

HAWKING CULTURAL ICONS:
REPRESENTATIONS OF STEPHEN HAWKING IN AMERICAN POPULAR
CULTURE, 1974-2004

By

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The thesis examines representations of Stephen Hawking from 1974 to 2004. It argues that Hawking has reached “iconic status” and examines that process. It argues that the primary media influencing Hawking’s “public persona” changes over time and charts that change. It also argues that continuities exist between Hawking’s representations in different media. By providing a specific example, the thesis tries to serve as a general blueprint for the formation of “cultural icons.” It tries to prove the utility of the concept of a “public persona.” It also tries to constantly root Hawking’s “public persona” in concrete instances of his characterization.

Unlike some similar books and papers, the thesis is structured so as to be sensitive to change over time. After dealing with the historiography, chapters are arranged chronologically. Chapters are subdivided to focus on similar characterizations. Such subdivisions may focus on a single theme, a single medium, or different characterizations generated by a single event.

The thesis is interdisciplinary in nature. It is informed by science and technology studies, literary criticism, and cultural history.

CHAPTER 1 INTRODUCTION

Stephen Hawking is part of an elite, Vice-Presidential task force that protects the spacetime continuum. At least, he is in the fictional world of *Futurama*. In other fictional worlds, his wheelchair can fly, he has created a robotic exoskeleton and uses it to fight crime, and he is a “gangsta rapper” who has (actually) released a CD and whose songs can be downloaded from the internet. Why? No other celebrity is routinely portrayed in remotely similar terms; so why is Hawking caricatured in such preposterous, yet generally positive, ways?¹ How and when did such characterizations first come about? What does it tell us about how we see Hawking—and ourselves—that we choose to imagine him in those ways?

Stephen Hawking completed his PhD in 1965.² His dissertation demonstrated that, given some reasonable assumptions, general relativity implied that the universe had begun in a singularity: the previously hypothesized big bang.³ Two years earlier, in 1963, Hawking had been diagnosed with amyotrophic lateral sclerosis (ALS, also known as Lou Gehrig’s disease in the United States, or motor neuron disease in the United

¹ A few other celebrities *have* been caricatured in similar ways, but not consistently so. I am thinking in particular of a segment of *The Simpsons* in which Lucy Lawless appeared. The segment ends with the revelation that, while Xena (a character Lawless plays) cannot fly, Lawless can. *The Simpsons*, “Treehouse of Horror X,” FOX, Originally aired October 31, 1999.

² William H. Cropper, “Affliction, Fame, and Fortune,” *Great Physicists: The Life and Time of Leading Physicists from Galileo to Hawking* (Oxford and New York: Oxford University Press, 2001), 455.

³ The Editors of *Time*, “Hawking,” *Great People of the 20th Century* (New York: Time Books, 1996), 145.

Kingdom).⁴ By 1974, Hawking's ALS had progressed to a degree that he could no longer walk, even with the aid of crutches.⁵ Also in 1974, Hawking put forward the theory that black holes "aren't really black."⁶ He was honored repeatedly, receiving the Albert Einstein Award in 1978 and becoming the Lucasian Professor of Mathematics in 1979.⁷ In 1983, Hawking and Jim Hartle proposed the "no-boundary concept" implying that, when viewed from the perspective of imaginary time, the universe had no beginning or end.⁸ Hawking participated in several documentaries during this period, including *The Creation of the Universe*. In 1985, Hawking came down with pneumonia, had a tracheotomy performed, and permanently lost the ability to speak. Shortly thereafter, he received the computer voice synthesizer that would become his trademark.⁹

Although Hawking was already a famous scientist in 1988, the publication of *A Brief History of Time*, and the movie of the same name in 1991, catapulted him to a new level of fame. The book was on the New York Times "Best Sellers" list for over 110 weeks and is easily the most successful science book ever.¹⁰ In 1993, Hawking made a guest appearance on *Star Trek: The Next Generation*. That appearance further increased

⁴ Michael White and John Gribbin, *Stephen Hawking: A Life in Science, New Updated Edition* (Washington, D.C.: The Joseph Henry House, 2002, originally published 1992), 60.

⁵ Morgan Strong, Interview with Stephen Hawking, *Playboy*, April 1990, in "Playboy Interview: The Three Decades," IBM, 1994.

⁶ *Great People of the 20th Century*, 145.

⁷ White and Gribbin, *Stephen Hawking*, 187.

As nearly every writer feels compelled to mention, it is the chair once held by Isaac Newton.

⁸ Strong, *Playboy*.

⁹ Strong, *Playboy*.

¹⁰ "The *New York Times* Book Review Best Sellers," *New York Time*, Late Edition (June 3, 1990), Section 7, Page 36 (LexisNexus).

his fame and put him in the symbolic lexicon of many *Star Trek* fans. Then, in 1999, Hawking appeared on *The Simpsons*. This was the capstone of the process begun with his *Star Trek* appearance: Hawking had become a cultural icon.

Hawking has several obvious “hooks” that contributed to this change: his work as a popularizer of science brought him to the public’s attention, while his brilliant mind and handicapped body cemented him in its imagination.¹¹ In this paper, I will provide a fuller explanation, tracing the changing phases of Hawking public persona through three decades of American popular culture.

“Public persona” is used to refer to the totality of Hawking’s exposure in popular culture, including the way in which references and allusions to Hawking are used. It is a quick way to refer to a generalized conception of the public’s knowledge and opinion of Hawking. This is obviously problematic, and reference to Hawking’s “public persona” should always carry with it the proviso that I am generalizing about the “American” conception of Hawking, when in reality, various class and cultural divisions, and personal idiosyncrasies, influence perceptions of Hawking.

Despite the problems inherent in such generalizing, the decision to do so is defensible. For one thing, because of mass media, most Americans do share at least some of the cultural references to which I will be referring. What is more, because of a shared cultural identity, even Americans who are not already familiar with the popular culture references that I am making will likely “get” the references when they *are* exposed to them—something not necessarily true of non-Americans. Finally, my generalizations are defensible because they offer valuable insights, both in regards to how we view Hawking,

¹¹ Tellingly, it is hard to describe Hawking’s popularity without using language that suggests mind/body duality.

and how we build up the mythology surrounding a famous scientist. So, even though it requires a disclaimer, generalizing allows us to access the site of cultural icon formation.

Similar generalizations have been beneficially made in the historiography surrounding the Civil Rights Movement. In the introduction to his edited volume on media, culture and the Civil Rights Movement, Brian Ward writes:

Black cultural heroes and innovations, much like the story of the freedom struggle itself, have become important touchstones of contemporary American musical, literary, and visual, as well as political, culture. Certainly the ways in which the Movement and its leaders—most conspicuously Martin Luther King and Malcolm X—have been pressed into symbolic service in film, music, and literature have helped to establish powerful popular notions, a “master narrative,” of what the postwar black freedom struggle, in all its various phases and incarnations, was really about.¹²

My “public persona” functions in the same way that Ward’s “master narrative” does, except that his refers to popular conceptions of a movement, and mine refers to popular conceptions of an individual.

While on the topic of definitions, it will be useful to divide popular culture references to Hawking into three broad categories: direct factual, direct fictional, and tangential. Direct factual, or direct nonfictional, references address Hawking or his work in an extended, literal way. A newspaper story about Hawking, one of his books, or a documentary appearance are all good examples. Direct fictional references are similar in that they are more than a passing reference, but differ in that they involve Hawking as a fictional character. Hawking’s guest appearance on *The Simpsons* is a great, but far from the only, example. The final category, tangential references, is composed of just that—passing references unconnected to the conversation taking place. In an episode of

¹² Brian Ward, “Forgotten Wails and Master Narratives: Media, Culture, and Memories of the Modern African American Freedom Struggle,” in Brian Ward (ed.) *Media, Culture, and the Modern African American Freedom Struggle* (Gainesville: The University Press of Florida, 2001), pg. 8.

Seinfeld, Jerry opens his door to see George riding in a powered wheelchair, George says, “Well, you're not gonna believe what happened.” Jerry responds, “You mugged Stephen Hawking?”¹³ The reference only involves Hawking peripherally. Indeed, in this instance, the joke works just as well with Larry Flint as with Hawking. Likewise, the most interesting tangential references are metaphors and analogies. These could also be interchanged, normally with a reference to Einstein. For instance, a science fiction book which describes a character as being “no Hawking.”¹⁴

Shifting from definitions to a disclaimer, very little emphasis will be placed on the several published Hawking biographies. While they are extensive examples of Hawking’s public characterization, and would be covered in a longer project, I have not seen that they have had much direct impact on how Hawking is characterized. The two biggest impacts have been that the first Hawking biography’s existence cemented Hawking’s science celebrity status, and that his ex-wife’s tell-all served as fodder to magazines like *Vanity Fair*.

Disclaimers aside, in the thesis I argue that the process of Hawking achieving iconic status began in 1993 and was culminated in 1999. I further argue that the primary media influencing Hawking’s “public persona” changes from newspaper articles in the 1970s and early 1980s, to direct nonfictional references more generally between 1985 and 1993, to tangential and direct fictional references after 1993. I also argue that continuities exist between Hawking’s representations in different media (very strong in

¹³ *Seinfeld*, “The Butter Shave,” NBC, Originally aired September 25, 1997.

¹⁴ David Weber and John Ringo, *March Upcountry* (Riverdale, NY: Baen Publishing Enterprises, 2001), pg. 552.

the case of tangents and direct fictional representations; weaker between those two types and direct nonfictional references).

I begin the thesis by examining the relevant historiography. The second chapter examines the work of the only other academic to write about Hawking's media identity: H  l  ne Mialet. The third chapter broadly examines the literature in the public understanding of science that examines science and popular culture. The following three chapters examine shifts in Hawking's' public persona chronologically. Chapter four examines Hawking's transition from a promising youngster to a leading theorist. It is separated from chapter five by the publication of *A Brief History of Time*. Chapter five examines the change from science superstar to cultural icon. Hawking's appearance on *The Simpsons* divides chapters five and six. Chapter six examines Hawking's representation since 1999, focusing on fictional representations of Hawking. I end with a conclusion, and an epilogue in which I make predictions about the future of Hawking's public persona.¹⁵

¹⁵ A note on page numbers: I am working with electronic versions of nearly all newspaper articles. Where I am working with transcripts of newspaper articles, instead of images of the original (or where the electronic source makes figuring out what page a quotation falls on in the original impossible), I have included my electronic source and an indication of length (preferring number of pages to word count, but using the number of words where it is the only indication of length available) in parentheses.

CHAPTER 2 HISTORIOGRAPHY: HAWKING AND HÉLÈNE MIALET

In this chapter, I argue that the only academic writing on Hawking’s public persona has done so poorly. To show the deficiencies of her work with Hawking, I try to faithfully summarize her project, followed by a critique of the facet that concerns my thesis. This is the first of two chapters that serve to justify the topic of my thesis.

Mialet and The Distributed-Centered Subject

Hélène Mialet “completed her PhD in philosophy at the Sorbonne and the Centre de Sociologie de l’Innovation (École des Mines) in Paris.”¹ From a science studies background, Mialet approached Hawking’s “public persona” as a way of explaining how he came to be viewed as a disembodied intellect. She proceeded to debunk that view of Hawking by locating him as the embodiment of an actor-network. While much of Mialet’s work is tangential to my current paper, she is, to my knowledge, the only other academic addressing Hawking’s “public persona.” As such, an extended engagement with her work is merited.

Mialet’s project is an admirable one. Faced with a field that has “banalized” scientific production—that views the attribution of genius or innovation in science as either accidental or purely political—Mialet proposes an alternative. Drawing on actor-network theory, Mialet proposes the metaphor of “embodiment.” By which, she means that an actor-network comes to be embodied in a single individual; that the actor-network

¹ Hélène Mialet, “Do Angels Have Bodies? Two Stories About Subjectivity in Science: The Cases of William X and Mister H,” *Social Studies of Science*, Vol. 29, No. 4 (Aug., 1999), 581.
N.B. The Centre de Sociologie de l’Innovation is associated with Michel Callon and Bruno Latour.

is their “extended body.” She calls this embodied actor-network the “distributed-centered” subject, and attributes “the qualities of expertise, creativity – of genius” to it.²

Mialet presents the idea of the distributed-centered subject in an article in *Social Studies of Science* titled “Do Angels Have Bodies? Two Stories About Subjectivity in Science: The Cases of William X and Mister H.” William X is William Montel, “a world-renowned expert in the field of applied thermodynamics” on whom Mialet did anthropological-type fieldwork.³ He is ‘William X’ because no one outside the field has heard of him. This contrasts with Mialet’s second case-study: Stephen Hawking.

Mialet again uses Hawking as a case-study in two different works: an article and a chapter in an edited volume. The article was published in *Critical Inquiry* and was titled “Reading Hawking’s Presence: An Interview with a Self-Effacing Man.” In it, Mialet does a close reading of an interview she conducted with Hawking as research for the aforementioned chapter. There, she builds upon and reinforces her conclusions about Hawking from “Do Angels Have Bodies?” The chapter was published in *From Newton to Hawking: A History of Cambridge University’s Lucasian Professors of Mathematics* and was titled “Is the end in sight for the Lucasian chair? Stephen Hawking as Millennium Professor.” The chapter has two goals. The first is to provide a brief biography of Hawking’s life and to convey the importance of his discoveries to a lay audience. The second is to rehash her earlier work on the distributed-centered subject. Of the two, Mialet emphasizes the second, using it to frame Hawking’s biography.

² H  l  ne Mialet, “Do Angels Have Bodies?,” 562.

³ Mialet, “Do Angels Have Bodies?,” 551.

Because it is where she most comprehensively lays out her theory of the “distributed-centered” subject, and because she uses the article as a springboard in her later writing, I will mostly be focusing on “Do Angels Have Bodies?”. However, the summaries of what she believes her earlier work proved, that she includes in “Reading Hawking’s Presence,” are also helpful. Her chapter on Hawking as Lucasian professor is derivative of her two articles, and is intended to disseminate her ideas to an audience of historians unversed in actor-network theory.

On its surface, the “distributed-centered” subject is not a radical notion. Mialet is not the first actor-network theorist to argue that agencies are “distributed” nor that they become “centered.” What sets Mialet apart is her attribution of adjectives like “intelligence” and “originality” to those networks. What, then, makes this possible? What makes her theory different from other actor-network theories? For instance, what distinguishes Mialet’s “distributed-centered” subject from John Law’s “punctualized” subject?

Although both Law and Mialet’s theories involve a single subject standing in for an actor-network, the two are quite distinct. The biggest difference is that Law argues “Punctualisation is always precarious.”⁴ This precariousness means that Law’s focus rests on how actor-networks stay punctualized. To wit, he writes:

This, then, is the core of the actor-network approach: a concern with how actors and organizations mobilise, juxtapose and hold together the bits and pieces out of which they are composed; how they are sometimes able to prevent those bits and pieces from following their own inclinations and making off; and how they manage, as a result, to conceal for a time the process of translation itself and so turn

⁴ John Law, “Notes on the Theory of the Actor-Network: Ordering, Strategy and Heterogeneity,” Originally published in Originally published in *Systems Practice* 5, 1992. Available online: <http://www.comp.lancs.ac.uk/sociology/papers/law-notes-on-ant.pdf>, 5.

a network from a heterogeneous set of bits and pieces each with its own inclinations, into something that passes as a punctualised actor.⁵

Since the natural tendency of networks is to dissolve, it is no surprise that, for John Law, “Actor-network theory is all about power.”⁶ This is not the case for Mialet.

Mialet does not directly address the issue of how durable her extended bodies are, but they are definitely not the “precarious,” temporary collections of John Law. The one instance in which Mialet does address changes in extended bodies over time, one gets the impression that they are changeable, but permanent. She writes, “this collective body has . . . undergone radical transformations in time.”⁷ She goes on to enumerate things like Hawking receiving his voice synthesizer, getting nurses, secretaries, etc.. These additions radically change how the network operates, but the network is still Hawking’s.

Another major distinction between Mialet and other actor-network theories is that Mialet reserves a special place for the central actor. She writes:

The actor . . . is not only (as actor-network theory holds) the product of an association of heterogeneous elements constituting his body and mind. In other words, William is *not only* the result of a process of composition, indiscernible from the network of entities on which he acts and which act through him. He can be distinguished from this network precisely because he moves within it in a specific way, mixing with his research object, translating and linking up things which were previously unconnected.⁸

⁵ Law, “Notes on the Theory of the Actor-Network,” 6.

⁶ Law, “Notes on the Theory of the Actor-Network,” 6.

⁷ Hélène Mialet, “Is the End in Sight for the Lucasian Chair? Stephen Hawking as Millennium Professor,” in Kevin C. Knox and Richard Noakes (eds), *From Newton to Hawking: A History of Cambridge University’s Lucasian Professors of Mathematics* (Cambridge: Cambridge University Press, 2003), 433.

⁸ Mialet, “Do Angels Have Bodies?,” 560.

One of those specific ways he moves within his network involves attribution/intervention. Mialet writes, “Thus, contrary to what Brannigan or the theory of actor networks seem to claim, these processes of attribution are not arbitrary, they are operative.”⁹

It is somewhat unexpected that Mialet would use actor-network theory in order to reintroduce ideas of originality, even carefully redefined originality, into science—something that seems contrary to the actor-network project. Mialet is aware of this, and comments upon it. She writes:

As I have tried to show, it is possible to understand the constitution of the knowing subject by using the tools and methods developed by those who would either deny or ignore its relevance. In this sense, my goal has been to try to understand the subject in-the-making; that is, as he or she becomes (productive) through the distribution and re-appropriation of his or her extended body.¹⁰

In that project, Mialet is partially successful.

Mialet does a fine job re-introducing “the role of a creative actor in the process of invention” in her case study of William X.¹¹ She convincingly shows the ways in which William’s body is extended to include his lab, research assistants, and his theoretical model (his research object, and what he is known for inventing). Furthermore, she shows how this collection is singularized into the person of William “through processes of attribution” and intervention.¹² Attribution gives William credit for the success of his model, even when others are instrumental in making the model work. Intervention by “the flesh-and-blood inventor . . . [is seen] at two specific moments. First he intervenes every time there is a malfunction in the device he has developed . . . Second, he has

⁹ Mialet, “Do Angels Have Bodies?,” 562.

¹⁰ *Ibid.*, 575.

¹¹ *Ibid.*, 562.

¹² *Ibid.*.

developed a particular skill for resolving these problems: his own specific ability to identify with his research subject.”¹³ These interventions make it clear to Mialet that, “contrary to the idea that invention is complete at the moment of inception . . . it is constituted through energy expanded and maintained over time.”¹⁴ This process is, also, what allows her to attribute intelligence and genius to her subjects.

The goal of Mialet’s work with Hawking is the same as with William X: the reintroduction of originality. She does this by locating originality as a verb, acted out in an actor-network. Her conclusions are largely the same as well, except that in the case of Hawking, she sees popular culture as one of the key forces singularizing his extended body. In summarizing her work with Hawking as a distributed-centered subject for another article, Mialet points out this central feature of her analysis. She writes, “The closer I was to the single body, the more I discovered a multiplicity of Hawkings, while the more I turned my focus to the multiplicity of constructions and representations of Hawking in the media, the more I could see a stable ego appear.”¹⁵ This disparity exists for Mialet because, in the popular media, “Hawking incarnates the mythical figure of the lone genius: a man who wants to – and declares himself capable of – grasping the ultimate laws of the universe with his mind.”¹⁶

Summarizing her conclusion, Mialet writes, “We have shown that Hawking, because of his handicap, makes visible that which is normally hidden in the scientist’s

¹³ Mialet, “Do Angels Have Bodies?,” 560.

¹⁴ *Ibid.*, 561.

¹⁵ Hélène Mialet, “Reading Hawking’s Presence: An Interview with a Self-Effacing Man,” *Critical Inquiry* 29 (Summer 2003), 574.

¹⁶ Mialet, “Do Angels Have Bodies?,” 564

practice and self-presentation, for example, the role of his assistants and the machines to which he is attached.”¹⁷ Mialet is successful in reappropriating creativity and genius for William X by locating such characteristics in continuing actions on the part of William and others in his laboratory. However, she makes several missteps when dealing with Stephen Hawking as a second case-study.

Critique of Mialet

In terms of her claims about Hawking’s public persona, Mialet is rarely *wrong*. She successfully argues that the characterization of Hawking as a disembodied intellect eclipses a range of people and technologies on which Hawking relies. Identifying this characterization is her strongest treatment of Hawking’s public persona. The characterization is often repeated in direct non-fictional references to Hawking, and was particularly prominent in the 1980s. For instance, in a review of John Boslough’s Hawking biography that appeared in the *Washington Post* in 1984, John Tirman wrote, “The author [Boslough] alludes to the idea of Hawking as a totally ‘cerebral man,’ one who has only his brilliant mind to occupy him, but this promising notion—does it account for his achievement and celebrity?—is never developed.”¹⁸ The idea reoccurs. A 1988 *Washington Post* article was titled “The Mind in Pursuit of the Universe.”¹⁹ In a 1988 *Time* article, Leon Jaroff wrote, “While ALS has made Hawking a virtual prisoner in his own body, it has left his courage and humor intact, his intellect free to roam.”²⁰ Another *Time* article repeated the characterization in 1992, Richard Schickel wrote, “[it]

¹⁷ Mialet, “Reading Hawking’s Presence,” 583.

¹⁸ John Tirman, “Cosmology Made Simple,” *The Washington Post* (Nov. 25, 1984), C3.

¹⁹ Henry Allen, “The Mind in Pursuit of the Universe,” *The Washington Post* (Apr 15, 1988), B1 and B4.

²⁰ Leon Jaroff, “Roaming the Cosmos,” *Time* (Feb 8, 1988), 58.

reinforces our sense of his isolation and immobility and the idea that we are in the presence of pure, disembodied thought, a little like that which George Bernard Shaw imaged as the end of evolution in his play *Man and Superman*.”²¹ Other articles, and several documentaries continue the characterization.

