a joint international relations strategy in space" requiring not just further cooperation with the Union, but also the coordination of national space programs in the pursuance of a fully integrated European Space Program.[69] Included in these goals are GMES' strategic initiatives and the GALILEO navigation satellite program, which would see "the EU will take the lead in the overall representation of applications programmes" in current and future sensitive projects. On the other hand, the ESA and its member states would retain primary control over its scientific endeavors as it did in the past, including human spaceflight, launcher development, and R&D.[70]

As clouds of Euroscepticism gathered just beyond the horizon, the EU's expansion into the ESA's affairs further grew. By 2011, the European Parliament and European Council formally changed the legal status of GMES into "... more than a research activity" to pursue the security component of the program and cement GMES' status as "dual-use observation resources" that are "both civilian and military" in their implementation.[71] The EC's 2011 communication frames the relationship

[67] *Ibid.*, 198.

[68] Council of the European Union, "Space Policy 2007," 1.

[69] *Ibid.*, 6.

[70] *Ibid.*, 12.

[71] European Commission, "Communication from The Commission to The Council, The European Parliament, The European Economic and Social Committee

between the EU and the ESA in different terms than previous communications. The EU drove reframing of GMES as more than a standard research activity, and while it acted with the consent of the ESA administration, the power in joint projects is biased towards the Union and its Member States. The ESA, in the 7th meeting of its Space Council,

> invited the European Commission, the EU Council, assisted by the European Defence Agency (EDA), together with Member States and the ESA "to explore ways to support current and future capability needs for crisis management through cost-effective access to robust, secure and reactive space assets and services [...] taking full advantage of dual-use synergies as appropriate." It also invited "the European Commission and the EU Council to propose policy solutions where necessary."[72]

The ESA's own rhetoric effectively invites the EU into the ESA's administration and explicitly allows the EU's legislative and administrative bodies into the ESA's policymaking process. EU-proposed policies, particularly the defense focused initiatives, are inherently limited to the goals of EU Member States, not ESA members. Though considerable overlap exists between the pair's membership pools, the status of members not held in common is questionable. External resources, though they may be available to the ESA, are not on the table for EU-ESA projects, as pursuing "... security missions without depending on the facilities and services of non-Member States" is a cornerstone of the Union's efforts to uphold Article 189 of the TEU.[73] Mere coexistence and cooperation between the two, the status quo established in the 1970s, is no longer the goal of European space science. While the old model persists in the ESA's research administration, integration of the two institutions is the path forward.

By 2014, just one year before David Cameron would promise a referendum on the UK's EU membership, the prospective relationships described by the TEU the 2007 Communication, and the 2011 communication developed into a distinct, well-articulated set of objectives for future cooperation. First outlined by the European Commission

and The Committee of The Regions: Towards A Space Strategy for The European Union That Benefits Its Citizens," (Brussels, April 4, 2011): 6.

[72] *Ibid*.

[73] European Commission, "Towards a Space Strategy," 6.

in 2012, the EC presented these four objectives as the most probable and practical options for the two entities to further integrate. While the ESA Director-General is reviewing these options on the same playing field, the Commission's status as the dictator of policy is a notable change from even the 2011 communication. Of the viable options, only maintaining the status quo retains the established legal framework between the two. A relationship formerly characterized the ESA under the old paradigm as "… the pre- existing international organization for European space cooperation" with "… its own mandate in the format of intergovernmental cooperation" is no longer a viable lens for viewing EU-ESA relations.[74]

The first of the four options on the desks of both the European Commission and the ESA Director-General makes no changes to the existing framework. EU-driven programs, like Galileo and GMES, would coexist between the two organization's mandates and administrative structures. Negotiations for funding, policies, and missions would continue to be laid out "phase-by-phase," similarly to the process surrounding GMES' departure from the ESA's norm of pure science.[75] Option two follows a similar path, though it would ideally reduce the negotiation time for each phase of every project. Under "Improved cooperation under the 'status quo,"' the ESA and EU would jointly develop a new framework agreement, though the ESA would continue to function as it has under the present relationship.[76] The third option closely represents the ideas laid out in the 2011 communication. It grants the EU considerable autonomy within its own "EU pillar" specifically designed to operate within EU rules and procedures.[77] While the pillar would primarily operate autonomously from the rest of the ESA, it would remain nominally part of the agency and "… would not affect the functioning of the remaining departments of the intergovernmental ESA as it exists today."[78] Finally, the fourth and most extreme option is the absorption of the ESA into the EU. Under this structure, non-Union states would be grandfathered in under the old framework to facilitate cooperation,

[74] Schmit-Tedd, "The Relationship between the EU and ESA within the Framework of European Space Policy and its Consequences for Space Industry Contracts," 29.