While identifying that characterization is where Mialet is strongest, it could have been problematized: it is not the only characterization of Hawking and there are contrary characterizations of Hawking. However, her other claims are more problematic. Mialet does not use enough sources, does not distinguish between different types of sources, and does not view Hawking’s characterization through a historicist lens. It is understandable that Hawking’s public persona is not her primary interest, and she does not spend much time on it. However, her failure to do so, and all the other poorly defended claims about Hawking, increases the need for a proper study.²²

Ascetic

Supporting her disembodied Hawking, Mialet argues that one of the primary ways in which Hawking is characterized is as an ascetic. She writes that, in the media, “Since he is no longer distracted by the daily and worldly occupations shared by the rest of humanity, he can devote himself entirely to thought.”²³ She uses the same characterization in “Reading Hawking’s Presence.” She writes that the common perception is, “Because of his handicap [Hawking] is no longer distracted by the daily and worldly occupations shared by the rest of humanity; he can therefore devote himself

²¹ Richard Schickel, “A Brief History of Time,” *Time* (Aug 31, 1992), 66 (2 pages). (Infotrac).

²² A niche I hope to fill in the following chapters!

²³ Mialet, “Do Angels Have Bodies?,” 568

entirely to thought.”²⁴ Immediately after which, she has a footnote in which she references Steve Shapin and Christopher Lawrence on the “relationship between asceticism and truth.” This characterization is problematic. As will be shown below, in Chapter Six, “Cultural Icon,” many recent (and some older) representations of Hawking actively attempt to humanize him. So, while there *is* some characterization of Hawking as an ascetic, it is by no means unchallenged.

Much of Mialet’s argument for the singularization of Hawking rests on her conclusion that Hawking is characterized as an ascetic, lone genius. Ironically, Mialet’s argument that popular culture singularizes Hawking is sound, even though her reasoning is less so. Mialet does not marshal the best evidence for Hawking’s singularity, but I shall attempt to do so: the root of Hawking’s singularization is that he is repeatedly depicted as independent. Visually, Hawking is often pictured alone, with his wheelchair and computer. That visual is part of why Mialet finds Hawking so compelling; he so obviously depends upon his “extended body” that her concept seems intuitive. However, at the same time, Hawking and his wheelchair and computer become a single unit that is independent. Hawking is handicapped, but the impression conveyed is that he is independent through the marvel of technology. Similarly, in part one of *Stephen Hawking’s Universe*, “Seeing is Believing,” Hawking is seen in several shots riding around the campus of Cambridge alone. Likewise, many news stories mention that Hawking is a well-known icon in Cambridge, often seen riding around campus.²⁵

²⁴ Mialet, “Reading Hawking’s Presence,” 573.

²⁵ I hasten to add that being alone is not the same thing as being ascetic. It shows Hawking is independent; no one would try to label a non-disabled person ‘ascetic’ for walking around campus without someone to supervise them.

In the 1990s, Hawking's personal life generated articles that implied his independence and further attacked the ascetic characterization. In 1990, Hawking left his wife, and, in 1995, married his longtime nurse; both events were covered by many news outlets.²⁶ That Hawking has a personal life, much less one capable of getting in the gossip columns of major publications, argues strongly for his independence (not to mention that gossip about a divorce and remarriage is hardly in line with the monk-like image of an ascetic).

Black Hole Metaphor

Another of Mialet's major claims about Hawking's public persona is that he is seen through his research subject: the black hole. Mialet *wants* Hawking to be characterized in that way because it falls into a pattern she developed with "William X."²⁷ However, Mialet generalizes from a single news story that Hawking "himself becomes a black hole."²⁸ She draws the connection between William and Hawking explicitly. She writes, "As one comes to read William's capacities as an inventor through the capacity of the model he invented, we see the link gradually forming between Hawking's sick body, the disincorporated brain, and the content of the physical theory on which he works."²⁹

I dislike the metaphor, but before examining why she ought not emphasize it, I feel compelled to marshal the evidence in favor of its more widespread existence—evidence that Mialet fails to provide. Many writers do indeed use Hawking's research objects as

²⁶ For instance, see Nadine Brozan, "Chronicle: One of the world's smartest men will marry his nurse," *New York Times* (July 7, 1995), B4; and see Richard Jerome, Vickie Bane, and Terry Smith, "Of a Mind to Marry," *People*, Vol. 44, Issue 6 (August 7, 1995), 44 (3 pages). (Infotrac).

²⁷ "In a particular way, he himself becomes, then, an oil fluid." Mialet, "Do Angels Have Bodies?," 560.

²⁸ Mialet, "Do Angels Have Bodies?," 568

²⁹ Mialet, "Do Angels Have Bodies?," 568.

metaphors, although few use precisely the same metaphor as Mialet. In a *Washington Post* article, Boyce Rensberger forswears (but mentions) a somewhat similar metaphor, writing, “Though casual observers may see Hawking’s own physical health as a metaphor for entropy, the physicist’s life defies comparison.”³⁰ The article from which Mialet draws her black hole metaphor, a *Newsweek* feature, contains another, similar metaphor, this one dealing with Hawking radiation instead of black holes generally. The authors write, “Like light from a collapsing star, exhausted by the struggle against gravity, the thoughts of Stephen Hawking reach us as if from a vast distance, a quantum at a time.”³¹

Continuing chronologically, journalists have written:

‘A Brief History of Time’ has been its own black hole. It not only swallowed up enough of the curios to keep it on the best-seller lists for 100 weeks. It also seems to have prevented any reader from emerging to sound the alarm: brief the volume is, but also dangerously dense.³²

Like one of Stephen Hawking’s collapsed stars, the domain of religion has been compressed into a single point—creation.³³

Hawking understood black holes because he could *stare* at them. Black holes mean oblivion. Mean death. And Hawking has been staring at death all his adult life.³⁴

Stephen was her private black hole, sucking in every ounce of her [his first wife, Jane’s] energy.³⁵

³⁰ Boyce Rensberger, “Physicist Theorizes on Directions of Time,” *The Washington Post* (Dec 26, 1986), A12.

³¹ Jerry Adler, Gerald C. Lubenow, and Maggie Malone, “Reading God’s Mind,” *Newsweek* (Jun 13, 1988), 56 (2839 words). (LexisNexis).

³² Vincent Canby, “If You Fumbled the Book, You’ll Love the Movie,” *New York Times* (Aug 21, 1992), C3.

³³ Robert L. Park, “A Cosmology of Your Very Own,” *New York Times* (Oct 9, 1992), A33.

³⁴ Patrick McGrath, “Her Long Goodbye,” *New York Times Book Review* (Feb 1, 1998), 6.

³⁵ Judy Bachrach, “A Beautiful Mind, An Ugly Possibility,” *Vanity Fair* (Jun 2004). 152 (7739 words). (Infotrac).

While these metaphors do not fit perfectly into the schema that Mialet developed for William X, they do show that since Hawking became a science celebrity (discussed below), writers have liked to use his research subjects metaphorically. However, overstating the role those metaphors have played in the formation of Hawking's public persona is a mistake. Likewise, generalizing from a single metaphor, as Mialet does, is also a mistake.

Turing Test

Although her fumbling of the black hole metaphor is my most stringent criticism of Mialet, I am similarly baffled by another statement she makes. In a footnote, she claims, "We can also say that in a certain sense he does not respond like a machine.

Nevertheless, Hawking would not be able to pass the Turing Test; because of his slowness at answering questions, someone who is not in his presence might have the feeling that he or she is communicating with a machine rather than a human being."³⁶

The Turing Test is a way of judging artificial intelligence. The theory is that when machines are sufficiently advanced to fool humans into believing that they are conversing with another human, the machines will have human level intelligence. That Hawking cannot pass is foolishness.

While Mialet's broader point that the slowness of Hawking in answering questions disrupts normal conversational patterns is valid, and has been remarked on by several journalists, claiming that Hawking could not pass the Turing Test is ludicrous. Even if Hawking takes far longer than many people to answer simple questions, the relevancy of his answers (not to mention simply explaining during the test that he is disabled!) would

³⁶ Mialet, "Reading Hawking's Presence," 584, footnote 29.

allow him to pass the Turing Test. I am baffled why Mialet even makes this claim. If Hawking could not pass the Turing Test with his extended body, it either implies that he has below human intelligence, which opposes the intelligence she is trying to attribute to him, or that the Turing Test is invalid, which would be a complete *non sequitur* with the rest of her argument.

Conclusion

Despite the validity of these criticisms of Mialet, they do not pose problems for her at the broadest level. I do have some reservations because Mialet does not refute my intuitive position that the extensions to Hawking's body are so radical in degree that they are effectively different in kind from those of a "normal" scientist. However, I am sympathetic to Mialet's project in general. That she uses actor-network theory to reintroduce concepts that many of the originators of said theory would rather see gone from the social scientist's vocabulary strikes me as fitting.

Ultimately, Mialet is fascinated by Hawking. She is unhappy that actor-network theory removes all notions of brilliance and originality from someone like Hawking. She writes articles about him in order to provide a sophisticated explanation of scientists in which there is a role for such concepts. My own fascination lies not so much with Hawking himself, as with the ways in which Hawking is characterized and mobilized as a symbol; a topic to which we shall return, after another historiographic detour.

CHAPTER 3 HISTORIOGRAPHY: SCIENCE AND POPULAR CULTURE

In this chapter, I argue that there is an institutional home for my thesis. I also indirectly argue that the field examining science and popular culture would benefit from a study of the formation of Stephen Hawking as a modern scientific cultural icon. I do so by examining key books in the historiography. This is the second of two chapters justifying my thesis.

Although perhaps once denigrated, popular culture has become a legitimate source for the historian of modern science. For instance, last year's History of Science Society meeting in Austin had a panel on science and popular culture. Non-historians of science have been even quicker to adopt popular culture as a legitimate source. In 1992, the journal *Public Understanding of Science* was founded. Numerous books, and articles in other journals, also deal with the topic. Within those groups looking at the public understanding of science, examining popular culture is a viable research field with a moderate following.

However, if one wants logical, rather than institutional, justifications, Dorothy Nelkin and Susan Lindee put forward a brilliant defense of focusing on popular culture in their book, *The DNA Mystique: The Gene as a Cultural Icon*. They write:

Popular culture matters. For many consumers, media stories, soap operas, advice books, advertising images, and other vehicles of popular culture are a crucial source of guidance and information. These are not simply escapist sources. They are narratives of meaning, helping their attentive listeners deal with social dilemmas, discover the boundaries of socially acceptable behavior, and filter complex ideas.

The stories in this literature bear on personal decisions and determine the acceptability of social and institutional policies.¹

They later elaborate, writing:

Popular narratives of television and pulp fiction convey theories of human motives and representations of social relationships. They employ conventions that are readily recognized by their audience and that conform to and shape cultural expectations and the emotional structure of everyday beliefs. ‘Habitual images and familiar metaphors,’ says anthropologist Marilyn Strathern, ‘provide the cultural forms that make ideas communicable.’²

The present study focuses on how one such set of “habitual images and familiar metaphors,” all variants on a common theme (Stephen Hawking) entered the public lexicon.

Mythologies

One of the earliest examinations of representations of the scientist in popular culture occurs in Roland Barthes’ *Mythologies*.³ Nestled between examinations of Jules Verne’s *Nautilus* and the myth of jet pilots, one essay is called “The Brain of Einstein.”

Barthes begins:

Einstein’s brain is a mythical object: paradoxically, the greatest intelligence of all provides an image of the most up-to-date machine, the man who is too powerful is removed from psychology, and introduced into a world of robots.⁴

Removal from psychology is one of the more interesting claims Barthes makes about Einstein’s characterization, but he never returns to it.

Instead, he introduces a new metaphor. He writes:

¹ Dorothy Nelkin and M. Susan Lindee, *The DNA Mystique: The Gene as a Cultural Icon* (New York: W.H. Freeman and Company, 1995), 11.

² Nelkin and Lindee, *DNA Mystique*, 12.

³ Incidentally, Barthes’ section on Einstein would be a great starting place for a paper on Hawking. Unfortunately for me, Mialet beat me to it. See Mialet, “Reading Hawking’s Presence,” 571.

⁴ Roland Barthes, *Mythologies*, ed. and trans. by Annette Lavers (New York: Hill and Wang, 1972. Originally published in French in 1957), 68.

The supermen of science-fiction always have something reified about them. So has Einstein: he is commonly signified by his brain . . . Superman is here divested of every magical character; no diffuse power in him, no mystery other than mechanical.⁵

While Barthes does not spend much time on any one idea, he does explore the implication of Einstein's characterization as mechanical. He writes:

Mythologically, Einstein is matter, his power does not spontaneously draw one towards the spiritual, it needs the help of an independent morality, a reminder about the scientist's 'conscience' (*Science without conscience,* they said . . .*) . . . [Footnote *:] 'Science without conscience is but the ruin of the Soul.'⁶

Interestingly, this concern with morality is not present with Hawking.

Barthes continues with his previous line of thought, about the consequences of Einstein's mechanical characterization, and talks about its impact on images of Einstein's death. Barthes writes:

The mythology of Einstein shows him as a genius so lacking in magic that one speaks about his thought as of a functional labour analogous to the mechanical making of sausages, the grinding of corn or the crushing of ore: he used to produce thought, continuously, as a mill makes flour, and death is above all, for him, the cessation of a localized function: '*the most powerful brain of all has stopped thinking*'.⁷

This reflection on Einstein's death is a strong summary of Barthes' thought about the popular perception of his life.

Barthes continues discussing Einstein's representation, this time linking in the Gnostic themes he had previously identified. He writes:

Popular imagery faithfully expresses this: *photographs* of Einstein show him standing next to a blackboard covered with mathematical signs of obvious complexity; but *cartoons* of Einstein (the sign that he has become a legend) show him chalk still in hand, and having just written on an empty blackboard, as if

⁵ Barthes, *Mythologies*, 68.

⁶ Barthes, *Mythologies*, 68.

⁷ Barthes, *Mythologies*, 69.

without preparation, the magic formula of the world. In this way mythology shows an awareness of the nature of the various tasks: research proper brings into play clockwork-like mechanisms and has its seat in a wholly material organ which is monstrous only by its cybernetic complication; discovery, on the contrary, has a magical essence, it is simple like a basic element, a principle substance, like the philosopher's stone of hermetists, tar-water for Berkeley, or oxygen for Schelling.⁸

This quotation shows one of Barthes' most glaring flaws; he personifies myths. "In this way mythology shows an awareness . . ." may just be a figure of speech (mythology is not *aware* of anything), but it also reflects a weakness in Barthes' analysis. Barthes ascribes his own analysis back onto the myths he examines. In doing so, he is either literally personifying myth, or is ascribing cooperative, conscious intention to their authors that, if he were to examine instances where Einstein is represented one by one, would be ridiculous.

It is not a stretch to say that, in terms of its methods, Barthes' mythology is not very rigorous. However, given that it was written almost fifty years ago and that the author was Roland Barthes, dismissing his argument on that count is a mistake. What *should* be noted, is that, by contemporary standards, his method is haphazard—which he acknowledges in his preface—and his evidence is not present. He is presenting an already completed thought, not presenting an argument.

In the essay that concludes *Mythologies*, "Myth Today," Barthes lays out the theoretical backing of the mythologies he has just presented. The most central of his claims is that "myth is a type of speech."⁹ He elaborates on this several times. He says, "myth is a system of communication, that it is a message. This allows one to perceive that myth cannot possibly be an object, a concept, or an idea; it is a mode of signification,

⁸ Barthes, *Mythologies*, 69.

⁹ Barthes, *Mythologies*, 109.

a form.”¹⁰ This is further refined one more time. He says, “speech of this kind [myth] is a message.”¹¹ This belief has implications in how Barthes formulates his arguments. Since he believes that myth is a message, he does not feel the need to precisely identify all of the sources from which he draws his analysis. He believes the myth is already “there” in a nebulous cultural realm; he is just making it explicit. This is a crucial difference with my own “public persona.” Needless to say, this is problematic.

However, despite being nebulous, Barthes’ does not ascribe some universal quality to myths. He writes:

Are there objects which are *inevitably* a source of suggestiveness, as Baudelaire suggested about Woman? Certainly not: one can conceive of very ancient myths, but there are no eternal ones; for it is human history which converts reality into speech, and it alone rules the life and the death of mythical language.¹²

Although he acknowledges myths have beginnings, he does not focus on the production of myth, perhaps because he sees a much closer parallel between ancient myth and modern myth than do modern cultural historians. Barthes goes further than saying that images have less-than-obvious meanings and claims that they are *messages*. He sees his job as one of intercepting these messages and deconstructing the myths; and even lays out a theory of their form.

He does not extend his questions to the site of individual myth production. He does discuss differences in representation based on medium on some occasions—notably the difference between photographs and cartoons of Einstein. He also ascribes responsibility to some groups for certain myths (mostly “the bourgeois”), and sometimes discusses an

¹⁰ Barthes, *Mythologies*, 109.

¹¹ Barthes, *Mythologies*, 109.

¹² Barthes, *Mythologies*, 110.

author whose work of fiction typifies a myth—as in “The *Nautilus* and the Drunken Boat.” Nevertheless, his essays are (understandably!) dated.

Einstein as Myth and Muse

Published in 1985, Alan J. Friedman and Carol C. Donley’s *Einstein as Myth and Muse* is a book length, as opposed to Barthes’ short essay, treatment of Einstein as both a cultural myth and as a muse for artists and authors.

Friedman and Donley’s general conclusion is, “Einstein is our [collective] symbol of mankind’s intellectual achievement, yet we fear intellect that is beyond most of us. After all, the myth goes, that intellect produced $E = mc^2$, cause of nuclear weapons and possible global holocaust.”¹³ It is interesting to note that *Myth and Muse* is characterized by Cold War concerns—this makes it useful for examining that period, but, as should be clear from the previous quotation, contemporary representations of Einstein put a decidedly different emphasis on Einstein’s representation than *Myth and Muse*.

Early in the book, Friedman and Donley do a fair job of contextualizing and explaining Einstein’s popularity. They explain that:

Except for isolated avant-garde groups, the general public remained untouched by Albert Einstein’s revolution in physics through World War I. This situation changed dramatically, however, when the results of the British eclipse expedition . . . were announced in November 1919.¹⁴

Once that publicity started, it was quite heavy. They write, “*The New York Times* did not cease its coverage after one news item . . . sixteen articles appeared in November

¹³ Alan J. Friedman and Carol C. Donley, *Einstein as Myth and Muse* (Cambridge: Cambridge University Press, 1985), 186.

¹⁴ Friedman and Donley, *Myth and Muse*, 10.

alone.”¹⁵ This first chapter about early newspaper coverage is one of the better chapters in the book.

After that, Friedman and Donley’s book changes focus. They begin focusing on Einstein as an inspiration for artists and authors, only returning to the popular aspect of Einstein’s persona in the last chapter (the book’s strongest). Although it will not be dwelt upon, it will be useful to have an idea of the types of conclusions Friedman and Donley draw in these middle chapters. They write:

Albert Einstein’s victory over the high cultural authority of classical science made further challenge to convention seem a more legitimate and promising activity for other potential cultural rebels. Einstein’s stature as a muse depends not on his being a sole source, but rather a spectacularly rich source of image and metaphor, and a personal model for the vigorous and fruitful re-examination of profoundly held concepts.¹⁶

Unfortunately, the insights from this section of the book are not fully integrated into the last chapter (on his popular representation).

The conclusion of that last chapter is:

Portraits of Einstein from mass circulation material in the 1970’s present certain prominent recurring features. Einstein appears throughout as a very old man; the symbols $E = mc^2$ are used to represent his major work and nuclear power; and Einstein is used to represent supreme intellect, which is out of reach of the ordinary mind. The misleading or inaccurate nature of these features has not diminished their importance in making a powerful cultural myth out of Einstein’s image.¹⁷

Similarly, the conclusion of the book as a whole is:

This survey of the cultural image of Albert Einstein raises questions of society’s response to ideas, and to dramatically gifted individuals . . . The myth of science unleashing powers without warning has hindered rational consideration of the role of science in society. Society’s guilt over such processes is inappropriately assuaged if a single, saintly member of society can somehow be imagined to bear a

¹⁵ Friedman and Donley, *Myth and Muse*, 10.

¹⁶ Friedman and Donley, *Myth and Muse*, 109.

¹⁷ Friedman and Donley, *Myth and Muse*, 180.

large share of responsibility. These facets of Einstein's existence have been far more powerful in the culture at large than have his ideas and his actual biography . . . Image apparently has wider penetration in our culture than idea, so that society at large has accepted only the image of genius, not the genius itself, of Albert Einstein.¹⁸

It is a recurring feature that Friedman and Conley are concerned with the "real" Einstein.

In terms of their methods, Friedman and Donley are in line with contemporary standards of citation; they have a sufficient, but by no means extensive, number of endnotes. They draw their analysis from a wide range of sources: poetry, drama, literature, movies, newspapers, and advertisements; and they contextualize with references from secondary literature. Structurally, the book is set up temporally/thematically, with three main phases: early exposure, Einstein as muse, and Einstein as myth. Because of this changing focus as the book progresses, Friedman and Donley never provide a continuous evolution of Einstein's public persona. They have several very useful insights, and do a fair job of gathering material to draw their conclusions from, but the structure of the book is ultimately its weakness. That they do not have a clear evolution of Einstein's public persona means that the middle chapters, dealing with Einstein as a muse, are not grounded in the public's perception of Einstein at the time. There is a real danger of transferring late-developing aspects of the Einstein myth onto earlier works, or of missing the nuances involved in a particular set of years' view of Einstein.

Selling Science

While most of Dorothy Nelkin's books are noteworthy, *Selling Science* will be the first of two I will discuss. The book is about science and the media. Nelkin has one

¹⁸ Friedman and Donley, *Myth and Muse*, 194.

chapter, “The Scientific Mystique,” that is directly applicable. Other chapters, such as “The Perils of Progress,” are case studies that are quite interesting, but are no longer current. The end of the book focuses on the journalists’ side of science reporting. For instance, “The Culture of Science Journalism” is another great chapter.

However, Nelkin’s book is not perfect. She remarks that she has “excluded science-fiction programs, medical dramas, educational programs, and docudramas that present fictionalized images of science with relatively little concrete information.”¹⁹ With a footnote saying, “These are the subject of another book: Dorothy Nelkin and Susan Lindee, *The DNA Mystique*.”²⁰ That is only partly true. One of the strengths of *Selling Science* is a broad conception of science. *The DNA Mystique* does not have that same broad scope (not to mention that the footnote was added in 1995; in 1987, there was no book Nelkin could point to). In any event, looking at journalism *and* broader popular culture remains an unexplored goal.

The DNA Mystique

One of the best books dealing with broader issues of science and popular culture is *The DNA Mystique: The Gene as a Cultural Icon*.²¹ In it, Dorothy Nelkin and Susan Lindee present chapters on various aspects of the roles and perceptions of genetics in popular culture: from Elvis’ success, to a genetic cause for homosexuality, to contemporary eugenics. The book is great. However, it may be useful to describe a chapter, to give the reader a sense of how the book is structured.

¹⁹ Dorothy Nelkin, *Selling Science: How the Press Covers Science and Technology, Revised Edition* (New York: W. H. Freeman and Company, 1995; first edition published 1987), viii.

²⁰ Nelkin, *Selling Science*, 172.

²¹ Dorothy Nelkin and M. Susan Lindee, *The DNA Mystique: The Gene as a Cultural Icon* (New York: W. H. Freeman and Company, 1995).

Much of chapter two, “The Eugenic Gene,” focuses on the eugenics movement in the United States in the early 20th century. In the beginning of the chapter, the movement is described, particularly the popular beliefs that derived from and influenced the more intellectual aspects of the movement. This includes the idea that people are “born criminals,” and that there are “pathological families” of criminals or the insane. The authors then carry this forward into the present, showing how “The dysgenic woman incarcerated at the Newark Custodial Asylum for Feeble-minded Women has become the ‘worthless welfare mother with numerous children destined to join the ranks of the unemployed and criminal.’”²²

In addition to collaborating on their book, Nelkin and Lindee contributed an essay on genetics and popular culture to an edited volume titled *Deviant Bodies*. Their essay, “The Media-ted Gene: Stories of Gender and Race,” is similar to their conclusions in *The DNA Mystique*, but they explicitly engage in a feminist critique of the ways gene imagery is used.²³ They conclude that genetic claims and the language of genes are one way to reinforce racial or gender stereotypes. Their conclusion seems somewhat facile, but the essay is useful because they summarize much of *The DNA Mystique* while reading it through the lenses of gender and race.

From Faust to Strangelove

While *The DNA Mystique* is one of the better books in the genre, *From Faust to Strangelove: Representations of the Scientist in Western Literature* is perhaps my favorite

²² Nelkin and Lindee, *The DNA Mystique*, 36.

²³ Dorothy Nelkin and M. Susan Lindee, “The Media-ted Gene: Stories of Gender and Race,” in Jennifer Terry and Jacqueline Urla (eds), *Deviant Bodies: Critical Perspectives on Difference in Science and Popular Culture* (Bloomington and Indianapolis: Indiana University Press, 1995), 387-402.

book on science and popular culture.²⁴ In it, Roslynn Haynes argues that fictional scientists have more impact on public perceptions of science than do all but a handful of “real” scientists. She further argues that those fictional scientists all-but-inevitably fall into one of several archetypes: the evil alchemist, the noble scientist (hero), the foolish scientist, the inhuman researcher, the scientist as adventurer, the mad or evil scientist, and the helpless scientist.

Haynes updates her argument in a recent article in *Public Understanding of Science* titled “From alchemy to artificial intelligence.”²⁵ In it, she revisits her seven archetypes of the scientist. Haynes implies that biology has taken on a central role in the negative stereotyping of scientists. She begins her article writing, “Just when scientists were beginning to redeem their image by reinventing themselves as ‘green,’ delivering the planet from the poisons developed by industrial chemists, biologists have fallen into the moral depths—again.”²⁶ She also calls the Frankenstein story the “most powerful and most common myth of our time.” While this might be read as a call to focus on biologists, she proceeds to focus on scientists generally.²⁷ This failure to investigate nuance is indicative of her greatest weakness: she generalizes and is ahistorical.

In her article, Haynes claims that “Albert Einstein so successfully cast himself in the role of the benign, absent-minded genius that his involvement at a theoretical level in

²⁴ Roslynn D. Haynes, *From Faust to Strangelove: Representations of the Scientist in Western Literature* (Baltimore and London: Johns Hopkins University Press, 1994).

I mention that it is my favorite partly to point out a fun book to the reader, but also because I am about to be quite critical and want to emphasize the book is still worthwhile.

²⁵ Roslynn D. Haynes, “From Alchemy to Artificial Intelligence: Stereotypes of the Scientist in Western Literature,” *Public Understand of Science* 12 (2003), 243-253.

²⁶ Haynes, “From Alchemy to Artificial Intelligence,” 243.

²⁷ Haynes, “From Alchemy to Artificial Intelligence,” 243.

the development of nuclear weapons was glossed over, overshadowed by the one formula that everyone remembers.”²⁸ This claim is true in a post-Cold War context, but completely backward for much of the post-1945 period. Einstein was associated very heavily with the atomic bomb, despite not having much to do with it. This misunderstanding might not be a problem if she limited herself to discussing the present; however, she also refers to historical characterizations of Einstein. For instance, she sees a 1945 poem that attributes responsibility for the Bomb to Einstein as unusual. This is because she does not examine the post-war period systematically. Had she done so, she might have come up with a more nuanced view of Einstein; one that changed over time, such as is attempted in *Einstein as Myth and Muse*. This failure to historicize is also present in *From Faust to Strangelove*. While she does examine historical conceptions of the scientist, she does not do so in a systematic way that keeps their original contexts in mind.

Another problem with Haynes is that, beginning around the time that *From Faust to Strangelove* was published (1994), a new scientist began emerging as a character in popular fictions; one whose characterization bucked Haynes’s paradigm for the portrayal of scientists in Western culture. I refer, of course, to the subject of this thesis: Stephen Hawking.

Nuclear Fear

Although Haynes’ book is a classic, it is not the only one. Another classic book in the field is Spencer Weart’s *Nuclear Fear: A History of Images*. Weart’s conclusion is that “Modern thinking about nuclear energy employs imagery that can be traced back to a

²⁸ Haynes, “From Alchemy to Artificial Intelligence,” 248.

time long before the discovery of radioactivity.”²⁹ By looking at popular representations of nuclear energy, radiation, and the like since the late-19th Century, he is able to show continuity with much older images. He concludes that some of the central myths regarding nuclear energy, prevalent at the height of the Cold War, were based, not in reality, but upon long existing cultural ideas—such as alchemy.

Frankenstein's Footsteps

Another interesting book is *Frankenstein's Footsteps*.³⁰ Turney's book is more explicitly historical than *The DNA Mystique*. Turney charts the Frankenstein myth from Mary Shelley to the present, using it as a device to interrogate contemporary popular culture on genetics, and science more generally. I am less fond of this book than *The DNA Mystique*. Whereas Nelkin and Lindee examine the early 20th century to draw a direct parallel between that well known eugenics movement and the present, Turney examines late-19th century popular culture for its own sake; something that is undoubtedly worthwhile in a history of the period, but which makes some of the book seem irrelevant to the conclusions later drawn about the present.

Spectacular Nature

Spectacular Nature represents a different way of addressing science and popular culture.³¹ Susan Davis examines the way in which popular conceptions about nature influence, and are shaped by, the corporate aims of Sea World. She shows us how the

²⁹ Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge, Mass. and London: Harvard University Press, 1988), 421.

³⁰ Jon Turney, *Frankenstein's Footsteps: Science, Genetics and Popular Culture* (New Haven and London: Yale University Press, 1998).

³¹ Susan G. Davis, *Spectacular Nature: Corporate Culture and the Sea World Experience* (Berkeley and Los Angeles: University of California Press, 1997).

corporate interests influence not only the park itself, but also its research and educational programs. This corporate angle is quite different from the types of analysis done by the previously mentioned authors, and so comes across as quite original. (It also fundamentally changes how one views a trip to a theme park!)

Primate Visions

Donna Haraway does her own thing in *Primate Visions* but occasionally focuses on popular culture.³² Haraway is concerned with primatology generally, and many chapters focus on the scientific aspects of the field. Nevertheless, several chapters, most notably, "Apes in Eden, Apes in Space: Mothers as a Scientist for National Geographic" do deal with the intersection of primatology and popular culture. Haraway offers sophisticated analysis with a feminist bent. The culture she paints, showing the connections between teaching apes sign language and the "King Kong" movies, could be favorably compared with any of the theorists in this chapter. However, such analysis is not Haraway's primary concern.

Conclusion

A number of other books and articles are listed in the bibliography. I have been avoiding discussing the myriad articles in the area. However, one article should be noted because of the author. Harry Collins wrote "Certainty and the Public Understanding of Science: Science on Television."³³ Additionally, a series of three review essays, surveying the public understanding of science literature were published in the *Handbook*

³² Donna Haraway, *Primate Visions: Gender, Race and Nature in the World of Modern Science* (New York: Routledge, 1989).

³³ H. M. Collins, "Certainty and the Public Understanding of Science: Science on Television," *Social Studies of Science*, Vol. 17, No. 4 (Nov., 1987), 689-713.

of Science and Technology Studies.³⁴ I mention both sources to emphasize that looking at science and popular culture has a well-established, and well-recognized, niche within the science studies community.

³⁴ Sheila Jasanoff, Gerald F. Markle, James C. Petersen, Trevor Pinch (eds), *Handbook of Science and Technology Studies, Revised Edition* (Thousand Oaks, London, New Delhi: Sage Publications, 1995).

CHAPTER 4 EARLY FAME TO LEADING THEORIST, 1974-1988

In this chapter, I argue that Hawking's public persona was almost exclusively driven by newspaper articles until 1985, and that newspaper articles continued to play a significant role after 1985. I also argue that hearsay played a major role in Hawking's characterization.

In 1988, the dust-jacket of *A Brief History of Time* heralded Hawking as having “achieved international prominence as one of the great minds of the twentieth century.”¹ His biographical blurb noted, he was “forty-six years old. He was born on the anniversary of Galileo's death, holds Newton's chair as Lucasian Professor of Mathematics at Cambridge University and is widely regarded as the most brilliant theoretical physicist since Einstein.”² One might assume that these claims are pure marketing hyperbole invented to sell more books. One aspect of his dust-jacket characterization that could fit that description is his self-comparison to Galileo.³ That observation had not been widely made in the media before the book's publication. Likewise, the claim that Hawking is “widely regarded as the most brilliant theoretical physicist since Einstein” is an exaggeration, even though it had been widely *reported* that he had been called that. However, the other two components of Hawking's

¹ Stephen W. Hawking, *A Brief History of Time: From The Big Bang to Black Holes* (Toronto, New York, London, Sydney, Auckland: Bantam Books, 1988).

² Hawking, *A Brief History of Time*.

³ While the publisher is more responsible for the dust-jacket than Hawking, he had compared himself to Galileo with that observation in the past.

characterization (that he is one of the great minds of the 20th-century and that he hold's the same chair as Newton) were both present in previous popular depictions.

Before the publication of *A Brief History of Time*, most of the references to Hawking were direct nonfictional. These references mostly occur in articles about black holes, but also crop up in articles about Hawking's PhD supervisor Dennis Sciama, in articles about conferences Hawking attended, and in reviews of books and documentaries that feature Hawking. A few tangential references were made, particularly towards the late 1980s. To my knowledge, there were no direct fictional references.

Early Taglines

The earliest references to Hawking occur in relation to his theories on black holes. They include no biographical information. For instance, in a 1974 *New York Times* article on using black holes as a power source, Hawking is mentioned because of his theory that there should be mini-black holes left over from the period immediately after the Big Bang.⁴ Likewise, in a 1979 *Washington Post* article, Hawking is mentioned at the end of a piece on an Einstein symposium.⁵ These articles are typical of the period. In these articles (and even in later biographical articles) Hawking invariably gets a "tagline." That is, a short, identifying phrase after his name. These taglines are one of the best ways to compare references to Hawking made in articles on disparate topics, and, in this early period, articles featuring Hawking are invariably on different topics. Only later does press coverage of Hawking grow to the point that one can compare articles that all cover the same topic, for example, the publication of *A Brief History of Time*.

⁴ Walter Sullivan, "Scientists Envision Tapping Power of the 'Black Holes,'" *New York Times*, Late City Edition (Mar 9, 1974), L+12.

⁵ Henry Mitchell, "From Here to Infinity: Pondering It All at the Einstein Symposium," *Washington Post* (Mar 8, 1979), C4.

The earliest Hawking taglines are relatively unimpressive. The most common formulation simply identifies him as being associated with Cambridge. For instance: “Stephen Hawking of Cambridge University,”⁶ “Physicist Stephen Hawking, 34, of Cambridge University,”⁷ “Stephen Hawking of Cambridge University”⁸ and “Stephen Hawking of Cambridge University in England.”⁹ There are also similar variants, as in “Stephen Hawking, a young British theorist.”¹⁰

Other taglines begin to comment on Hawking’s status as a leader in the field, or on his disability. One article claimed, “some experts already rate Hawking as one of the dozen most creative theoretical physicists of this century.”¹¹ A report on the previously mentioned Einstein symposium commented, “English theoretician Stephen Hawking was seen at every session in his wheelchair. He has sometimes been called the equal of Einstein in brilliance.”¹² Another article introduced him as, “Stephen Hawking, a leading black hole theorist.”¹³

It is noteworthy that Hawking was not the only person being compared to Einstein in the 1970s. In 1974, Paul Dirac, Hawking’s predecessor in the Lucasian Chair, was

⁶ Walter Sullivan, “Curiouser and Curiouser: A Hole in the Sky,” *New York Times Magazine* (Jul 14, 1974), 11.

⁷ Peter Gwynne, “Peering Into Black Holes,” *Newsweek* (Jan 24, 1977), 78 (756 words). (LexisNexis).

⁸ John J. O’Connor, “TV: ‘Key to the Universe’ Surveys Modern Physics,” *New York Times*, Late City Edition (May 24, 1977), L41.

⁹ Walter Sullivan, “Theorist Suggests ‘Black Holes’ May Be Explosive,” *New York Times*, Late City Edition (Oct 12, 1980), 27.

¹⁰ Walter Sullivan, “Scientists Envision Tapping Power of the ‘Black Holes,’” *NYT*, Late City Edition (Mar 9, 1974), L+12.

¹¹ Peter Gwynne, “Peering Into Black Holes,” *Newsweek* (Jan 24, 1977), 78 (756 words). (LexisNexis).

¹² Henry Mitchell, “From Here to Infinity: Pondering It All at the Einstein Symposium,” *Washington Post* (Mar 8, 1979), C4.

¹³ “Q&A,” *New York Times* (Aug 21, 1979), C3.

identified as “the British theorist P. A. M. Dirac, whom many physicists rank with Einstein.”¹⁴ Einstein was being used as a standard of intelligence.¹⁵ This is noteworthy because it partly explains why Hawking, who does not provide a new way of viewing the Universe, first began being compared to Einstein, who did; and, it is additionally noteworthy because Hawking would be used as the same type of standard, beginning in the 1990s.¹⁶

The 1980s

The 1980s saw a dramatic increase in the number of articles being written about Hawking. During the 1980s, there were two main ways of introducing Hawking: focusing on his disability and focusing on his genius. Of course, the two were not mutually exclusive and often appeared together, but some articles featured Hawking’s disability more prominently, while others downplayed or did not mention his disability.

Disability

In 1981, Hawking appeared in an article on science and disease in which the only other scientists mentioned were Einstein, Darwin, Newton, and Tesla.¹⁷ The article mentioned Hawking’s disability and called him a genius. The author, Malcolm Browne, wrote:

the British physicist Stephen Hawking, now 39 years old, has been progressively crippled and otherwise incapacitated by amyotrophic lateral sclerosis. But during

¹⁴ Walter Sullivan, “Curiouser and Curiouser: A Hole in the Sky,” *NYT Magazine* (Jul 14, 1974), 11.

¹⁵ The claim is my own, but see also, Alan J. Friedman and Carol C. Donley, *Einstein as Myth and Muse* (Cambridge: Cambridge University Press, 1985).

¹⁶ To the extent that when James Lighthill, Dirac’s Lucasian predecessor, died in 1998, he was described, not as having held Newton’s chair, but as having held the chair currently held by Hawking. See Ford Burkhart, “James Lighthill, 74, an Innovative Mathematician,” *New York Times*, Late Edition (Aug 2, 1998), L42.

¹⁷ Malcolm W. Browne, “Does Sickness Have Its Virtues?,” *New York Times* (Mar 10, 1981), C2.

the same period, Hawking's mathematical analyses of space and time in the vicinity of black holes have earned acclaim by colleagues as the work of rare and authentic genius.¹⁸

Later, advertisements for John Boslough's biography of Hawking would use the same "crippled genius" formula for identifying Hawking. A *New York Times* advertisement read, "British physicist Stephen Hawking is 42, and a victim of Lou Gehrig's disease. Yet he is widely admired as one of the most extraordinary scientific minds of our time, even hailed as 'an equal of Einstein.'"¹⁹

The same types of characterizations occurred in other articles. One article described Hawking as "a gifted English physicist who has made signal contributions to cosmology and particle physics." Adding, "That he has done so while paralyzed by a progressive disease of the central nervous has made him the object of a number of articles and profiles."²⁰ Likewise, "Although Dr. Hawking has been classed by some fellow theorists with Albert Einstein, he is admired almost as much for his ability to cope with a debilitating disorder of the nervous system."²¹ A few articles even included Hawking's disability in his tagline, to the exclusion of his scientific or intellectual credentials. For instance, the introduction: "Cambridge University professor Stephen Hawking, in the latter stages of Lou Gehrig's disease, . . ."²²

¹⁸ Malcolm W. Browne, "Does Sickness Have Its Virtues?," *NYT* (Mar 10, 1981), C2.

¹⁹ [Ad for *Stephen Hawking's Universe* by John Boslough], *New York Times Book Review* (Oct 21, 1984), 18.

²⁰ Timothy Ferris, "Earth and Air, Fire and Water," *New York Times Book Review* (Dec 2, 1984), 77.

²¹ Walter Sullivan, "Is There a Past in the Future?," *New York Times* (Dec 30, 1986), C13.

²² Patricia Brennan, "PBS' 'Creation of the Universe' in 90 Minutes," *Washington Post TV Week* (Nov 17, 1985), 10.

Hawking's disability is, obviously, a significant part of his public persona during the period. However, with the increase in biographical articles that occurred around the time *A Brief History of Time* was published, and with Hawking becoming the best known sufferer of amyotrophic lateral sclerosis, and with the increased role that visual mediums like television and film played in Hawking's public persona starting in the 1990s, Hawking's disability became more significant in later periods.

Leading Theorist, Successor to Einstein, Genius

Whether expressed as a comparison to Einstein, or as an assertion that Hawking is a leader in his field, or a flat assertion that he is a genius, the other prominent aspect of Hawking's public persona was claims about his intellect. Many of the quotations just used to demonstrate the way authors encapsulated Hawking's disability also demonstrate how they dealt with his genius and characterized his scientific stature. However, during this period, a majority of comments about Hawking's genius do not make reference to his disability, so it will be instructive to examine some such statements.

A *New York Times* article used a tagline comparing Hawking to Einstein, "Stephen Hawking of Cambridge University, who has been called the nearest thing to a living Einstein,"²³ A *Washington Post* article did the same: "the British cosmologist Stephen Hawking—who many believe is the greatest physicist since Einstein—."²⁴ Other articles make claims about Hawking's contributions to cosmology. For instance, in 1984, "Hawking is the leading force in cosmology, the effort to understand the nature and origins of the universe, and his contributions are nonpareil."²⁵ Likewise, he has been

²³ "Some Strangeness in the Proportion," *New York Times Book Review* (Sep 26, 1982), 18.

²⁴ John Tirman, "Cosmology Made Simple," *Washington Post* (Nov 26, 1984), C3.

²⁵ *Ibid.*.

called “one of the world’s greatest theoretical physicists,”²⁶ and “one of the giants of modern science.”²⁷ Similarly, in 1987, “Cambridge University physicist Stephen Hawking (currently Top Guy in that superbrainy field).”²⁸ While these types of sweeping claims of brilliance or prominence become much more common after the publication of *A Brief History of Time*, one should note that they do exist before that publication, problematizing any claim made about *A Brief History of Time* as *the* source of Hawking’s fame.

Hearsay and Attributed Sources

One might also note that before 1987 there is an awful lot of hearsay associated with the most extravagant claims about Hawking. “Many believe,” “has been called,” “has been classed” are all ways of shunting the responsibility for such characterizations to others. This type of nebulous attribution is journalistic controversy-avoidance (“ass covering”) and continues beyond this period, particularly in regards to comparisons with Einstein. Very few journalists feel comfortable making the comparison themselves, but feel no compunction about repeating other journalists’ reports of such comparisons. However, around 1987 journalists do begin to make more sweeping claims (i.e. “giant of modern science”) without attributing them to nebulous sources.

It is difficult to track down unattributed sources, particularly once Hawking’s public persona comes to include the fact that he has been compared to Einstein. Once it is common knowledge that the comparison has been made, Hawking’s public persona,

²⁶ Leon Jaroff, “Roaming the Cosmos,” *Time* (Feb 8, 1988), 58 (3 pages). (Infotrac).

²⁷ Boyce Resnberger, “Physicist Theorizes on Direction of Time,” *Washington Post* (Dec 26, 1986), A12.

²⁸ Alex Heard, “Out There: Happy 1987: Better Late Than Backward,” *Washington Post Magazine* (Jan 25, 1987), 7.

rather than a quotation from a source at a particular time and particular place, becomes the basis for the claim that he has been compared to Einstein.