[75] European Commission, "Report from the Commission: Progress Report on Establishing Appropriate Relations Between the European Union and the European Space Agency (ESA)", (Brussels, February 6, 2014): 5.

[76] *Ibid.*, 5.

[77] *Ibid.*, 6.

[78] *Ibid.*

but EU programs and funding would dominate the Agency and its objectives.[79] Of the four options, the council most specifically wished to delve deeper into options two and three, stating "while option 3 may be a better response to dealing with the structural issues in the EU/ESA relations, option 2 (the revision of the existing Framework Agreement) should be considered alongside with option 3."[80] Full integration, as specified in the fourth option, would best favor the EU's objectives, but the Commission dismissed its immediate practicality in favor of the tempered options. Though the Commission does not choose a distinct path, the document firmly established the inevitability of further EU-ESA integration. Closer integration and cooperation would in turn make fully absorbing the ESA far simpler.

Following the EU's entrenchment of its firm position on deepening cooperation with the ESA, the UK carried out the highly controversial Brexit vote, leading to David Cameron's ouster. PM Theresa May cemented the UK's departure from the bloc by triggering Article 50 of the Treaty of the European Union, and the Union dug in its heels in response to May's hardline rhetoric. At this line, the Union's plans for the ESA face serious doubt; keystone projects, including those already operating under the status quo, face at least a diminished role from a founding member. Like the messy process of "… disentangling legislation, regulations, procedures and other details," the UK cannot simply disengage from all EU-integrated projects in the ESA and expect to remain a strong, leading member.[81] However, unlike the hard-nosed EU who is seeking to protect its members, interests, and integrity in its negotiations with the UK, the ESA has nothing to gain from striking an aggressive, confrontational tone with the UK and its scientists. Furthermore, the growing, evolving relationship between the ESA, its member states, and its benefactors in the EU is not static, and it has every incentive to foster a productive working relationship between the three. Unlike Article 50 of the TEU, which offers no clear option for walking back a stated intent to leave, the ESA's structure is much more accommodating.

[79] *Ibid*.

[80] European Commission, "Progress Report," 9.

[81] Antje Wiener, "The Impossibility of Disentangling Integration," In *Brexit: Sociological Responses,* edited by William Outhwaite. (London: New York: Anthem Press, 2017): 149.

On June 18, 2016, just five days before the Brexit referendum, British astronaut Tim Peake returned from a six-month stint on the International Space Station on a joint ESA-NASA mission. Having "'… missed a lot of the campaigning,"' Peake struck a conciliatory tone after the surprising Leave victory, hoping to "'… put that behind us now and work on unity and moving forwards."'[82] Having viewed Brexit from an international, collaborative project orbiting far above the political concerns of the continent, Peake's perspective is fitting. ESA Director General Jan Worner paralleled Peake's attitude in the July after the referendum and sought to emphasize Peake's position as more than just a British citizen. Following a visit to the UK to meet with Peake, PM Theresa May, and ESA facilities throughout the UK, the Director General stakes out a clear objective for the ESA amidst the Brexit chatter. Worner strikes an ambitious tone throughout his description of his visit, citing how the ESA has a "… remarkable decades-long track record and provides a solid foundation from which to tackle challenges now and in the future" in reference to the Agency's tumultuous yet successful past.[83] Notably, Peake pointedly mentions the new ESA facility near Oxford, indirectly demonstrating his Agency's already-established and growing place in the UK. Worner ventures into territory typically occupied by the EU in Europe's political imagination, describing Peake as a scientist who "… proves day in, day out that ESA does not just talk about Europe but is the living and very dynamic embodiment of it."[84] Concern from within the ESA about the possible effects of Brexit on their role in the UK remained calm and measured after the vote. While the rest of the UK sorted out the messy contradictions created by a Conservative government trying to not only to put up a strong face to the Union but also trying to repair the internal bleeding caused by the ruling Conservative government's split on the referendum, British citizens working in the ESA remained calm. In a September 2016 interview with Engineering and Technology, former UK Space Agency head David Parker and current ESA Director of Human Spaceflight and Robotic Exploration flatly stated that "The UK will continue to be a member of ESA

[82] Ian Sample, "Tim Peake on Brexit: 'I don't want negative effects on UK science'," *The Guardian,* July 3, 2016, accessed March 9, 2018, https://www.theguardian.com/science/2016/jul/03/tim-peake-negative-effects-brexit-uk-science.

[83] Jan Worner, "Tim Peake, Europe and Brexit," Jan Worner's Blog, July 28, 2016, accessed March 9, 2018, blogs.esa.int/janwoerner/2016/07/28/tim-peake-europe-and-brexit/.