There are examples, however, of early attributed quotations. For instance, Kip Thorne is responsible for the quotation, “I would rank him, besides Einstein, as the best in our field.”²⁹ Another such early source of quotations regarding Hawking’s intellectual stature and scientific achievement was his PhD supervisor, Dennis Sciama. During the 1970s, Sciama is quoted in several articles “talking up” Hawking’s work. For instance, in *Newsweek* in 1977, he claimed Hawking “has really caused a revolution in his science.”³⁰ A *New York Times* article claimed, “The noted British cosmologist, Dr. Dennis W. Sciama, believes such a [master] theory may already be taking form in the hands of one of his former research students, Dr. Stephen Hawking”³¹ In that same article, “The sophisticated mathematics Dr. Hawking developed” are called a “work of genius.”³² In 1980, Sciama went even further. A *New York Times* article paraphrased him, writing, “Dennis W. Sciama, described the revised concept of black holes as ‘a conceptual revolution’ to which theorists ‘are still trying to adjust.’”³³

Conclusion

I began the chapter by arguing that much of the characterization of Hawking by the dust-jacket of *A Brief History of Time* actually *was* reflective of previous popular

²⁹ Henry Allen, “The Mind in Pursuit of the Universe,” *The Washington Post* (Apr 15, 1988), B4.

³⁰ Peter Gwynne, “Peering Into Black Holes,” *Newsweek* (Jan 24, 1977), 78 (756 words). (Lexis Nexus).

³¹ Malcolm W. Browne, “Clues to Universe Origin Expected,” *New York Times*, Late City Edition (Mar 12, 1978), 54.

³² Malcolm W. Browne, “Clues to Universe Origin Expected,” *New York Times*, Late City Edition (Mar 12, 1978), 54.

³³ Walter Sullivan, “Theorist Suggests ‘Black Holes’ May Be Explosive,” *New York Times*, Late City Edition (Oct 12, 1980), 27.

characterizations of Hawking. As I hope I have demonstrated, that is true. However, the dust-jacket was not a neutral reflection of Hawking's public persona. As noted above, many magazine and newspaper articles reported that Hawking had been compared to Einstein and/or that Hawking was brilliant. However, the dust-jacket codified these comparisons. As we shall see below, after *A Brief History of Time*, writers refer back to the dust-jacket, rather than to the original comparisons. This has the dual effect of making the comparison seem less genuine,³⁴ but also increases its frequency significantly.

³⁴ By making it seem as if Hawking is claiming people have compared him to Einstein, instead of simply stating that people have compared him to Einstein.

CHAPTER 5 SCIENCE SUPERSTAR TO CULTURAL ICON, 1988-1999

In this chapter, I argue that the publication of *A Brief History of Time* drove Hawking's characterization early in this period. I further argue that Hawking's appearance on *Star Trek* in 1993 began the process that would end with Hawking as a cultural icon. I argue, towards the end of the chapter, that this process ends in 1999, with Hawking's appearance on *The Simpsons*. Finally, this is chapter in which I argue that one sees the shift from nonfiction references to tangential and fictional references as the driving force behind Hawking's public persona.

A Brief History of Time was published in April 1988. The book, and its enormous success, catapulted Hawking from a brilliant theorist leading his field, to the status of popularizer and "science superstar." Several new characterizations of Hawking, and new representations of Hawking using new mediums, also began after 1988. However, that does not mean that previous characterizations of Hawking vanished; indeed, they continued throughout the period.

Baseline: Science Superstar

Several major publications featured biographical articles about Hawking around the time that *A Brief History of Time* was published. I will compare three such articles: a February article in *Time* called "Roaming the Cosmos," an April article in *The Washington Post* called "The Mind in Pursuit of the Universe," and a June article in *Newsweek* called "Reading God's Mind."

“Roaming the Cosmos”

On February 8, 1988 *Time* published a Leon Jaroff article called “Roaming the Cosmos.”¹ Jaroff’s article is very descriptive and uses a great deal of imagery. He begins the article describing a scene in which:

down the crowded thoroughfare comes the University of Cambridge’s most distinctive vehicle, bearing its most distinguished citizen. In the motorized wheelchair, boyish face dimly illuminated by a glowing computer screen attached to the left armrest, is Stephen William Hawking, 46, one of the world’s greatest theoretical physicists.

Jaroff proceeded to describe Hawking’s history with ALS, transitioning to discussing Hawking’s scientific contributions by saying, “While ALS has made Hawking a virtual prisoner in his own body, it has left his courage and humor intact, his intellect free to roam. And roam it does, from the infinitesimal to the infinite, from the subatomic real to the far reaches of the universe.” Jaroff then described Hawking’s research areas. He mentioned Hawking holds Newton’s chair, and proceeded to describe a typical day for Hawking. After Hawking’s typical day, Jaroff discussed Hawking’s personal history, beginning with Hawking’s birth and the interjection that the date was “300 years to the day, [Hawking] often notes, after the death of Galileo.”

The article then has a good deal of biographical information, incorporating brief descriptions of Hawking’s theories after the narrative reaches Hawking’s entrance to graduate school. Towards the end of the article, Jaroff begins incorporating religious imagery into Hawking’s characterization. He quotes one of Hawking’s nurses, “There is an aura around [Hawking], a spiritual atmosphere. He is going to end up as a saint.” Jaroff also uses Martin Rees’ phrase “the physicists’ Holy Grail” in reference to the

¹ Leon Jaroff, “Roaming the Cosmos,” *Time* (Feb 8, 1988), 58 (3 pages). (Infotrac).

possibility of a Grand Unified Theory. Finally, Jaroff quotes Hawking himself, in his “provocative” question that, if Hawking and James Hartle’s “no boundary” condition of the universe is true, “What place, then, for a Creator?”

“The Mind in Pursuit of the Universe”

On April 15, 1988, *The Washington Post* published an article by Henry Allen called “The Mind in Pursuit of the Universe.”² In the article, Allen provides a detailed description of a small meeting, involving Hawking, two other physicists, and several journalists, that he attended. He uses the meeting as an organizational tool, giving the article a pleasing cohesive quality. Allen is also self-consciously playing with the ways in which Hawking is characterized, particularly with religious imagery.

After setting the stage for the meeting, Allen introduced Hawking. He wrote, “They awaited an answer from the third physicist, who was slumped in a wheelchair. [Paragraph] This was Stephen Hawking, the British black-hole theorist, hero of science and author of a new book titled, with Hawkingesque wit, ‘A Brief History of Time.’” Allen proceeded to describe Hawking’s disability. He transitioned to describing Hawking’s theoretical work by mentioning the things that Hawking has achieved despite having ALS, including holding Newtons’ chair.

After some more description of the small press conference, Allen does his own survey of the ways in which Hawking is characterized. He quotes John Boslough’s biography, “He is our planet’s most fully developed cerebral creature, a man who lives to think.” Carl Sagan in the introduction to *A Brief History of Time*, calls him “A legend.” Allen even takes a potshot at *Time*, writing:

² Henry Allen, “The Mind in Pursuit of the Universe,” *Washington Post* (Apr 15, 1988), B1.

In *Time* magazine, where the instinct for beatification lingers on, even two decades after Henry Luce's death, American physicist Rocky Kolb was quoted recently as saying: "In general relativity and early cosmology, Hawking is the hero." Cal-Tech physicist Kip Thorne: "I would rank him, besides Einstein, as the best in our field." And the former nurse quoted above, claiming Hawking would "end up as a saint."

Jumping ahead in the article, he later writes, "Hawking is already part of the folklore and hagiography of modern physicists—beliefs that have little to do with the science these people do, but a great deal to do with the importance that we attach to it." After the *Time* quotations, Allen returned to his description of the press conference. After a brief question and answer from Hawking, the article turned to a biographical narrative, followed by a discussion of the nature of science, including mentions of Einstein and Oppenheimer.

After which, Allen wrote about Hawking's voice synthesizer, mentioning that Hawking often jokes that it has an American accent. Allen disagreed, claiming, "It sounded like the accent of an Eastern European who might have lived in Canada, sinuous but with all the vowels formed in the front of the mouth." He also described the ways that people talked to Hawking (slowly) and the ways that Hawking's voice synthesizer disrupted normal speech patterns. Allen closes the article with a fairly long description of the end of the press conference.

One unexamined aspect of Allen's is that he plays with religious imagery. Such imagery is sprinkled throughout the article, and is obviously more self-conscious than Jaroff's religious imagery. Early in the article, Allen proposes a name for the scene (the press conference) he is describing: "The Lost Priesthood of the Physicists (Attended by Journalists): Late 20th Century." He calls the Grand Unified Theory (GUT) "The Grail" and calls Hawking "a knight in search of it." He mentions Hawking claiming that a GUT would let us know "the mind of God," but also includes Hawking's "What place, then,

for a creator?” quotation. He explicitly uses religious imagery again, pairing it with the idea of transcendence. He writes:

Hawking and his world have transcended these barbarisms. [Paragraph] Like saints, physicists are credited with the knowledge of God. Hawking might be a candidate for latter-day sainthood of this order—he is a living example of the transcendent mind, a human with all the virtues of science-fiction beings in galaxies eons ahead of ours, pure brain, no body, a man mortified beyond carnal temptations.

However, he immediately subverts this characterization, writing, “However, [one of Hawking’s intimates] will urge that you ‘Try not to get into this disembodied-brain business that everybody talks about with Hawking. He can be a real SOB when he has to.’”

“Reading God’s Mind”

On June 13, 1988 *Newsweek* published an article by Jerry Adler, Gerald C. Lubenow, and Maggie Malone called “Reading God’s Mind.”³ The article is less-obviously self-conscious in its depiction of Hawking.

The article begins and ends with the black hole metaphors mentioned above in “Historiography: Hawking and H  l  ne Mialet.” After the initial black hole metaphor, the authors describe the effects of Hawking’s ALS, ending the paragraph with the claim, “Hawking is trying to read the mind of God.” After that claim, the authors describe the way that Hawking is characterized on the dust-jacket of *A Brief History of Time*, including: that Hawking’s birthday was 300 years after Galileo’s death, that Hawking holds Newton’s chair, and that he has been compared to Einstein.

³ Jerry Adler, Gerald C. Lubenow, and Maggie Malone, “Reading God’s Mind,” *Newsweek* (Jun 13, 1988), 56 (2839 words). (LexisNexus).

The authors move on to describe Hawking's search for a Grand Unified Theory, commenting, "Necessarily, Hawking pursues these questions on a purely cerebral level." They went on to describe Hawking's theories, transitioning into biographical material. The authors then described a visit to Hawking's office. During the description of that visit, they comment that Hawking's "terse remarks take on an oracular quality that can preclude disagreement." The authors turn away from their visit to Hawking's office to observe, "There is a self-righteous streak in Hawking that some colleagues find nettlesome." They go on to describe a priority dispute that Hawking pursued in *A Brief History of Time* for one of his friends. They end, as already mentioned, with the metaphor of a black hole.

A Comparative Turn

All three articles use religious imagery in describing Hawking and/or physics. All three articles mention that Hawking is searching for a Grand Unified Theory. All three articles mention the idea of transcendence. Two articles try to subvert (nuance?) some aspect of Hawking's public persona: "The Mind in Pursuit of the Universe" juxtaposes all of its religious imagery with someone saying that Hawking is no saint, that "he can be a real SOB when he has to;" likewise, "Reading God's Mind" describes a priority dispute in which Hawking seems out of line and eventually apologizes. Despite these subversions, all three articles are uncritical about other aspects of Hawking's public persona and replicate them.

Of the three, "The Mind in Pursuit of the Universe" is the only article to go beyond quoting the back of *A Brief History of Time* in examining the ways that Hawking has been characterized. That examination, and the playful way that Allen throws in (particularly religious) imagery, forces the conclusion that Allen is self-conscious about

his role in furthering the “Hawking myth.” However, while that complicates the themes Allen uses, it by no means stops him from reproducing aspects of Hawking’s public persona.

Taglines and Short Descriptions

The biographical articles just mentioned make an interesting baseline because they are quite similar in content and were all published within a few months of each other. However, after the initial burst following the publication of *A Brief History of Time*, there are few comparable groups of articles. Even the release of the film version of *A Brief History of Time* did not generate the same slew of biographical articles. So, I return to a technique already familiar to the reader: taglines.

In the 1980s, there were relatively few taglines in each category, so I combined three themes into a single category referring to Hawking’s intellect. In the 1990s, those three themes each come into their own: Hawking’s fame, his being compared to Einstein, and claims about his genius. The other category from the 1980s—that Hawking is disabled—recurs, but has changed considerably. In addition, there are also three new categories: disembodiment, Hawking as a hero, and what I have termed “Ultimate” claims. Finally, there are a few taglines that defy easy categorization. For instance, in an article on faith, the author writes, “Science is the third force that kneads our faith. Stephen Hawking and Carl Sagan personify it.”⁴ This does not fit neatly into any category. A few other odd references to Hawking exist, but, given the number of articles, there are surprisingly few such “rogue” claims.

⁴ John Wheeler, “Theme for the 90’s: A Rebirth of Faith,” *New York Times*, Late Edition (Dec 31, 1988), L23.

I would dispute that Hawking personified science in 1988. Hawking personifying science does not become a major theme until after 1999. It is discussed below, in “Cultural Icon.”

Famous

References to Hawking's fame are the most common taglines during this period, beating out comparisons to Einstein. References to Hawking in this category tell the reader (and reinforce) the idea that Hawking is a famous cosmologist/physicist/scientist. While this may initially sound straightforward, there are a wide range of ways of claiming that Hawking is famous. For instance, one could claim that he is "one of this century's most important scientific thinkers."⁵ Contrast this with, "The renowned British astrophysicist Stephen W. Hawking of Cambridge University."⁶ Also, "the famed physicist Stephen Hawking,"⁷ versus "Earth's most celebrated cosmologist."⁸ The less energetic portrayals of Hawking disappears around 1993.

During this period, very few authors feel the need to quote someone else's evaluation of Hawking, but a few do. For instance, one writer quotes White and Gribbin's claim that Hawking is "perhaps the greatest physicist of our time."⁹ However, they are overshadowed by the many references that take the form of: "one of the world's leading physicists,"¹⁰ "the world's most famous living physicist,"¹¹ "the reigning guru of

⁵ "Separated, Stephen Hawking," *Time* (Aug 13, 1990), 73.

⁶ Malcolm W. Browne, "New Direction in Physics: Back in Time," *New York Times* (Aug 21, 1990), L C1.

⁷ Timothy Ferris, "When Science is the Star," *New York Times* (Aug 16, 1992), H7.

⁸ Michael A. Lipton, "Trek Stop: Physicist Stephen Hawking Beams Aboard the Enterprise to Film a Painstaking Cameo," *People* v39, n25 (June 28, 1993), 81 (2 pages). (Infotrac).

⁹ Leon Jaroff, "Stephen Hawking: A Life in Science," *Time* (Jun 8, 1992), 88 (2 pages). (Infotrac).

¹⁰ Michael D. Lemonick, "Black Holes and Baby Universes and Other Essays," *People* v40, n15 (Oct 11, 1993), 35 (2 pages). (Infotrac).

¹¹ Richard Jerome with Vickie Bane and Terry Smith, "Of a Mind to Marry," *People* v44, n6 (Aug 7, 1995), 44 (3 pages). (Infotrac).

the cosmic and mysterious in modern physics – Stephen Hawking,”¹² and “Stephen Hawking, perhaps the best known scientist alive.”¹³

In addition to those taglines, there are a number of articles that use a more complicated short description. For instance, “Dr. Hawking, author of the best-selling book, ‘A Brief History of Time,’ is probably the most famous physicist in the world – a tribute to his genius as both a theoretician and a self-promoter.”¹⁴ One article used Hawking as a standard of fame within an academic field, “Johan Huizinga remains today, just as he was 70 years ago, a giant among giants. His name is to medieval and Renaissance history what Richard Lattimore is to the classics, what Stephen Hawking is to physics.”¹⁵ Likewise, “Few outside the physics community will recognize his name as easily as those of his famous colleagues Albert Einstein and Stephen Hawking – or even of his graduate student Richard Feynman.”¹⁶ Similarly, a later article on fashion uses Hawking as a standard of celebrity, “Look at Stephen Hawking and all the people who tune in to hear him talk about the universe. Now there’s a star!”¹⁷

A few articles have paired Hawking’s fame with his disability, “the 51-year-old Cambridge University professor is probably the best-known scientist in the world. [And],

¹² James Gorman, “Can He Explain the Vulcan Mind Meld?,” *New York Times Book Review* (Nov 26, 1995), 11.

¹³ Timothy Ferris, “A Lively Jaunt Through the Corridors of Science,” *CNN.com* (Oct 13, 1998), <http://www.cnn.com/books/reviews/9810/13/whole.shebang/index.html>. Accessible Feb 15, 2005.

¹⁴ George Johnson, “What a Physicist Finds Obscene,” *New York Times* (Feb 16, 1997), E4.

¹⁵ Melissa Bennelts, “A Look into Medieval Sensibilities Knightly Prowess and Courtly Love Revealed,” *Christian Science Monitor* (Apr 25, 1996), 21 (672 words). (ProQuest).

¹⁶ Michael Riordan, “The Nuclear Family,” *New York Times Book Review* (Oct 4, 1998), 24. This reference could just as easily fall in the comparison with Einstein section, but it fits quite nicely here.

¹⁷ Malcolm McLaren and Holly Brubach, “Being and Nothingness and Kate Moss,” *New York Times Magazine* (May 21, 1995), 63.

Hawking is in a wheelchair too, the victim of a degenerative nerve disease that left him as paralyzed as his youthful audience.”¹⁸ Although most articles mention Hawking’s disability, the close pairing of fame and disability in Hawking’s tagline is less common than it was in the 1980s.

Finally, at least one article makes hyperbolic claims about Hawking’s scientific status. A *Time* article refers to Hawking as a “famed physicist, best-selling author and all-around science god.”¹⁹ Obviously the author does not mean to imply that he is a pantheist and that Hawking is literally a god of science (although, it does have an interesting resonance with the religious imagery common in biographical treatments of Hawking). Similarly, in the popular magazine *Astronomy*, the author claims, “[Hawking] has been called a science super-star, the successor to Albert Einstein, even Master of the Universe. Stephen Hawking is certainly one of the most famous scientists in the world today.”²⁰ This hyperbolic claim also contains a report of a comparison with Einstein, the next category to be examined.

Einstein

The second common tagline in the period mentions that Hawking has been compared to Einstein, or, more often, that he is the best scientist/physicist/intellect since Einstein. These references often bleed over into either claims about Hawking’s fame or about his genius. However, references to Einstein are so common that they deserved their own category. Additionally, comparison to Einstein plays a role in other chapters, so tracing the history of such comparisons has definite merit.

¹⁸ Michael D. Lemonick, “Hawking Gets Personal,” *Time* (Sep 27, 1993), 80.

¹⁹ “Stellar Guest,” *Time* (April 19, 1993), 73.

²⁰ Russ Sampson, “Two Hours with Stephen Hawking,” *Astronomy* (Mar 93), 13 (2 pages). (EBSCO).

As seen above, comparisons to Einstein have been around since as early as 1979, and were commonly made in the 1980s using hearsay. This pattern continues. For instance, “Considered by many the most brilliant theoretical physicist since Albert Einstein.”²¹ Like references to Hawking’s fame, a few comparisons with Einstein get linked with Hawking’s disability. For instance:

the British physicist-mathematician considered by many to be the greatest mind since Einstein. A victim of amyotrophic lateral sclerosis (“Lou Gehrig’s disease”), Hawking is confined to a wheelchair and can talk only with a voice synthesizer, yet he has become a world-renowned scientist and best-selling author of *A Brief History of Time: From the Big Bang to Black Holes*.²²

Another longer, short description is self-conscious in its comparison with Einstein. The *Newsweek* article claims:

It’s become cliché to compare Hawking to Einstein, as in ‘the greatest physicist since . . .’ But unlike Einstein’s, most of Hawking’s work, on black holes, is not proved (though widely accepted). On one measure, however, there is no doubt that Hawking, 50, resembles Einstein: he is the most celebrated scientist of his time.²³

However, as with references to Hawking’s fame, the most common comparison to Einstein is simple.

Such simple comparisons to Einstein can look like: “Colleagues have called him the inheritor of Albert Einstein’s mantle as the leading theoretical physicist of his day,”²⁴ “A cosmologist at Cambridge University, he is sometimes described as the most brilliant

²¹ Joseph P. Shapiro, “Shortchanging the Disabled,” *U.S. News & World Report* v105, n4 (July 25, 1988), 50.

²² “Suiting Science to a T-shirt, two Chicago Bar Owners Set up a Stephen Hawking Fan Club,” *People* v32, n11 (Sep 11, 1989), 111.

²³ Sharon Begley with Jennifer Foote, “Why Past is Past,” *Newsweek* (Dec 28, 1992), 52 (1170 words). (LexisNexis).

²⁴ “Stephen Hawking’s Story on Film ‘A Brief History of Time’ Reconfirms Erol Morris’s Genius as a Filmmaker,” *Christian Science Monitor* (Aug 24, 1992), The Arts, 14.

and best-known scientist since Einstein, a premier explorer of space and time,”²⁵ or “Stephen Hawking was born on the 300th anniversary of Galileo’s death. He has come to be thought of as the greatest mind in physics since Albert Einstein.”²⁶

Genius

The other category that comparisons to Einstein overlap with is claims that Hawking is a genius. A few such claims to genius are made indirectly. For instance, in a book review of *Cardinal of the Kremlin* a character is described on working on “problems so intricate only genius-class I.Q.’s can comprehend let alone solve them Awed colleagues compare him to Stephen Hawking and Freeman Dyson.”²⁷ However, most such claims are both direct and simple. For instance, an article quoting Brent Spiner saying that Hawking is “the smartest man in the universe.”²⁸ Other taglines incorporate Hawking’s disability with his mind, as in, “the brilliant, paralyzed British physicist.”²⁹

Disembodied

One of the new aspects of Hawking’s public persona during this period is the implication that his disability has left him a disembodied mind. This is the characterization attacked by Hélène Mialet. Hawking’s disembodiment can be subtle, as in the phrasing of the title of a *Washington Post* article: “A Mind that Roams the

²⁵ John Noble Wilford, “Signoff,” *New York Times Television* (Oct 12, 1997), 55.

²⁶ “A Science Odyssey: People and Discoveries: Stephen Hawking,” *PBS.org* (c1998), <http://www.pbs.org/wgbh/aso/databank/entries/bphawk.html>. Accessible March 2005.

²⁷ Robert Lekachman, “Making the World Safe for Conventional War,” *New York Times Book Review* (Jul 31, 1988), 6.

²⁸ Michael A. Lipton, “Trek Stop: Physicist Stephen Hawking Beams Aboard the Enterprise to Film a Painstaking Cameo,” *People* v39, n25 (June 28, 1993), 81 (2 pages). (Infotrac).

²⁹ Belinda Luscombe, “In Physics, The Naked Win,” *Time* (Feb 24, 1997), 77.

Universe.”³⁰ It can also come from a juxtaposition of Hawking’s mind and body. For instance, “But not even the fascination of this superbly functioning brain imprisoned in a nonfunctioning body can explain the hold his ideas have on people.”³¹ Likewise, “His body may be confined to a wheelchair, but the mind of Stephen Hawking soars, grappling with the most profound mysteries of the universe.”³² The theme of disembodiment has also been a muse to at least one person:

Hawking, the professor of physics at Cambridge University noted for his theories of the origin and destiny of the universe, is almost totally paralyzed by amyotrophic lateral sclerosis (Lou Gehrig’s disease). For [Philip] Glass, he became the very personification of the metaphor of voyaging as an activity for the mind, unfettered even by grave physical incapacity.³³

As I noted in the chapter on Mialet, while the disembodiment theme exists, it is problematic to emphasize the theme because Hawking’s personal life challenges the theme, and other representations actively subvert it.

Hero

One of the new characterizations of Hawking during this period is that he is a hero. While this characterization is new for Hawking, it is a common trope in the characterization of scientists generally, as noted by both Dorothy Nelkin and Roslynn Haynes. Nelkin has argued that, “Scientists still appear to be remote but superior wizards, culturally isolated from the mainstream of society. Such heroic images are most

³⁰ Rudy Rucker, “A Mind that Roams the Universe,” *Washington Post Book World* (Apr 3, 1988), 7.

³¹ Robert L. Park, “A Cosmology of Your Very Own,” *New York Times* (Oct 9, 1992), A33.

³² “Hawking’s Vision,” *Discover* (March 1999), 18.

³³ James R. Oestreich, “A Persistent Voyager Lands at the Met,” *New York Times Magazine* (Oct 11, 1992), 26.

apparent in press reports about prestigious scientists, especially Nobel laureates.”³⁴

Likewise, though dealing with fictional scientists, one of Haynes’ archetypes is “the ‘noble scientist’ as hero or savior of society.”³⁵

Hawking’s heroic characterization first appears during the early part of this period, with the number of articles explicitly claiming heroic status declining after 1993. However, even after 1993, it plays a role in Hawking’s characterizations in other mediums.

In a story about a Hawking fan club that had been distributing thousands of shirts, Hawking is called a hero. The *People* article claimed what was needed was “Not just the sports kind or the movie star kind, but heroes like, well, like Stephen Hawking.”³⁶ Other characterizations of Hawking make reference to the idea of a film hero. For instance, referring to the film adaptation of *A Brief History of Time*, “There are one or two uneasy Science Heroes in film, embodied most recently by a computer-voiced, wheelchair-bound but mesmerizing Stephen Hawking.”³⁷ Likewise, an example from before 1991, “the well-known British cosmologist who first proved so many of the theoretical results about black holes. Severely crippled by a wasting disease . . . He would be a wonderful scientist-hero in any science-fiction movie, including the one we live in.”³⁸

³⁴ Dorothy Nelkin, *Selling Science: How the Press Covers Science and Technology, Revised Edition* (New York: W. H. Freeman and Company, 1995; originally published 1987), 14.

³⁵ Roslynn Haynes, “From Alchemy to Artificial Intelligence: Stereotypes of the Scientist in Western Literature,” *Public Understanding of Science* 12 (2003), 244.

³⁶ “Suiting Science to a T-shirt), two Chicago Bar Owners Set up a Stephen Hawking Fan Club,” *People* v32, n11 (Sep 11, 1989), 111.

³⁷ Carol Muske Dukes, “Evil Science Runs Amok—Again!,” *New York Times* (Jun 10, 1993), A27.

³⁸ Rudy Rucker, “A Mind that Roams the Universe,” *Washington Post Book World* (Apr 3, 1988), 7.

Finally, some references to Hawking call him heroic, instead of using hero as a noun. For instance, in an article about the director of the film version of *A Brief History of Time* published before the release of the movie, the author wrote, “Professor Hawking suffers from amyotrophic lateral sclerosis, sometimes known as Lou Gehrig’s disease, which involves a progressive degeneration of the muscles. ‘Stephen Hawking is a very heroic character,’ Mr. Morris said.”³⁹

Disabled

As has just been shown, many characterizations of Hawking are occasionally paired with references to his disability. Those instances are the same types of taglines found in the 1980s. However, in the 1990s, a new element of Hawking’s public persona emerges that revolves around his disability: Hawking becomes the most famous sufferer of amyotrophic lateral sclerosis.

For instance, a number of articles exist in which the subject is amyotrophic lateral sclerosis, or someone else with ALS, and Hawking is brought in as the most famous sufferer. For instance, in an article on genetics, “The map of chromosome 21, for example, will prove useful for those seeking to pluck out the gene that in its mutant form results in amyotrophic lateral sclerosis, or Lou Gehrig’s disease, the crippling disorder that afflicts physicist Stephen Hawking.”⁴⁰ Likewise, “There is no known cure for A.L.S. which killed the baseball star Lou Gehrig and with which the world-renowned physicist Stephen Hawking is afflicted.”⁴¹

³⁹ Lawrence Van Gelder, “At the Movies,” *New York Times* (Jun 1, 1990), C12.

⁴⁰ Natalie Angier, “Big Gains Reported in Project to Map Human Genetic Makeup,” *New York Times* (Oct 1, 1992), A22.

⁴¹ Susan Pearsall, “Voices for Those Lost to Disease,” *New York Times* (Mar 9, 1997), Connecticut Weekly 1.

Although I have not explored it yet, this highlights an aspect of the public understanding of science that could be quite interesting to those in social studies of science: Hawking comes to symbolize a disease, even though he has a remarkably uncommon form of that disease. Most suffers of ALS die relatively quickly, while Hawking has survived for nearly four decades.

A Brief History of Time's Clarity

One of the most controversial areas of Hawking's public persona revolves around the readability of *A Brief History of Time*.⁴² Initial responses to the book lauded it as an exemplar of science popularization. To wit:

Stephen W. Hawking of Cambridge University, who has survived Lou Gehrig's disease for more than two decades, has been a world leader in the effort to bring these two provinces [quantum physics and relativity] together. In a jaunty and absolutely clear little book, he shares ideas about the universe, its origins and its fate, with everyone who can read, along with some provocative revelations of his own motivations, hopes, mistakes and prejudices. His book is a rare sharing of confidence by a scientist with uncommon courage, a dazzling vision and an impish sense of humor.⁴³

This characterization was shared by many, and still crops up occasionally in the "Cultural Icon" period.

However, soon after *A Brief History of Time* was published, a vocal dissent appeared. A *Washington Post* critic titled an article on the book "A Theory of Relative Confusion" and began by writing "Damn you, Stephen Hawking. Damn you and your book."⁴⁴ Two days before the *New York Times* named Hawking's book one of the best of the year (the quotation above), a *Washington Post* article claimed, "The problem with

⁴² The other major controversy being the publication of his first wife's tell-all in 1999 (but after the end of the period being examined) and the anti-hagiographic articles it spawned.

⁴³ "Editors' Choice: The Best Books of 1988," *New York Times Book Review* (Dec 4, 1988), 3.

⁴⁴ Richard Cohen, "A Theory of Relative Confusion," *Washington Post Magazine* (Jun 26, 1988), 5.

Hawking's book is that it is utterly incomprehensible."⁴⁵ Lest one think that the criticism of the book was limited to the *Washington Post*, a *New York Times* review of the film version of *A Brief History of Time* was titled "If You Fumbled the Book, You'll Love the Movie."⁴⁶ A *New York Times* tagline from 1995, even managed to incorporate the incomprehensibility of Hawking's book, "The physicist Stephen Hawking is a mini-celebrity, as notable for writing a best seller, 'A Brief History of Time,' which few laymen can comprehend, as he is for coping with the onslaught of Lou Gehrig's disease."⁴⁷ Although no clear resolution exists, one can posit a tentative consensus that, regardless of its intrinsic readability, *A Brief History of Time* was not *as* easy to read as was initially claimed.

Quasi-Metaphors Galore

One of the most interesting aspects of Hawking's public persona during this period is the way in which Hawking's name is used as a standard. This quasi-metaphorical use began in 1993, the same year that Hawking appeared on *Star Trek: The Next Generation* (the same week Hawking's appearance was announced in *Time*, in the earliest case I am aware of). In terms of further context, the film version of *A Brief History of Time* was released in 1991; and the White and Gribbin biography was released in 1992.

The most common quasi-metaphorical use of Hawking's name is as a standard of intelligence. This is also the most common metaphorical use of Einstein's name. What, then, is a *quasi*-metaphorical reference? A metaphorical use of Hawking's name would

⁴⁵ Charles Krauthammer, "A Mysterious Parable," *Washington Post* (Dec 2, 1988), A27.

⁴⁶ Vincent Canby, "If You Fumbled the Book, You'll Love the Movie," *New York Times* (Aug 21, 1992), C3.

⁴⁷ Daniel S. Greenberg, "The Vanishing Heroes of Science," *New York Times*, Late Edition (July 4, 1995), 31.

resemble: “He was no Hawking,” or “It didn’t take a Hawking to figure out.” This is the way in which Einstein’s name is used. However, during this period, Hawking’s name is used in the same context, but the form of the references is different. For example, instead of “He was a real Hawking,” one sees, “He was compared to Stephen Hawking.” In other words, references using Hawking as a standard refer to the flesh-and-blood Stephen Hawking. I call them quasi-metaphorical because the references fill the same niche as metaphors, and, after 1999, one begins to see a transition to actual metaphors.

Hawking as a Cosmological Expert

The earliest example of Hawking being used as a standard, that I am aware of, occurred in a sports column in April 1993.⁴⁸ The author uses a metaphor in which the Nets are equated with the Universe, and, Hawking is referenced as an expert on the Universe. The author writes, “Are the Nets in the process of building a championship contender or collapsing into another state of suburban decay? Stephen Hawking would have trouble figuring out the evolution of their universe.”⁴⁹ A later metaphor, relies on Hawking as an expert on black holes. The author writes, “A wall of paper. No, not a wall. A *mass* so dense and impenetrable that Stephen Hawking could not probe it.”⁵⁰ This type of metaphor relies on the knowledge that Hawking is a theoretical physicist, and in the second case, that he is an expert on black holes. This type of quasi-metaphor is also the least metaphorical of any of the types to be discussed. It is included because it

⁴⁸ Sports writers use Hawking quasi-metaphorically more often than one might expect. My theory is that sports writers are expected to write both colorfully and simply, making metaphors a necessity. Fresh metaphors (as Hawking was in 1993) would be ideal, but Hawking was not yet ubiquitous enough. A pure metaphor would confuse some people, and might seem strained. From the point of view of the writers, these quasi-metaphors provide almost all of the benefits that a metaphor would, but avoid the potential pitfalls. From the historical point of view, they paved the way for true metaphors.

⁴⁹ Harvey Araton, “Is This Just a Brief Moment in Time for Nets?,” *New York Times* (April 16, 1993), B13.

⁵⁰ Stanley Bing, “Executive Decisions: Spring Cleaning,” *New York Times* (June 12, 1994), F11.

forms a continuum of tangential references to Hawking, beginning with this type, moving through Hawking as a standard of intelligence and complexity, and ending in true metaphors in the next period to be examined.

Hawking as a Standard of Intelligence

Another tangential reference to Hawking, this one properly deserving the title quasi-metaphorical, is also first seen in a sports column. Quoting Don Imus, the author writes, “If Stephen Hawking wrote a playbook, the Pacers wouldn’t win.”⁵¹ This does not rely on Hawking as an expert on the Universe or on black holes. Rather, Hawking is a true standard of intelligence, akin to Einstein. Likewise, “But his jargon-laden commentary is so prolix that it might have addled the physicist Stephen Hawking;”⁵² and, “It might even stagger Stephen Hawking to contemplate how many ties there are in the world;”⁵³ and, my favorite, from Frank Rich, “[It] will serve as a placebo nanny, with a ratings system that Stephen Hawking could not decipher and a V-chip any 8-year-old will outfox.”⁵⁴

Hawking as a Standard of Complexity

Much less prevalent, but interesting nonetheless, particularly in light of the previous section on the unintelligibility of *A Brief History of Time* is the way in which Hawking was used as a standard of complexity. Also first found in a sports column, the author (the same author that quoted Don Imus) wrote, “The latest attempt to guarantee a true college football national championship game was unveiled yesterday by the Bowl

⁵¹ Richard Sandomir, “Imus Scores on Turnover By Sealy,” *New York Times*, Late Edition (May 1, 1993), 33.

⁵² Richard Sandomir, “Jones-N.F.L. Lawsuits May End in a Draw,” *New York Times* (Dec 10, 1996), B17.

⁵³ David Colman, “Fabrics Fit to be Ties,” *New York Times* (Nov 16, 1997), Sunday Styles 2.

⁵⁴ Frank Rich, “The Baptist Pratfall,” *New York Times* (Nov 22, 1997), A15.

Championship Series, which concocted a complex formula of ratings that might have been devised by Stephen Hawking.”⁵⁵ This type of reference has the same quasi-metaphorical status as Hawking as a Standard of Intelligence.

First Appearances as a Fictional Character

The other exciting, new characterization of Hawking involves his first direct fictional references. That is, cases in which someone portrays Hawking as a fictional character. Three such characterizations exist from this period: Hawking’s appearance on *Star Trek: The Next Generation* in 1993, *The Onion* satirizing Hawking in 1997, and Hawking as a fictional character on *Dilbert* in 1999.

Star Trek: The Next Generation

On June 21, 1993, a *Star Trek: The Next Generation* episode called “Descent, Part I” included an appearance by Hawking.⁵⁶ The episode begins with Data playing poker on the holodeck with Isaac Newton, Albert Einstein, and Stephen Hawking. Data refers to them as three of history’s greatest minds, but the game is cut short after Hawking wins the hand, because of a “red alert.” The comparison between the three scientists is so obvious I do not want to belabor the point, but Hawking is held up as the equal of both Newton and Einstein; perhaps even their better—after all, he wins the hand.

A moment should be taken to discuss the press coverage of Hawking’s appearance. *Time* called Hawking a “famed physicist, best-selling author and all-around science god.”⁵⁷ Though their quotations were less grand, the *New York Times* and others also

⁵⁵ Richard Sandomir, “New System for Rating Top College Team,” *New York Times* (Jun 10, 1998), C6.

⁵⁶ *Star Trek: The Next Generation*, “Descent, Part I,” Paramount (first-run syndication), Originally aired June 21, 1993.
N.B. Hawking portrays himself in the episode.

⁵⁷ “Stellar Guest,” *Time* (Apr 19, 1993), 73.

covered the appearance. In either case, the descriptions of Hawking in such articles fit into the picture sketched for taglines above. While I do not want to modify my conclusions from above, I did want to take the opportunity to point out, using a specific context, that the taglines discussed above all have specific contexts in their respective articles, but that whether the article discuss Hawking appearing on *Star Trek* or the release of a new Hawking book, the taglines fit the general pattern above.

The Onion

The most interesting single reference to Hawking in this period occurred in *The Onion*. *The Onion* is a satirical newspaper known for its deadpan, AP (Associated Press) style delivery and its fantastic, topical stories. For instance, in regards to the problems some fundamentalist Christians had with Harry Potter, an *Onion* headline read: “Harry Potter Books Spark Rise in Satanism Among Children.” That, and other *Onion* stories, have been taken seriously by the very people being satirized, and occasionally, even by foreign media sources.⁵⁸

On July 9, 1997, *The Onion* had a science headline that read “Stephen Hawking Builds Robotic Exoskeleton.”⁵⁹ The story explains that with the help of “his orphaned teenage sidekick and research assistant Hawk-Lad,” “Nobel Prize-winning physicist Stephen Hawking” invented and built “a remarkably advanced cybernetic exoskeleton

⁵⁸ Daniel Terdiman, “*Onion* Taken Seriously, Film at 11,” *Wired News* (Apr 14, 2004), <http://www.wired.com/news/culture/0,1284,63048,00.html>, Available March 2005.

⁵⁹ “Stephen Hawking Builds Robotic Exoskeleton,” *The Onion*, Volume 31, Issue 23 (July 9, 1997). Once available online: <http://www.theonion.com/onion3123/hawkingexo.html>, Available March 2004. Now available online through *The Onion*’s subscription-required archive.

designed to replace his wheelchair.”⁶⁰ The article alternates between explaining how the new body will enable Hawking to further his theoretical research and how it will help him to fight crime. For instance, one of Hawking’s colleagues tells the paper:

With the new exoskeleton, Stephen will be able to safely handle radioactive isotopes in the high-radiation area of the new supercollider particle accelerator. And his new robo-arms are capable of ripping open enemy tanks like they were nutshells.

Towards the end of the article, Hawking explains his decision to use his new suit to enter a black hole. He says:

Only by penetrating the event horizon itself will I be able to observe the effects of singularity on neutrino decay and complete my research . . . It should also prove invaluable in the construction of my new Anti-Gravity Gun. It may be our only hope for stopping Monstro, The Living Behemoth.

The article ends with the comment that Hawking is a favorite to win this year’s Nobel Prize for Physics and that he was recently given a key to the city of New York “after saving the city from the Galactons.”

As noted above, *The Onion* relies upon satire. From traditional newspapers, to the figures and subjects it “reports on,” *The Onion* exaggerates a subject, or common perceptions about a subject, to the point of absurdity. This particular article is no exception. The premise of the article is twofold. The first is Hawking building a robotic exoskeleton. The theme of Hawking overcoming his disability (building a body that is “faster, stronger... better than before.”⁶¹) through his own ingenuity will recur regularly in the next chapter, “Cultural Icon.” The second is that Hawking uses his newfound power to both further his research and to fight crime. There is an absurdist strain here, playing

⁶⁰ It is interesting to note that Hawking has never won a Nobel Prize. The attribution of said prize is a shorthand for scientific authority. At least one other characterization of Hawking (*Dilbert*) uses the same shorthand.

⁶¹ Ellipsis in original.

on the characterization of Hawking as a heroic figure by making him a superhero. Additionally, as part of being a superhero, Hawking is an aggressive figure. This will be a major theme in “Cultural Icon.” Having Hawking as an aggressive figure is an example of the ironic/absurdist humor pervasive in post-World War II American popular culture. Additionally, it reflects Americans’ discomfort with disability. The idea of being unable to move one’s own body, to the extent that Hawking cannot, is deeply unsettling. Making him capable of aggression alleviates that discomfort. Additionally, it subverts the characterization of Hawking as transcendent, thereby humanizing him. Finally, it builds upon the numerous positive characterizations of Hawking, in that we trust Hawking more than previous scientists.

In addition to being characterized as an aggressive figure, *The Onion* contributed to the characterization of Hawking as transcendent.⁶² In the story, Hawking has used his brilliant mind to overcome the limits of his body, specifically, and of the flesh, more generally, to become more than human.

Not quite as interesting as what is included, but noteworthy nonetheless, is what is not included. In *From Faust to Strangelove*, Roslynn Haynes identifies a series of negative archetypes that are used to portray scientists in Western culture. All of these negative archetypes are absent from Hawking’s characterization. Hawking is not a sinister alchemist, nor an academic in his “ivory tower,” unconnected to the real world, nor a “helpless scientist,” who has lost control over his inventions, nor any of the myriad

⁶² This is a contradiction with my earlier claim that *The Onion* humanizes Hawking. This contradiction exists in the article itself, and is also present in several later fictional representations of Hawking. Many characterizations of Hawking play with, or are resonate with, a transcendent Hawking, but simultaneously try to humanize him.

of other traditional, negative, portrayals of scientists.⁶³ This is significant because Hawking does not escape the use of such archetypes in *The Onion* through extensive characterization. In other words, he does not rise above them by becoming a more complex character. Instead, a new, positive, way of stereotyping scientists is used, suggesting (along with other such characterizations of Hawking) a definite change in how one scientist is portrayed, and a possible sea change, since Haynes's book was published.

Dilbert

Another fictional characterization occurred on May 24, 1999. "The Infomercial" episode of *Dilbert* included a fictional Stephen Hawking.⁶⁴ Although it aired over two weeks after *The Simpsons*, I categorize it along with the other "pre-*Simpsons*" representations of Hawking during the transition from science superstar to cultural icon because it was in production concurrently with *Simpsons* and so was not influenced with it.

The (eventual) premise of the episode is that a black hole has been created by a prototype of the "Gruntmaster 6000." The episode never specifies what the device is used for, but we are told that it includes a graviton generator. Dilbert had been working on the device, but it was released for field trials by management before it was tested. Hawking makes a brief appearance, unidentified, to convey the information that anyone using a graviton generator is going to create a black hole that would annihilate the entire solar system.

⁶³ Roslynn D. Haynes, *From Faust to Strangelove: Representations of the Scientist in Western Literature* (Baltimore and London: John Hopkins University Press, 1994), 3-4. See also: Roslynn Haynes, "From Alchemy to Artificial Intelligence: Stereotypes of the Scientist in Western Literature," *Public Understanding of Science* 12 (2003), 243-253.

⁶⁴ *Dilbert*, "The Infomercial," UPN, Originally aired May 24, 1999.

Hawking makes his first proper appearance about six minutes before the end of the episode. It begins with Dogbert going to Cambridge to get the help of Stephen Hawking with the black hole. In Cambridge, Dogbert talks to a receptionist. She asks him to sign Hawking out, and once Dogbert does so, Hawking is sent up on a dumb waiter. She introduces Hawking, calling him a "Nobel Prize winning, Lucasian Professor of Mathematics, expert on all astrophysical phenomena, and black holes in particular."⁶⁵ After which, Dogbert asks, "How do I move him around?" In response, he is given a universal remote control, with buttons for "TV" "VCR" and "S. Hawking."