[84] Worner, "Tim Peake, Europe and Brexit."

as long as it wishes to be."[85] No chaos and no messy split was needed; the UK had not forsaken its allies in the space science community. At the edge of current events, the ESA's commitment to accommodating the UK's departure has not been as apparent as Worner and Parker's optimistic outlooks may have proscribed. The ESA is not showing the UK the door, but rather their organization is simply not putting its established plans and agreements with the Union on hold while Brexit talks continue. The December 2016 ESA Ministerial Council meeting set out to establish the Agency's push towards "Space 4.0 for a United Space in Europe."[86] Space 4.0 represents the Agency's push towards a new era in space science and application with a special focus on European collaboration. The sentiments established by over a decade of mutual negotiation will be fully realized in the Space 4.0 policy framework; the Ministerial Council itself reaffirmed the ESA's commitment to the EU and specifically notes the need to establish "... sustainable and mutually beneficial arrangements for cooperation that take into account differences in the membership of ESA and of the European Union."[87] While recent statements put the EU in the driver's seat for mutual negotiations, the Space 4.0 framework reestablishes the ESA's priorities in an uncertain Europe. With the policy, the Agency has unequivocally demonstrated its unique, self-determined place in Europe. Though integration with the EU will continue, the ESA's place as the space agency for Europe remains a far more inclusive identity. Its example serves as a functional reminder of what a unified Europe can accomplish: a hard-fought, pioneering, independent voice between greater individual powers. As Brexit negotiations continue, the fate of European research has not gone unnoticed within the greater context either. The European Council's latest draft guidelines for Brexit negotiations establish the UK's position as "... subject to the relevant

[85] Tereza Pultarova, "Brexit not a threat for UK space sector," *Engineering and Technology,* September 14, 2016, accessed March 10, 2018, https://eandt.theiet.org/content/articles/2016/09/brexit-not-a-threat-for-uk-space-sector/.

[86] European Space Agency, "Council Meeting Held at Ministerial Level on 1 and 2 December 2016: Resolutions and Main Decisions," (Lucerne, December 2, 2016): 2.

[87] European Space Agency, "Council Meeting Held at Ministerial Level on 1 and 2 December 2016," 2.

conditions for the participation of third countries" in the upcoming Multiannual Financial Framework.[88]

Given its lengthy investment of time and money in a collaborative mechanism for European space collaboration, doing so would not only leave the UK out in the cold, but it would also forsake decades of stable leadership in the ESA. In contrast to its role as the rambunctious, unruly, and often unwilling stepchild of European integration, the UK has been a leader in the ESA and its predecessors. Since its measured step towards Europe instead of the US in the ELDO/ESRO years, the UK has guaranteed its position in space as a leader, not a follower. Britain's Eurosceptics have sustained their movement by appealing to British sovereignty and glory; the 2016 Brexit vote saw that sentiment at last boil over into the realm of consequence. While Prime Minister Theresa May bargains for a portion of what Brexiteers expected from their state's allegedly restored sovereignty, the ESA's unique position allows for the United Kingdom to retain its orientation towards the stars. Though the Agency's deepening relationship with the Union will dampen the depth of the island state's participation, their continued cooperation and coexistence will set an example for how other mechanisms may function in the coming decade. As the ESA presses forward into the era of Space 4.0, its future success rests upon its establishment as a truly European space agency; not as an exclusive arm of the EU, but as a continental effort including both a prudent, accommodating Union and major external players like the United Kingdom. While May and Tusk debate which programs the United Kingdom must leave, Europe's place in the cosmos will remain.

[88] Council of the European Union, "European Council (Art.50) (23 March 2018) – Draft guidelines," Brussels, March 7, 2018, 4.

Contributors

Anne Elise Crafton

Anne Elise Crafton graduated with Bachelor of Arts degrees in both English and History, with minors in Classical Studies and Medieval and Renaissance Studies at the University of Arkansas. Her ongoing research involves the significance of mythic elements and their transformations across cultural and temporal space. Anne is currently spending a year working in non-profits and justice initiatives before pursuing graduate study in either Medieval History or Medieval Literature. She would like to thank Dr. Laurence Hare, Dr. Joshua Smith, and Dr. Lynda Coon for their continual support throughout this process and incredibly valuable advice.

.

Colin Doege

Ever the science enthusiast, Colin Doege started his college career with hopes of becoming an aerospace engineer, but he quickly gravitated (no pun intended) to the study of interntional affairs and policy. He graduated *magna cum laude with honors* in the spring of 2018, completing majors in International Studies, Political Science, and European Studies. With his honors thesis project on the European Space Agency, Colin was able to bring together his eclectic interests in science and politics. In the near future, he hopes to continue his studies at the graduate level with a focus on international space policy.