Hawking is present for several minutes of action, but does relatively little. He again becomes important after the episode has been resolved. Hawking is outside, talking with Dilbert's genius garbage man and Dogbert. The scene begins with Hawking finishing an unheard joke, saying, "And the farmer's daughter says, 'I see you've met my cat.'" To which everyone laughs. Dilbert asks, "Professor Hawking, what are you doing here? Isn't this several thousand miles out of your way?" Hawking responds, and begins a dialogue with Dilbert:

[Hawking] Actually, there's a shortcut.

[Dilbert] A shortcut? My street is a shortcut to England?

[Hawking] Yes.

[Dilbert] Will somebody explain to me what's going on?

[Everyone but Dilbert] No

[Dilbert] Hey, I've got a copy of your book in my trunk. Would you mind signing it?

[Hawking] I already signed it.

[Dilbert] No you didn't, it's locked in my trunk.

[Hawking] I'll wager five-dollars I already signed it.

[Dilbert] You're on.

⁶⁵ Again, Hawking has never won a Nobel Prize. See immediately below the section on *Dilbert* for a discussion of Hawking and the Nobel Prize.

As Dilbert looks in the trunk, the garbage man pushes a few buttons on his truck, and a futuristic-looking console appears. A wormhole opens and the truck, the garbage man, Dogbert, and Hawking go in. As Dilbert removes Hawking's book from the trunk, the viewer gets a brief glimpse of the title: "More Things You'll Never Understand." Dilbert opens the book, and Hawking has signed it:

Dilbert
 You owe me
 \$5.00
 S. Hawking

Dilbert laughingly says, "The joke's on him, he'll never be able to collect the five!" At which point, two vortices open, one on either side of Dilbert. Hawking quickly drives out of one and into the other, grabbing the five dollars that Dilbert is holding. Dogbert comes out of the house and says, "You didn't really think you'd win a bet with a Nobel Prize winning, Lucasian Professor of Mathematics?" To which Dilbert ends the show by quipping, "At least I didn't pay for his stupid book!"

Much more so than other mainstream characterizations, *Dilbert* focuses on the limitations of Hawking's disability. Throughout the episode, Hawking rarely acts on his own initiative; the only time he does so is to win the five-dollar bet with Dilbert. Hawking is introduced by being transported in a dumbwaiter at Dogbert's request. Throughout the show, he is moved around with the remote control that was given to Dogbert. With it, Dogbert forces Hawking to perform an Evel Knievel-esque stunt, jumping a row of cars, and to push Dilbert into the black hole. In general, Hawking is extremely passive, used mainly for gags and for providing information on the black hole.

Although he does little else, Hawking *is* used as a reliable source of information for the viewer, and so is characterized as being very knowledgeable. Hawking is twice

introduced as a “Nobel Prize-winning, Lucasian Professor of Mathematics, expert on all astrophysical phenomena, and black holes in particular.”⁶⁶ Later in the episode, Hawking provides crucial information, used to progress the storyline. He says, “As long as nothing disturbs the singularity, the hole will grow very slowly.” Which, in concert with his “We’re screwed,” after something *does* disturb the singularity, provides the impetus for the climax: Dilbert entering the black hole.

The final way in which Hawking is characterized is as greedy. Hawking is repeatedly shown as being concerned with money. He asks Dilbert “Did you buy [my book]? Or read it at the library?” When Dilbert answers, “I think I borrowed it,” he calls him a “cheap bastard.” And, as has already been mentioned, the only time he acts independently is to win a bet. While this is generally a negative characterization, it does have a humanizing effect when juxtaposed with articles claiming Hawking is transcendent. Somewhat similarly, when Dilbert returns home, Hawking is finishing telling a dirty joke. This is a humanizing moment that is much more positive than Hawking’s greed.

It has been suggested to me, that the depiction of a greedy Hawking may be just a particularly dense form of irony. That while Hawking is actually pursuing some of the deepest, most profound questions about the universe and the meaning of life, it is subversive to show him more interested in money, like the rank and file of humanity.⁶⁷ This argument has a lot of merit. However, some of the disparity between *Dilbert’s* characterization of Hawking and that of others must also lie in the creators’ respective

⁶⁶ This, incidentally, may well reflect a belief by the writers that not everyone in the audience will know who Hawking is. Contrast this with Hawking’s appearance on *Futurama* in “Cultural Icon.”

⁶⁷ Dr. Brian Ward, undated personal correspondence. Exchanged sometime early in the Fall 2004 semester.

evaluations of Hawking's contribution to the popular understanding of science. In *Dilbert*, the name of Hawking's book is *More Things You'll Never Understand*, and the episode ends with Dilbert saying, "At least I didn't pay for his stupid book!" The writers of this episode of *Dilbert* seem to be of the opinion that *A Brief History of Time* is inaccessible for most readers.⁶⁸ Scott Adams, the creator of *Dilbert*, also apparently has mixed feelings toward Hawking. In 1993, Adams gave an interview to the *New York Times*. In an introductory chart with things like birth-date, Adams was asked what the last book he read was. He responded that he had just read *A Brief History of Time*, "but only because I was on jury duty."⁶⁹

Characterization as a Nobel Prize Winner

Hawking-as-Nobel Prize Winner is a peculiar subset of Hawking's broader characterization as an authority. Stephen Hawking has never won a Nobel Prize, but that has not stopped two of the characterizations just examined from bestowing that honor upon him. *The Onion* article begins "Nobel Prize-winning physicist Stephen Hawking", and ends by stating that he will likely win this year's Nobel Prize. Likewise, *Dilbert* twice describes him as a "Nobel Prize-winning, Lucasian Professor of Mathematics." There is a certain logic in claiming that Hawking has won a Nobel Prize. In the vernacular, Nobel Prizes convey authority, so, in these instances, authority conveys a Nobel Prize.

⁶⁸ As shown above, they are far from the only ones to believe that Hawking's first popular book was neigh incomprehensible. That opinion was common, though not universal, throughout the period, including in 1999.

⁶⁹ Peter H. Lewis, "Dilbert's Creator Espouses The Interactive Life Style," *New York Times* (Dec 5, 1993), F12.

Conclusion

I could well extend the chapter by six or seven pages by moving the discussion of *The Simpsons* to this chapter. Hawking's appearance on *The Simpsons* signals the culmination of the transition from "science superstar" to cultural icon. However, I decided to deal with it in "Cultural Icon" because, while it is a culmination, *The Simpsons* is also the foundation of the most recent period of Hawking's characterization. As such, the themes opened in *The Simpsons* mesh better with the other characterizations of Hawking in "Cultural Icon," than they do in "Science Superstar to Cultural Icon."

CHAPTER 6 CULTURAL ICON, 1999-2004

In this chapter, I argue that Hawking is a cultural icon. I argue that tangential and fictional representations of Hawking dominate his public persona. I also argue that tangential and fictional representations develop the same themes. Finally, I argue that Hawking has become ubiquitous. I show this through the simplification of his newspaper taglines.

This chapter deals with the final (contemporary) period of Hawking's characterization. Although I have indicated in the chapter title that the period ends with 2004, that is only a reflection of when my coverage of said period ends. As I write, we are still in the midst of Hawking-as-Cultural Icon, and will be for the foreseeable future.¹

Changing Taglines

While many elements of Hawking's characterization stay the same from the 1990s, there is one major change: a majority of writers assume the public knows who Hawking is. This leads to many minimalist taglines for Hawking, in addition to the continuation of some old favorites.

Famous

Continuing the most common brief characterization of Hawking from the previous period, many articles emphasize Hawking's fame in his tagline. The end of the title of a *Time* article by Hawking, on Einstein and relativity, was "by the world's most famous

¹ By the "foreseeable future" I mean until three or four years after Hawking's death. For a more detailed prediction of Hawking's future status, see the epilogue.

living physicist.”² A *Washington Post* article called him, “one of the galaxy’s most famous scientists.”³ Alternate phrasing can look like, “the celebrated Cambridge physicist Stephen Hawking”⁴ An interesting variant is, “the celebrated University of Cambridge cosmologist Stephen J. Hawking [*sic*].”⁵

Genius

Another continued characterization of Hawking emphasizes his intellect. The most common forms should be familiar to the reader by now. For instance, “Stephen Hawking, the Cambridge University physicist, is renowned for his brains.”⁶ A more elaborate one comes from Larry King. He said, “The words brilliant and genius probably get used way too much. But my guest tonight deserves both of them and more. Professor Stephen William Hawking is an intellectual icon, best selling author, the greatest mind in physics since Albert Einstein.”⁷

Simple Taglines

The most interesting (and most common) characterization of Hawking in this period is a minimalist tagline. These taglines hark back to the brief characterizations of Hawking common in the 1970s. However, the reason behind these similar taglines could

² Stephen W. Hawking, “A Brief History of Relativity: What is It? How Does it Work? Why Does It Change Everything? An Easy Primer by the World’s Most Famous Living Physicist,” *Time* (Dec 31, 1999), 66+ (3365 words). (Infotrac).

³ T. R. Reid, “Physicist’s 60th Marked a Big Bang; For Stephen Hawking, A Remarkable Milestone,” *Washington Post* (Jan 12, 2002), C1 (1001 words). (ProQuest).

⁴ “Is Stephen Hawking Being Abused by His Wife?,” *People* (Feb 9, 2004), 76 (419 words). (Infotrac).

⁵ Ron Cowen, “Information, Please: Betting on Whether Data Disappear Down Black Holes,” *Science News* (Sep 25, 2004), 202.

N.B. Should be Stephen W. (William) Hawking.
Could the typo be a confusion caused by Stephen J. Gould?

⁶ Lawrie Mifflin, “Homer Meets Dr. Hawking,” *New York Times*, Late Edition (May 12, 1999), E9.

⁷ “Larry King Live,” *CNN*, First Aired Dec 25, 1999.

not be more different. In the 1970s, Hawking had a simple tagline because he did not have a pre-existing public persona. The public was not expected to know him, so being reminded of who he is would accomplish little. In the 2000s, Hawking is ubiquitous. The public is expected to know who he is, so extensive prompting is unnecessary.

Some simple characterizations reference that Hawking is British or that he is from Cambridge. For instance, “the British cosmologist Dr Stephen W Hawking,”⁸ “Dr Stephen W Hawking, the University of Cambridge physicist,”⁹ and “Stephen Hawking, the Cambridge University physicist and author.”^{10,11} Other characterizations are even simpler, just referencing Hawking’s field of study. For instance, “The astrophysicist Dr. Stephen Hawking”¹² and “Astrophysicist Stephen Hawking.”¹³ Some articles even have no introduction of Hawking.¹⁴

Miscellaneous Taglines

In addition, there are a number of descriptions of Hawking that do not fall easily into one of the preceding categories. Most such taglines fall into one or more of the categories identified during the 1990s; however, there are too few references in any one

⁸ James Glanz, “A Black Hole, Made from Scratch,” *New York Times*, Late Edition (Feb 1, 2000), F6.

⁹ James Glanz, “With Little Evidence, String Theory Gains Influence,” *New York Times*, Late Edition (Mar 13, 2001), F4.

¹⁰ “World Briefing Europe: Britain: Hawking Questioned Over Injuries,” *New York Times*, Late Edition (East Coast) (Mar 19, 2004), A8.

¹¹ “World Briefing Europe: Britain: No Evidence of Abuse of Hawking,” *New York Times*, East Coast Late Edition (Mar 30, 2004), A12.

¹² “Stephen Hawking Denies Reports that He is a Victim of Abuse,” *New York Times*, Late Edition (East Coast) (Jan 24, 2004), A4.

¹³ Shawn Pogatchnik, “Hawking Revisits Black Hole Theory; Collapsed Stars Do Not Destroy Everything They Consume, Astrophysicist Says,” *Washington Post* (Jul 22, 2004), A3.

¹⁴ J. Richard Gott III, “Will We Travel Back,” *Time* (April 10, 2000), 68+ (1474 words). (Infotrac).

category to justify that category's inclusion here. Others are more novel, combining several categories in unusual ways, or making a more complex argument.

A second tagline from Larry King calls Hawking, "An incredible man, an amazing intellect." King then paraphrases one of Hawking's graduate students (although not attributed as such), "It's been said that he can sell physics better than Madonna can sell sex."¹⁵ Another tagline also includes several different categories of representation, but draws them from already familiar categories. The *Time* article refers to, "the brilliant physicist whose disease has put him in a wheelchair, heir to the revered Cambridge professorship once held by Isaac Newton."¹⁶

Although there are many such permutations, one conjunction of two categories is repeated a few times: the famous genius. For instance, "One of the most admired and brilliant theoretical physicist of the 20th century."¹⁷ A second example also includes Hawking's disability, "a famous genius with a famous degenerative disease."¹⁸

A few articles make arguments while characterizing Hawking, leading to longer descriptions than one normally sees. One of the best examples of this deals with the popularity of *A Brief History of Time*. The *Time Magazine* reviewer wrote:

Nobody has ever figured out precisely why Stephen Hawking's first popular book, *A Brief History of Time*, has been such a gigantic success, selling an astonishing 10 million copies since it was published in 1988. One possibility is that readers thought they were hearing from the greatest physicist since Einstein, and maybe the

¹⁵ "Larry King Live," *CNN*, First Aired Dec 25, 1999.

¹⁶ Michael D. Lemonick, "Hawking Cries Uncle: The Famous Physicist Admits He Was Wrong About Black Holes—and Pays Off a Long-Standing Wager," *Time* (Aug 2, 2004), 65 (712 words). (Infotrac).

¹⁷ "Hawking, Stephen," *Britannica Student Encyclopedia* (2004) from *Encyclopedia Britannica Online*, Available online: <http://search.eb.com/ebi/article?tocId=9274795>, Available March 2005.

¹⁸ Craig Offman, "Stephen Hawking's ex-Wife Writes Tell-All: Jane Hawking Chronicles the Misery of Her Marriage," *CNN.com* and *Salon.com* (Aug 12, 1999), Available online: <http://www.cnn.com/books/news/9908/12/hawking.marriage.salon/index.html>, Available March 2005.

greatest of all time (Hawking himself declared that comparison “rubbish” in a TIME interview several years ago, and most of his colleagues agree with him.)¹⁹

Harkening back to the hyperbolic characterizations of Hawking’s fame in the 1990s, a few representations of Hawking in the 2000s are hyperbolic. A *Scientific American* article began, “In 1988 God appeared in Caltech. [Paragraph] More precisely, the scientific equivalent of the deity, in the form of Stephen W. Hawking.”²⁰

Finally, during this period Hawking is still the most famous sufferer of ALS. As such, he gets referenced in articles about ALS. For instance, “All my husband and I knew about A.L.S. was that Lou Gehrig died of it and that Stephen Hawking had it.”²¹

True Metaphorical Uses

Quasi-metaphorical uses of Hawking’s name had been around since 1993. However, starting around 2001, true metaphors began to appear. For instance, in a science fiction book titled *March Upcountry*, one of the characters is described as being “no Hawking.”²² Another metaphorical use of Hawking’s name is found in *U.S. News & World Report*. The reference appears in a chart comparing various statistics of two fossils. Under the category of “brain power,” *paralititan stromeri* is “Bluto.” The other fossil, *hadrocodium wui*, is “Stephen Hawking.”²³ A third example comes from *Vanity Fair*. An article on football describes someone as “a Stephen Hawking-ishly cerebral

¹⁹ Michael D. Lemonick, “Beyond the Theoretical: Physicist Stephen Hawking’s Latest is Provocative, Informative and More Accessible Than His Last,” *Time* (Nov 5, 2001), 106 (498 words). (Infotrac).

²⁰ Michael Shermer, “The Shamans of Scientism,” *Scientific American* (Jun 2002), 35.

²¹ Dale O’Reilly, “Fear of Death, Love of Life,” *New York Times*, Late Edition (East Coast) (June 25, 2000), Proquest lists page number as “15.16”.

²² David Weber and John Ringo, *March Upcountry* (Riverdale, NY: Baen Publishing Enterprises, 2001), pg. 552.

²³ “Mite vs. Might,” *U.S. News & World Report* (Jun 11, 2001), 12.

offensive mastermind”²⁴ Contrast “Stephen Hawking-ishly” as an adverb with earlier quasi-metaphorical references to Stephen Hawking as a noun.

Although true metaphorical uses of Hawking’s name are the noteworthy addition during this period, they do not completely supplant quasi-metaphorical uses. A nationally syndicated comic strip contained a quasi-metaphorical use of Hawking in 2004. The comic has a character sitting in front of a computer, talking to another character looking over his shoulder. The character sitting in front of the computer says, “My game is going to take enemy A.I. to a whole new level.” On the next panel, he says, “The guys you’ll be fighting won’t just be smart, they’ll be super-smart.” Then, “Check it out.” In the final panel, the person looking over his shoulder says, “You’re being attacked by Stephen Hawking?” To which the first character replies, “His wheelchair shoots missiles.”²⁵ This uses Hawking as a standard of intelligence, but references Stephen Hawking as a noun.

Anti-Hagiography: *Vanity Fair*

In June 2004, *Vanity Fair* ran a long (almost 8,000 word) article on Hawking, highlighting allegations that he was and is being abused by his second wife. However, the article also delves into Hawking’s biography, and highlights his divorce and remarriage, drawing on his ex-wife’s 1999 tell-all, *Music to Move the Stars*, and interviews with his daughter Lucy and a few of his colleagues.

Judy Bachrach, the author, begins the article with a metaphor similar to those discussed in the earlier chapter on Mialet. She then refers to Hawking’s “brutal new

²⁴ David Kamp and Peter Richmond, “The Pro Football Snob’s Dictionary Vol. 1,” *Vanity Fair* (Oct 2004), 292 (4223 words). (Infotrac).

²⁵ Bill Amend, *Foxtrot* in *Gainesville Sun* (Nov 4, 2004), “Scene” 36.

universe.” She uses an interesting tagline, “the icon of science, the second Einstein, as some call him.” She then makes it clear that his “brutal” universe is meant to refer to his abuse.

Bachrach rehashes allegations of abuse from 2000, 2001, and 2002, transitioning to discuss Hawking’s 60th birthday party, and then *A Brief History of Time*. Bachrach comments on the book, writing, “Brief it is: 182 pages as dense and mysterious as the universe itself.” She remarks that when Hawking discusses imaginary time “the comprehension of the average reader” “disappears completely.” She continues, “Nor are the ordinary alone in their mystification. It is often pointed out that Hawking is a theorizer; he leaves empiricism and proof behind in the dust. Moreover, some of his more provocative theories have been retracted by Hawking himself after further deliberation.”

After discussing Hawking’s fame and recognition, Bachrach begins what will be a dominant theme of the article: repeating the complaints of those familiar with Hawking. For instance, Hawking’s daughter Lucy said, “The whole of my early life I looked after him . . . and the minute he got fame and money he was gone.”

Following a brief detour through some religious imagery, obligatorily associated with the “Theory of Everything,” Bachrach describes the “cancan girls draped . . . all over the famous wheelchair” at Hawking’s 60th. She then returned, again, to allegations of abuse, drawing on interviews with Lucy and some of Hawking’s former nurses. Lucy is reported as saying, “Because my father has this reputation as the World’s Greatest Living Scientist or the World’s Most Intelligent Man, people refused to believe that he could be abused!”

Bachrach summarizes Hawking, saying, “Hawking cannot be defined only by his disease. He is a generous father, a lover of women, a tough negotiator extremely interested in money, a commander of intense loyalties, and a brittle, angry combatant who uses the limited means at his disposal to diminish others.” She then changes the topic to Hawking’s biography, focusing on his life with Jane (his first wife).

Bachrach uses the framework of Jane and Hawking’s relationship to discuss Hawking’s atheism as a wedge between them. She quotes Hawking’s famous line that “God not only plays dice, but sometimes throws them where they cannot be seen.” But she follows the quotation with, “sniped Hawking-from what private store of rage we can only imagine. In his own life, obviously, the dice had come up snake eyes more than once, which may help explain why Hawking is no fan of the Supreme Gambler.” She goes on to call Hawking’s beliefs “staunch atheism” and repeats Jane’s belief that his atheism is “very, very cruel.”

After discussing more of Jane’s complaints from *Music to Move the Stars*, Bachrach repeats the views of Sohnius, one of Hawking’s colleagues that he “fights dirty” and gives examples. She then returns to Hawking’s biography, to the point that he moves in with Elaine (his second wife). Bachrach then spends time describing instances in which Elaine mistreated Lucy or was verbally abusive to Hawking in Lucy’s presence.

The article ends with short comments from various Hawking’s intimates who believe Hawking is not being abused, the results of the police investigation (negative, but not definitively), and Lucy wondering whether Elaine just married Hawking for his money.

Near the very end of the article, Bachrach quotes someone, writing, “You know, part of it is the myth, the beautiful myth . . . This man who can’t move but has everything. Money, house, fame, celebrity, best-sellers, genius, a wife, children. And no one wants to puncture the myth.” On the contrary, once Hawking had achieved iconic status, it was *inevitable* that someone would try to destroy the myth. However, it is noteworthy that despite being remarked upon in the press, Hawking leaving his wife and his subsequent remarriage did not attract this type of anti-hagiographic article. Only after Hawking appeared on *The Simpsons*, and after the publication of *Music to Move the Stars* did this type of article emerge. It is still not common, although many articles contain a paragraph where they summarize some of Hawking’s foibles.

This article is a good barometer for Hawking’s public persona. Its very existence is a comment on the status of Hawking’s mythos, and the representations of Hawking that individuals choose to attack tells us even more about the particulars of said mythos.

Appearances as Fictional Characters

The Simpsons

The May 9, 1999 *Simpsons* episode, “They Saved Lisa’s Brain” includes an appearance by Stephen Hawking.²⁶ The premise of the episode is that Lisa joins Mensa—a society for people with high I.Q.’s. After a series of unrelated events, ending with the mayor fleeing the city, Mensa (Lisa, Comic Book Guy, Dr. Hibbert, Principal Skinner, Professor Frink, and Lindsay Neagle) ends up governing the city. In the last few minutes of the episode, at an outdoor assembly, the Mensa members are in a Gazebo giving a State of the Town address to the townspeople. They are each giving a short

²⁶ *The Simpsons*, “They Saved Lisa’s Brain,” FOX, Originally aired May 9, 1999. N.B. Hawking provides the voice for his fictional counterpart.

speech in which they explain policy initiatives that will soon become law. Conflict develops because several people put forward ideas that they have not cleared with the group. Frink's announcement is:

[Frink] Well, first of all, we're going to ban such barbaric sports as bullfighting and cockfighting. [met with cheers from the crowd] Also boxing, both, uh, kick and the kinds with the gloves, there. [less enthusiastic cheering] And hockey, football, push-ups, and anything in general where you have to take off your shirt, which is embarrassing. [muttering from the crowd]

[Lisa] I don't remember discussing that.

Comic Book Guy gives the most controversial announcement. He says, "Inspired by the most logical race in the galaxy (the Vulcans), breeding will be permitted once every seven years. For many of you, this will be much less breeding. For me, much, much more." At which point, the crowd gets angry. The Mensa members begin fighting amongst themselves, with different people claiming they should be in charge because they have the highest I.Q.. Suddenly, a synthesized voice breaks in and says, "Big deal; my I.Q. is 280."

All of the Mensa members turn and chorus:

Stephen Hawking!

[Skinner] The world's smartest man!

[Lisa] What are you doing here?

[Hawking] I came to see your utopia, but now I see it is more of a Fruitopia.

[Skinner] I'm sure what Dr. Hawking means is—

[Hawking] Silence. I don't need anyone to talk for me, except this voice box. You have clearly been corrupted by power. For shame.

[from the Crowd, Homer] Larry Flint is right! You guys stink!

[Hawking] I don't know which is a bigger disappointment: my failure to formulate a unified field theory, or you.

[Skinner] I don't like your tone.

[Hawking] If you are looking for trouble, you found it!

[Skinner], Yeah, just try me you—

At this point, Skinner is punched with a boxing glove that springs out of Hawking's chair.

After Skinner and Hawking's brief fight, the crowd descends into chaos and a riot develops. Hawking says, "Time for this hawk to fly!" An arm extends from his wheelchair and begins brushing his teeth. He says, "Wrong button," and a set of helicopter blades emerges from the top of his chair. As the riot gets worse, he flies away, but pauses in midair to rescue Lisa. They set down away from the gazebo riot. Marge and Homer come up to the two. Homer asks Lisa:

[Homer] Did you have fun with your robot buddy?

[Lisa] Dad! Oh, Dr. Hawking, we had such a beautiful dream. What went wrong?

[Hawking] Don't feel bad, Lisa. Sometimes, the smartest of us can be the most childish.

[Lisa] Even you?

[Hawking] No. Not me. Never.

[Marge] I guess everyone has a different vision for the perfect world.

[Lisa] Wow, Mom, that's very profound!

[Hawking] Hey, you read that off my screen!

[Marge] Who's up for some beers?

[Homer] I am!

[Hawking] That's the smartest thing I've heard all day.

The show ends with Hawking and Homer at Moe's. Hawking says:

[Hawking] Your theory of a donut shaped universe is intriguing, Homer. I may have to steal it.

[Homer] Wow, I can't believe someone I never heard of is hanging out with a guy like me.

[Moe] Alright, it's closing time. Who's paying the tab?

[Homer, imitating Hawking's voice synthesizer] I am.

[Hawking] I didn't say that.

[Homer as Hawking] Yes I did.

At which point, Hawking hits Homer with his chair's boxing glove. The show ends with Homer, still imitating Hawking, getting hit and saying, "D'oh!"

Hawking's appearance has three primary effects: He returns the town to its original power structure; he rescues Lisa from the gazebo mob; and he offers closure to the episode, by explaining the failure of Mensa. On a more analytic level, Hawking's appearance is a *deus ex machina*. Taking the phrase literally hints at a transcendent

Hawking (*Deus ex machina* is Latin for "god from the machine"), perhaps with "the machine" referring to the technology that allows him to function. While this resonates with characterizations of transcendence, it is awfully thin support for a serious claim, and it contrasts with another characterization that is more obviously present: that Hawking is a normal man.

Another rather thinly defended characterization, this one potentially quite insightful, is that the technology built into Hawking's wheelchair is very reminiscent of that in *Inspector Gadget*. This comparison between *Inspector Gadget* and Hawking is unique to *The Simpsons*, and it is certainly fitting. Hawking's motorized wheelchair and voice synthesizer are both remarkable pieces of technology that most people are unfamiliar with. Extending that remarkable, unfamiliar technology to the point of helicopter blades, rockets, a boxing glove, etc. is firmly in line with the absurdist strain of post-WWII American humor. It also allows an element of slapstick humor, common in *The Simpsons*.

However, what I would call the *dominant* characterizations are: that Hawking is aggressive, that he is a general authority to be appealed to on a wide range of subjects, and that he is humanized. The first, that Hawking is aggressive, is obvious from Hawking telling Skinner, "If you are looking for trouble, you found it!" and from his liberal use of his boxing glove on both Skinner and Homer.

The second dominant characterization is that Hawking is the personification of intellectual authority. As will be seen below, the idea that Hawking is an authority normally relates to him as a source of trustworthy knowledge about matters scientific—specifically about black holes. In this case, however, his scientific authority has been

generalized and he is portrayed as a font of general wisdom, in other words as an authority on Humanity. This comes through clearly in three quotations: Skinner calling Hawking “the world’s smartest man;” Hawking saying, “Don't feel bad, Lisa. Sometimes, the smartest of us can be the most childish;” and Marge reading from Hawking’s screen, “I guess everyone has a different vision for the perfect world.” In the world of *The Simpsons*, Lisa is generally the voice of reason. Her awed reaction to Hawking implies that Hawking should be taken very seriously, and sets him up as a source of wisdom.

Furthermore, the writers of the show consciously developed this theme. In a *New York Times* article, “Matt Selman, one of the show’s writers [said], ‘We needed someone smarter than them, someone they could respect who could shame them into seeing the error of their ways.’”²⁷ One of the executive producers of the show also liked the irony of having Hawking and Homer together. In the article, “Mike Scully, the show’s executive producer, said, ‘What I loved was that it was a chance to have the world’s smartest man and the world’s stupidest man get together.’”²⁸

The last characterization, that Hawking is humanized, is the opposite of the transcendence that some other sources attribute to Hawking. The characterization comes through in three places in the episode. First, when Hawking attempts to fly away and gets his teeth brushed instead—emphasizing that he can make mistakes. Second, when Marge asks if anyone wants some beer, and Hawking says, “That’s the smartest thing I’ve heard all day.” This also indirectly attacks the transcendent myth; one sees very few

²⁷ Lawrie Mifflin, “Homer Meets Dr. Hawking,” *New York Times*, Late Edition (May 12, 1999), E9.

²⁸ Lawrie Mifflin, “Homer Meets Dr. Hawking,” *New York Times*, Late Edition (May 12, 1999), E9.

pictures of angels getting drunk. And finally, Hawking tells Homer he may have to steal his idea of a donut shaped universe. This allows people to relate to Hawking, but is also a heavy dose of irony. Hawking and Homer are operating on two totally different levels, so the idea that Hawking is “stealing” the idea is funny.

Futurama

Matt Groening’s second foray into the mythos of Stephen Hawking, “Anthology of Interest I” aired on May 21, 2000.²⁹ The episode is composed of three shorts, connected by a basic premise and frame story: Dr. Farnsworth has invented a “What If?” machine, of which people can ask a question and see their scenario acted out. Hawking appears in the third short, and, as in *The Simpsons*, provides his own voice.

The question posed in the last short is “What would happen if Fry never came to the future?” The scenario begins as the series began, with Fry delivering a pizza to a cryogenics facility, but, instead of falling into one of the cryogenics tubes (how he came to the future), Fry hits his head on the side. After which, a rift opens in which Bender, Dr. Zoidberg, Dr. Farnsworth and Lela are all staring at Fry, and talking. Farnsworth says, "It appears the very fabric of spacetime has ripped." At which point, Fry runs out of the facility.

Later, Fry is at work in a pizza restaurant. Stephen Hawking enters. The owner says, "Hey, the usual, Professor Hawking?" To which Hawking replies, "No. Today I'd like something good." Fry exclaims:

[Fry] Hey, Stephen Hawking! Aren't you that physicist that invented gravity?
 [Hawking] Sure. Why not?
 [Fry] Lemmie ask you something. Has anyone ever discovered a hole in nothing with monsters in it? Because if I'm the first, I want them to call it a Fry Hole.

²⁹ *Futurama*, “Anthology of Interest I,” FOX, Originally aired May 21, 2000.

[Hawking] There is nothing to be concerned about. I must go. There is much to do.

As Fry is leaving for the night, he walks down a dark alley. From off-screen, Hawking says, "There he is! Seize him!" Fry's shadow is beaten by the shadows of Gary Gygax and Nichelle Nichols, both using tennis rackets.

When Fry wakes up, he is in a converted bus with several people, including Stephen Hawking. Fry asks:

[Fry] Who are you people?

[Gore] I'm Al Gore, and these are my Vice Presidential Action Rangers. A group of top nerds, whose sole duty is to prevent disruption in the spacetime continuum.

[Fry] I thought your sole duty was to cast the tie-breaking vote in the Senate.

[Gore] That. And protect the spacetime continuum! Read the Constitution!

[Fry] Hmmmm. So I guess you'll want to see my Fry Hole.

[Gore] Very much so, but first meet the Action Rangers. You already know Stephen Hawking. Also with us are Nichelle Nichols, AKA Lt. Uhura [from *Star Trek*]... To my left, you'll recognize Gary Gygax, inventor of Dungeons & Dragons... And, our summer intern, Deep Blue, the world's foremost chess playing computer.

[Fry] So what do you nerds want?

[Uhura] It's about that rip in spacetime that you saw.

[Hawking] I call it a Hawking Hole.

[Fry] No Fair! I saw it first!

[Hawking] Who is the Journal of Quantum Physics going to believe?

Gore, Gygax and Uhura explain that something that was supposed to happen did not, because of a quantum fluctuation. They say that they have to go back and make sure it happens, or the Universe will be destroyed.

In the cryogenics facility, Fry is explaining:

[Fry] And then my chair tilted back, and I almost fell into this freezer thingie.

[Hawking] I call it a Hawking Chamber.

[Fry] But instead of falling in and getting frozen, I missed and wanged my head.

[Gore] Well, it's obvious what should have happened. That wang to the head should have killed you.

[Fry] What?

[Uhura] Let's finish the job!

[Hawking] Hold him down!

At which point, Hawking begins repeatedly rolling over Fry.

As Hawking is rolling over Fry, the rip in spacetime reopens. Bender is inside, drinking. Uhura says, "Something's wrong. Murder isn't working, and that's all we're good at! . . . Wait, I'm getting an idea. What if Fry was supposed to get frozen?" Hawking chimes in, "Yes. Shove him in the tube. It was my idea." After some wrangling, Fry seems to agree to be frozen, but instead smashes the cryogenic tube. Earth and then the entire Universe are sucked into the rip, leaving a white screen and no sound. The camera zooms in on the characters. Hawking says, "Great. The entire Universe was destroyed." Fry asks, "Destroyed? Then where are we now?" Gore quips, "I don't know. But I can darn well tell you where we're not: the Universe!"

After another round of quips, the episode cuts back to the frame story, with Farnsworth turning off the What If? machine. He says, "That story was preposterous! Stephen Hawking in a pizzeria! This thing isn't worth the gold it's made of."

Hawking is characterized using similar devices to those used on *The Simpsons*. Primarily, the absurdist strain seen with Hawking and Homer in the bar is expanded. The most repeated joke in the entire short is that of Hawking stealing credit for other people's ideas. When he first meets Fry, he allows himself to take credit for inventing gravity;³⁰ he claims to have discovered the Fry/Hawking Hole (the rip in spacetime); he claims that the cryogenic chambers are "Hawking chambers;" and claims credit for Nichelle Nichols' idea to freeze Fry. While idea theft would be a very serious charge, particularly when aimed at a scientist and academic, the absurdity of Hawking's claims takes any possible

³⁰ Interestingly, Hawking is introduced only with his name and the claim that he invented gravity. Part of this is due to the audience being expected to know who he is. The other part is a joke on Fry and on the viewer. Fry's comment betrays his ignorance (and the ignorance of many) about what science is and what scientists do, even when a scientist (Hawking) becomes a recognizable celebrity.

sting out of them. The show even jokes about Hawking's prestige, adding an element of dark humor as Hawking rightly points out, "Who's the Journal of Quantum Physics going to believe?"

Again, similar to *The Simpsons*, the fact that Hawking is in the pizzeria enough to have a "usual," helps the viewer to identify with Hawking. In fact, except for changing beer to pizza, it is the same humanizing mechanism as in *The Simpsons*.

Once more, like in *The Simpsons*, Hawking is both humanized and lauded in *Futurama*. The suggestion that Hawking is an ordinary man is attacked during the end of the episode. After the short is over, Farnsworth says, "That story was preposterous! Stephen Hawking in a pizzeria!" That a thousand years in the future, Dr. Farnsworth holds Hawking in such esteem singles Hawking out as special.³¹

This singling out of Hawking also contributes to his authority. Hawking is introduced as "that physicist that invented gravity." He is also the person that Fry asks about the "Fry Hole," suggesting that Fry expects him to be able to provide some answers. Finally, Hawking is the character that relays the information that "the entire universe was destroyed." It is only after this pronouncement from a genuine authority, that Al Gore can make his witty remark: "I don't know [where we are]" but "where we're not" is "the Universe." After thinking about it, one is left with the distinct impression that Hawking could have provided a better—but less funny—answer; that if anyone knows where they are, it is Hawking.

Another point of similarity with *The Simpsons* is that Hawking is characterized as aggressive. The first aggressive act is Hawking's order to seize Fry, and Fry's

³¹ Although, one should note that Richard Nixon's head is a recurring character, so simple knowledge of Hawking would not be *that* extraordinary.

subsequent beating. However, this is a wash. Hawking is orchestrating violence, but not carrying it out personally. However, his aggressive, “tough-guy” status is assured during the scene in the cryogenics building. When Nichelle Nichols announces that they should “finish the job” and kill Fry, Hawking orders them to “Hold him down!” and proceeds to repeatedly run over Fry with his wheelchair.

MC Hawking

An aggressive Hawking is also a central component of the next fictional representatioan of Hawking. On September 7, 2000, Ken Leavitt-Lawrence founded *MC Hawking's Crib* (www.mchawking.com). Since then, it has been reviewed in places such as *Tech TV*, the *LA Times*, and *Entertainment Weekly*. In addition, one of MC Hawking's songs was included on the CD accompanying the September 2002 issue of *PC Gamer*. Finally a CD, wonderfully titled *A Brief History of Rhyme*, has been released. The premise of the site is that Stephen Hawking is a physicist by day, and a “gansta rapper” and “lyrical terrorist” by night, where he is known as MC Hawking or “The Hawkman”. The site has a dozen different downloadable songs in mp3 format—recorded using original music as well as stealing (“sampling”) the tunes from other songs, and using a speech synthesizer to mimic Hawking's voice. Also, similar to what one would find on a website dedicated to a “real” celebrity, *MC Hawking's Crib* has: pictures of MC Hawking with different well known rap celebrities; music videos for some of the songs; a discography of all three of the Hawkman's “albums”, complete with cover-art that satirizes well-known rap albums; news stories informing people about the life of MC Hawking; and novelties like T-shirts and mouse pads that people can buy with MC Hawking logos on them.

The picture of Hawking that emerges from MC Hawking's music is fascinating—and often very humorous. MC Hawking raps about the kinds of things one imagines that the physicist-turned-rapper would. He has tracks about how great he is (obligatory for any rapper),³² tracks railing against creationists, tracks explaining science, and tracks about his fictional gang war with MIT.³³

One of MC Hawking's early tracks, "The Mighty Stephen Hawking" is one of several songs that serve to establish Hawking's credentials. One of the more memorable lines encapsulates the gist of the song. Hawking raps:

Don't make me get out of this chair,
I'll pop you like a zit,
you step to me as if you bad,
bitch please you ain't got shit.³⁴

Followed by the chorus:

I'm the mighty Steven Hawking,
The might mighty Steven Hawking,
I'm the mighty Steven Hawking,
Might might mighty Steven Hawking,³⁵

As one can see, braggadocio often bleeds into threats of violence.

In addition to such threats, MC Hawking's songs, like the more traditional rap he parodies, often include references to the gangster-lifestyle and the violent acts that it

³² "[Rapping is] a way to take your anger, frustrations, your ego, and kind of give it a form. That's what it was for us... The ego. That's a part of rap. A lot of people don't realize. Ego, bravado, it's a part of the music. It's as essential as rhyming, to a certain extent."*

* Ice Cube, *Fresh Air*, NPR, Originally aired Jan 10, 2005.

³³ Explained by the fact that their town stole the name Cambridge from Hawking's own town/university.

³⁴ MC Hawking, "The Mighty Stephen Hawking," *MC Hawking's Crib*: www.mchawking.com, Available online: http://www.mchawking.com/multimedia.php?page_function=mp3z, Available March 2005. All of the songs referenced are also available on *A Brief History of Rhyme: MC Hawking's Greatest Hits*; I chose to leave the citations in the most useful format for those seeking to find the songs online.

³⁵ MC Hawking, "The Mighty Stephen Hawking."

entails. His song written for *PC Gamer* in 2002, “GTA3,” compares Hawking’s life to the popular, and infamously violent, videogame Grand Theft Auto 3. He raps:

GTA3's like the Sims to me,
a real life simulator 'cause that's where I be,
on the street, packing heat, car jacking, head cracking,
taking duckets [*sic*] from the pockets of the bourgeoisie.³⁶

In “All My Shootin’s Be Drivebys,” Hawking learns from one of his collaborators, DJ Doomsday, that his childhood friend, Pookie, has been killed. He raps:

I ask Doomsday who the motherfuckers be,
"some punk ass bitches from MIT."
The fucking Institute, man I should've known,
I say meet me at my crib and hang up the phone.
Playtimes over I got a job to do,
and the world will be less crowded by the time I'm through,
and I'll keep rolling while bullets fly,
cause all my shootings be drivebys.³⁷

The song continues along these lines, and by the end, Hawking and DJ Doomsday have avenged Pookie by killing six “gang members” from MIT. The mythos of this song is further elaborated on in several tracks from *A Brief History of Rhyme*. The CD includes “excerpts” from a radio interview with MC Hawking. The radio host tries to get Hawking to admit he participated in an unsolved driveby shooting of a group of MIT students very similar to MC Hawking’s lyrics, that occurred mere months before the song was released.

While MC Hawking’s songs always have an element of braggadocio in them, they also frequently make reference to Hawking as a scientist—indeed the dichotomy between

³⁶ MC Hawking, “GTA3,” *MC Hawking’s Crib*: www.mchawking.com, Available online: http://www.mchawking.com/multimedia.php?page_function=mp3z, Available March 2005. N.B. *The Sims* is another popular videogame, in which players experience everyday activities through an in-game avatar; “duckets” derives from ducats and refers to money.

³⁷ MC Hawking, “All My Shootin’s Be Drivebys,” *MC Hawking’s Crib*: www.mchawking.com, Available online: http://www.mchawking.com/multimedia.php?page_function=mp3z, Available March 2005.

the two is one of the main appeals of the songs. For instance, in the same song, “All My Shootin’s Be Drivebys,” Hawking describes a shooting as:

Time to give a Newtonian demonstration,
of a bullet its mass and its acceleration.³⁸

While many songs have similar, small, references to science, an early song, “Entropy,” is almost exclusively about science. Throughout the song, Hawking attempts to explain the concept of entropy. For instance, he raps:

Defining entropy as disorder's not complete,
'cause disorder as a definition doesn't cover heat.
So my first definition I would now like to withdraw,
and offer one that fits thermodynamics second law.
First we need to understand that entropy is energy,
energy that can't be used to state it more specifically.
In a closed system entropy always goes up,
that's the second law, now you know what's up.³⁹

In the same song, he uses his explanation of entropy to further his conflict with the creationists. He raps:

Creationists always try to use the second law,
to disprove evolution, but their theory has a flaw.
The second law is quite precise about where it applies,
only in a closed system must the entropy count rise.
The earth's not a closed system' it's powered by the sun,
so fuck the damn creationists, Doomsday get my gun!⁴⁰

One of the most humorous parts, of course, is that “Entropy” is a succinct explanation of the second law of thermodynamics. Likewise, a new track from *A Brief History of Rhyme* is titled “Big Bizang,” and explains the Big Bang.

³⁸ MC Hawking, “All My Shootin’s Be Drivebys.”

³⁹ MC Hawking, “Entropy,” *MC Hawking’s Crib*: www.mchawking.com, Available online: http://www.mchawking.com/multimedia.php?page_function=mp3z, Available March 2005.

⁴⁰ MC Hawking, “Entropy.”

Although MC Hawking attacks creationists in “Entropy,” that song is not the first time he has done so. One of his oldest tracks is called “Fuck the Creationists.” In it, he raps:

Fuck the damn creationists, those bunch of dumb-ass bitches,
 every time I think of them my trigger finger itches.
 They want to have their bullshit, taught in public class,
 Stephen J. Gould should put his foot right up their ass.
 Noah and his ark, Adam and his Eve,
 straight up fairy stories even children don't believe.
 I'm not saying there's no god, that's not for me to say,
 all I'm saying is the Earth was not made in a day.⁴¹

Like his rivalry with MIT, but perhaps more heartfelt on the part of the creator, Hawking’s conflict with creationists gives him someone to attack, while building himself up. It is designed to be reminiscent of the various “rap wars”—in which rap groups attack rivals in their songs.

The overriding theme employed in the characterization of MC Hawking is that he is aggressive. From drive-by shootings, to continuous threats of violence, MC Hawking plays on a dissonance between the MC’s trash talk and Hawking’s disability. He also plays on a dissonance between the street language of rap and the expected language of the brilliant scientist.

Repeated Characterizations of Hawking in Fiction

Hawking as an Authority

This type of reference to Hawking is the most prevalent and is also, generally, the briefest. It is often a passing mention that does not focus directly on Hawking, instead using his position as an authority to make another claim. In situations in which Hawking

⁴¹ MC Hawking, “Fuck the Creationists,” *MC Hawking’s Crib*: www.mchawking.com, Available online: http://www.mchawking.com/multimedia.php?page_function=mp3z, Available March 2005.

is not simply mentioned, but is more involved in the story (direct fictional, as opposed to tangential), Hawking's authority tends to be a central characteristic, but also only one of several attributed to him.

The idea that Hawking is frequently characterized as an authority should not be new. It has been touched on throughout the discussion of fictional appearances.

Futurama, from this period, and *Dilbert*, from the cusp of the last, both portray Hawking as an authority.⁴² In *Dilbert* he is an "expert on all astrophysical phenomena, and black holes in particular."⁴³ In *Futurama* he is "that physicist that invented gravity" and the person who relays, both to the other characters and to the viewers, that the Universe has been destroyed.⁴⁴

A typical reference to Hawking's authority occurs in Richard Kelly's movie, *Donnie Darko*.⁴⁵ Towards the middle of the movie, Donnie asks his science teacher, "Do you know anything about time travel?" After a few shots to indicate time passing, the teacher says "Ah, a wormhole with an Einstein-Rosen bridge." At which point there is a cut to an extended shot of *A Brief History of Time* sitting on the teacher's desk. The teacher continues, "Which is theoretically a wormhole in space, controlled by man. So, according to Hawking, a wormhole may be able to provide a shortcut for jumping between two distant regions of spacetime." This reference to Hawking not only explains to Donnie what the teacher's explanation is based on, it also offers the audience an

⁴² *The Simpsons* will be covered in the section below. It is related to Hawking as authority, but distinct: Hawking as the personification of knowledge and/or intellect.

⁴³ *Dilbert*, "The Infomercial."

⁴⁴ *Futurama*, "Anthology of Interest I."

⁴⁵ Richard Kelly (writer, director), *Donnie Darko*, Twentieth Century Fox Home Video, 2003; theatrical release 2001.

authority on which to rely. By doing so, it helps to dispel the audiences' (natural?) disbelief at the concept of effects preceding causes—key to understanding the movie. By using Hawking's authority to relay information in the movie, Richard Kelly is reinforcing the characterization of Hawking as an authority. A similar, but more subtle, reference to *A Brief History of Time* occurs in the film adaptation of *Harry Potter and the Prisoner of Azkaban*. Time travel also plays a role in that film. Early in the film, a wizard is seen reading a copy of Hawking's book while magically stirring a large mug.⁴⁶

Although from before the current period,⁴⁷ another previously unmentioned example comes from Drew Carey's book, *Dirty Jokes and Beer*. Living up to the book's title, one of the sections is called "101 Big Dick Jokes," in which Carey has collected jokes exchanged between him and his friends, all of which deal with how large their respective genitalia are. The one applicable here is, "My dick's so big that Stephen Hawking has a theory about it."⁴⁸ The joke assumes the knowledge that Stephen Hawking is an authority associated with black holes, but it still functions if one only knows that Hawking is an authority associated generally with science. The joke itself informs the listener that Hawking is associated with things that are big, so only a passing familiarity with Hawking is needed to "get" the joke. The joke functions, to some degree, in the same way that *Donnie Darko* does: reinforcing that Hawking is an

⁴⁶ *Harry Potter and the Prisoner of Azkaban*, Warner Bros. Pictures, DVD distributed by Warner Home Video, 2004. Theatrical release 2004.

⁴⁷ This is a quasi-metaphor, and would fit nicely in that section in the previous chapter. However, it is such a nice example of Hawking as an authority, that I saved it for here. It should also serve as a reminder that these periodizations, though logical, are artificial. Another viable categorization would be 1974-1988, 1988-1993, and 1993-2004. I chose the schema I did because I wanted to emphasize changes before and after 1999, but either schema is defensible. The lesson is to not insist on rigid periodizations.

⁴⁸ Drew Carey, "101 Big Dick Jokes," *Dirty Jokes and Beer*, Abridged audio book (New York: Simon & Schuster Audio, 1997).

authority. However, it also implies that Hawking is the key person who comes up with theories about the macroscopic Universe.

Hawking as the Personification of Knowledge/Intellect

In *Einstein as Myth and Muse*, Alan Friedman and Carol Donley argue that Einstein is characterized as the embodiment of knowledge. They write, “the public image of Albert Einstein has come to represent intelligence in general, and the scientific mind in particular . . . Einstein is used to represent supreme intellect, which is out of reach of the ordinary mind.”⁴⁹ While Hawking’s characterization as intellect personified is not nearly as ubiquitous as Einstein’s, Friedman and Donley’s quotation applies just as well to some popular culture characterizations of Hawking.

This has already been seen. In *The Simpsons*, Hawking is “the world’s smartest man,” and serves as a font of wisdom. This wisdom is not at all related to his claims to authority based on his research and position. It is one of the first examples (and certainly the first widely popular example) of Hawking’s authority being generalized. Other, briefer, uses of Hawking as a generalized authority also exist. In the short-lived television show *John Doe*, the protagonist, John Doe, himself a genius, mentions playing chess by e-mail with Stephen Hawking.⁵⁰ Again, Hawking is used as an authority in an area not connected to his usual portfolio. The reference primarily serves to characterize Doe as incredibly intelligent, but also reinforces that characterization of Hawking.

In addition to *John Doe* and *The Simpsons*, several more references to Hawking imply similar claims. In 1994, the remnants of Pink Floyd released *Division Bell*.

⁴⁹ Alan J. Friedman and Carol C. Donley, *Einstein as Myth and Muse* (Cambridge: Cambridge University Press, 1985), pg. 180.

⁵⁰ *John Doe*, "Shock to the System," FOX, Aired April 4, 2003.

Perhaps the pivotal track of the album, "Keep Talking," features Hawking using his voice synthesizer to speak several lines.⁵¹ A typically-Pink Floyd instrumental segment begins the song. The first words of the song are Hawking saying:

For millions of years mankind lived just like the animals
Then something happened which unleashed the power of our imagination
We learned to talk

The song alternates between a male singer and a group of female gospel singers, with one serving as the primary singer, and the other serving as a responsive chorus. For instance, in the first verse, the male sings the lead and the gospel singers respond. He sings, and they respond (after each forward slash):

I think I should speak now / Why won't you talk to me
I can't seem to speak now / You never talk to me
My words won't come out right / What are you thinking
I feel like I'm drowning / What are you feeling

The first verse ends with the male singer asking, "Where do we go from here?" After an instrumental interlude, Hawking again speaks:

It doesn't have to be like this
All we need to do is make sure we keep talking

A second verse follows, this time with the gospel singers singing lead, and the male responding. After which, Hawking repeats his previous, "It doesn't have to be like this / All we need to do" quotation, except more slowly, and much more dramatically.

Aside from a distinct appropriateness for Stephen Hawking to be delivering a message on the importance of talking, Hawking is used as an authority on the evolution of human society. He is also used to deliver the overriding message of the album: "All we need to do is make sure we keep talking." Even if one quibbles that "Keep Talking"

⁵¹ Pink Floyd, "Keep Talking," *Division Bell*, Columbia Records, 1994.

is not *the* central message of the album, it is clearly meant to be sagacious advice.

Setting up Hawking as a dispenser of wisdom is the same characterization that would later be used in *The Simpsons*, and functions to generalize the authority Hawking already has in physics.

Another characterization is also from an unexpected source. On *Def Poetry Jam* on April 25, 2003, "Uncle Shappy" did a rap titled "I am that Nerd," the tenor of which was humorous.⁵² In it, Shappy says, "I'm so much smarter and nerdier than you." In addition to rapping about Star Wars, and the like, he mentions Stephen Hawking. He raps:

I had Stephen Hawking gawking and gasping for air,
blew his mind with my knowledge
and he fell straight out his chair

It may be useful, in showing the connection between Shappy's lyrics and Hawking's characterization, contextualize the previous quotation with another reference, later in the rap. In bragging about how much money he has, Shappy claims, "I make Bill Gates feel poor." Gates is one of a handful of people associated with having vast amounts of money. It is not a stretch of the imagination to claim that Bill Gates is the "embodiment of wealth." So, when Shappy wants to claim that he is wealthy, he hyperbolizes that he "makes Bill Gates feel poor." When he wants to claim that he is smart, he claims he "blew [Hawking's] mind with [his] knowledge." Shappy characterizes Hawking as someone who has knowledge, in the same way that Gates is someone who has money. This is a far more ambitious claim than that Hawking is an authority on black holes.

⁵² "Uncle Shappy," "I am that Nerd," *Def Poetry Jam*, HBO, Originally aired April 25, 2003, Available online: <http://www.uncleshappy.com/video/defjam.ram>, Available March 2005.

Yet another example comes from another animated FOX show: *Family Guy*.⁵³ In a song about how great it will be to leave in the Griffin's new mansion, the servants sing to Chris, "We'll do your homework every night." Chris responds, "It's really hard." The butler says, "That's why we got that Stephen Hawking guy!" A similar example comes from the short-lived Showtime science fiction show, *Odyssey 5*. In an episode in which a drug links people's minds into a distributed computer, Neil Taggart says, "All the kids who take this drug, they get really smart. Dr. Stephen Hawking smart."⁵⁴

Hawking as Transcendent

In many ways, the idea of transcendence is the opposite of the emphasis on both Hawking's disability and his humanity. Transcendence is deeply rooted in the Enlightenment idea of mind/body duality, and specifically the triumph of mind over body; of Godliness over the brutishness of Man. Hawking has an incredible mind, but a failing body. Although not a dominant theme in any one piece of fictional popular culture, it resonates with the newspaper articles that imply (or explicitly use) that characterization.

A transcendence motif is most obviously developed in the story in *The Onion* from the previous chapter on the 1990s. In it, Hawking uses his incredible mind to design and build a new, better (nonhuman) body for himself. Perhaps tellingly, *The Onion*, while fictional, is also a newspaper—the dominant media for that characterization. However, other examples also exist. In *The Simpsons* episode, the theme is much less obvious, but still resonates. The episode hints at Hawking's transcendence in several respects.

⁵³ *Family Guy*, "Peter, Peter, Caviar Eater," FOX, Originally aired Sep 23, 1999.

⁵⁴ *Odyssey 5*, "Rapture," Showtime, Originally aired August 2, 2002.

Hawking is shown as the embodiment of wisdom, which, while not implying transcendence is certainly congruent with it. More convincingly, Hawking is shown as being in an objective position, able to pass judgment, and to tell Lisa where she and her cohorts went wrong. Perhaps the best hint occurs during the scene with the mob, in which Hawking literally rises above “brutish humanity.” In short, any time a characterization of Hawking juxtaposes Hawking’s brilliant mind and wasted body, the implication of transcendence exists.

Humanizing Hawking

The portrayal of Hawking as an ordinary man is a common characterization. Tellingly, it is much more likely to be present if Hawking is participating in his own portrayal, than if Hawking is being portrayed by someone else.

In *The Simpsons*, Hawking is eager to go get some beer with Homer. In *Futurama*, he frequents a “pizza joint,” and is constantly taking credit for other people’s ideas. On the previously unmentioned *Late Night with Conan O’Brien*, he is awed by the film *Dumb and Dumber*.⁵⁵ And in the world of *MC Hawking’s Crib*, his concern with respect, his drug and alcohol use, and his propensity for violence mark him as a common man within the subgroup that the MC is satirizing.

There can be element of humbleness in such characterizations, and also perhaps a desire to be included, instead of constantly set up on a pedestal; or, if Hawking is not involved, of imposing humbleness. In any case, there is a definite element of humanizing the mythic in most of the Hawking’s fictional appearances. This generally translates into a proviso that Hawking is “still a man.”

⁵⁵ *Late Night with Conan O’Brien*, NBC, Originally aired May 22, 2003.
N.B. Hawking provides his own voice.

Emphasizing Hawking's Disability

Visually, one of the immediately obvious facts about Stephen Hawking is that he is disabled. Most characterizations of Hawking include this fact, but some emphasize it. In the already discussed episode of *Dilbert*, Hawking rarely acts on his own initiative and is moved around with a remote control. In the quip from *Seinfeld* mentioned in the Introduction, the only important fact about Hawking is that he is in a wheelchair.

Additional tangential references, starting in 1993, also deal with Hawking's disability. An earlier *Seinfeld* reference involved a salesman trying to sell a wheelchair with the claim that he had previously sold one to Stephen Hawking.⁵⁶ A similar reference occurs on *Malcolm in the Middle*. Craig breaks both of his legs and both of his arms and gets a capuchin "helper" monkey. Bragging about the monkey, he says, "I got a good one too. His brother worked for Stephen Hawking."⁵⁷ A Tom Stoppard play obliquely refers to Hawking. A character, speaking to a physicist says, "I'd push the lot of you over a cliff myself. Except the one in the wheelchair, I think I'd lose the sympathy vote before people had time to think it through."⁵⁸ And, of course, a number of already mentioned articles focus on his disability.

Hawking is also the subject of many representations on the Internet. A small genre of flash animations of Hawking exist. Hawking's characterizations in these normally revolve around his disability and are much more likely to be negative than mainstream characterizations. The prevalence of such portrayals is a result of two things. First,

⁵⁶ *Seinfeld*, "The Handicap Spot," NBC, Originally aired May 13, 1993.

⁵⁷ *Malcolm in the Middle*, "Monkey," FOX, Originally aired May 2, 2002.

⁵⁸ Tom Stoppard, *Arcadia* (London and Boston: faber and faber, 1993), 61.

Hawking is easy to impersonate—anyone with a computer can mimic his “voice.”
Second, Americans are very uncomfortable with the severely disabled.⁵⁹

One way to deal with Hawking’s disability is to ridicule it. Many such representations do so, whether it be through Hawking getting a girlfriend who also suffers from ALS,⁶⁰ or being unable to press a button to complete his plans of world domination,⁶¹ or being beaten up in a reenactment of Rocky.⁶²

Hawking as an Aggressive Figure

The other way of dealing with that discomfort is to make Hawking aggressive, or at least make him active. For instance, a picture focuses on Hawking’s disability while parodying *Tony Hawk’s Pro Skater*. The picture purports to be the cover of a new game, from the makers of the *Tony Hawk* franchise, called *Stephen Hawking Pro Wheelchair 2*.⁶³ It features a surprisingly serene looking Hawking performing skateboarding moves with his wheelchair. That is, he is in his wheelchair, in the air, upside down, and over a

⁵⁹ While Americans are not the only ones uncomfortable with the severely disabled, I feel more confident defending that claim than one that is broader.

⁶⁰ “Stephen gets a girlfriend,” *Newgrounds.com*, Flash animation, Available online: <http://www.newgrounds.com/portal/view.php?id=34865>, Available March 2005.

⁶¹ “Episode 1 – Hawking Attack,” *Newgrounds.com*, Flash animation, Available online: <http://www.newgrounds.com/portal/view.php?id=45048>, Available March 2005.

⁶² “Stephen Hawking is Rocky,” *Newgrounds.com*, Flash animation, Available online: <http://www.newgrounds.com/portal/view.php?id=30640>, Available March 2005.

⁶³ It is unclear who created the picture, but it was submitted by a fan to, and is available from, *MC Hawking’s Crib*, and is being referred to as: “Stephen Hawking Pro Wheelchair 2,” *MC Hawking’s Crib*, Available online: http://www.mchawking.com/multimedia.php?page_function=fan_submissions, Available March 2005.

For a flash animation with a similar premise, see “Stephen Hawking’s Pro-Skater,” *Newgrounds.com*, Flash animation, Available online: <http://www.newgrounds.com/portal/view.php?id=37880>, Available March 2005.

half-pipe. Another example has Hawking's wheelchair sporting weapons, and his using them to fight Christians.⁶⁴

Making Hawking aggressive is also the tactic used in most mainstream fictional characterizations. For instance, in *The Simpsons*, he hits both Skinner and Homer. In *Futurama*, he orders Fry to be beaten, and is ready to kill Fry himself. In *The Onion*, he uses his power to rip open enemy tanks, and to fight evil. Finally, MC Hawking's violent exploits need little recapping. In addition to alleviating discomfort over Hawking's disability, having Hawking be aggressive is, as previously noted, an example of the ironic/absurdist humor pervasive in post-World War II American popular culture. Additionally, it subverts the characterization of Hawking as transcendent, thereby humanizing him. Finally, it builds upon the numerous positive characterizations of Hawking, in that we trust Hawking with power, more so than we have trusted previous famous scientists.⁶⁵

⁶⁴ "S. Hawking (ChristKiller)," *Newgrounds.com*, Flash animation, Available online: <http://www.newgrounds.com/portal/view.php?id=45107>, Available March 2005.

⁶⁵ An entire generation of science celebrities was tainted with association with the building of the atomic bomb.

CHAPTER 7 CONCLUSION

I have spent a good deal of time examining the ways that Hawking has been characterized throughout the past thirty years. But it is my hope that, by now, the reader will have a good sense as to why Hawking is repeatedly characterized along certain lines. I think this is a reasonable hope because the reasons behind the rise and fall of particular representations of Hawking are so intimately tied with the ways in which Hawking has been characterized. One has great difficulty separating the how and why.

There are, however, a few observations that address the “why” question, that have not yet been emphasized. I will do so now. The first is that Hawking is quotable. Spending five minutes composing sentences leads to pithy, quotable phrases that get reused often.¹ However, even before his tracheotomy, he was well known for two quotations. The first is his response to Einstein’s claim, “God does not throw dice.” Hawking famously quipped, “Not only does God throw dice, he throws them where they cannot be seen.” The second, explaining the implications of his “no boundary” proposal, also got quoted frequently during the late 1980s. He said, “What place, then, for a Creator?”

That second quotation was replaced, however, by a phrase from the last paragraph of *A Brief History of Time*. Hawking claimed that a “Theory of Everything” would be akin to knowing “the mind of God.” Several articles on Hawking also end with that

¹ Hawking can store them and recall them later.

quotation, and many more mention it. Finally, one quotation is referenced in articles about Hawking, but comes up frequently in articles about Schrödinger's cat. In context, it looks like: “‘When I hear about Schrodinger's Cat,’ Stephen Hawking once grumpily declared, ‘I reach for my gun.’ [Paragraph] Last week, the taunting feline (along with the image of Dr. Hawking pulling a revolver from a holster on his wheelchair and blasting the poor kitty to bits) was evoked again.”²

A second “why” is that Hawking is media savvy. Dorothy Nelkin once claimed, “Although scientific findings are reported in the press, theories are seldom newsworthy. Notably excepted are those theories of behavior that bear on social stereotypes.”³ Hawking often gets his theories reported on in the press because of wagers he makes with Kip Thorne and other scientists. Any time a bet is settled, it becomes a news story.

Another “why” question is, why is Hawking so consistently portrayed in comedies? Although the first major fictional appearance of Hawking was in a drama (*Star Trek: The Next Generation*) the majority of Hawking's appearances occur in comedies, and animated comedies at that. The animation is easy to explain. Hawking's brief appearance on *Star Trek* took hours to film.⁴ The comedy aspect is also understandable. Comedy, as a genre, makes it “OK” to laugh at anyone, regardless of whom they are. This gives the writer the freedom to incorporate images of a disabled Hawking, without fear of turning the episode into a “very special episode.”

² George Johnson, “Refining the Cat's-Eye View of the Cosmos,” *New York Times* (Jul 16, 2000), Week in Review 16.

³ Dorothy Nelkin, *Selling Science: How the Press Covers Science and Technology, Revised Edition* (New York: W. H. Freeman and Company, 1995; First edition published 1987), 21.

⁴ Michael A. Lipton, “Trek Stop: Physicist Stephen Hawking Beams Aboard the Enterprise to Film a Painstaking Cameo,” *People* (Jun 28, 1993), 81 (2 pages). (Infotrac).

Shifting gears, although not a prominent “why,” one aspect of Hawking’s characterization that I have not emphasized enough is the almost ritualistic repetition of a single phrase by dozens of authors: Hawking is “the Lucasian Professor of Mathematics at Cambridge, a post once held by Isaac Newton.” Out of hundreds of articles, I may have seen four or five that mention the Lucasian Chair without immediately following it with the information that Newton once held the chair. Watching how different authors slightly adjusted and punctuated the same basic phrase became a bit of a game for me.

Another aspect of Hawking’s public persona that I have not examined is representations of Hawking in art. In that context, Hawking is used as a symbol. Normally it is a symbol for intellect, or for overcoming adversity, but Phillip Glass used him as a symbol for exploration. In any event, Hawking has been a part of several works of art.⁵ Einstein has also been a part of a great many works of art and literature. However, because of their different roles—Hawking as a brilliant synthesizer and popularizer; Einstein as a revolutionary—Hawking will never have the same type of revolution in art and literature that Alan Friedman and Carol Donley are able to chart for Einstein in *Einstein as Myth and Muse*.⁶

Another comparison with Einstein involves the negative aspects of Einstein’s public persona. Friedman and Donley claim, “Einstein is our [collective] symbol of mankind’s intellectual achievement, yet we fear intellect that is beyond most of us. After all, the myth goes, that intellect produced $E = mc^2$, cause of nuclear weapons and

⁵ See: James R. Oestreich, “A Persistent Voyager Lands at the Met,” *New York Times Magazine* (Oct 11, 1992), 22, 26, and 28. and, Roberta Smith, “Some British Moderns Seeking to Shock,” *New York Times*, Late Edition (Nov 23, 1995), C11. and, Roberta Smith, “Peter Panchbeck, Abstract Painter and Teacher, 69,” *New York Times*, Late Edition (Sep 21, 2000), L B14

⁶ Alan J. Friedman and Carol C. Donley, *Einstein as Myth and Muse* (Cambridge: Cambridge University Press, 1985).

possible global holocaust.”⁷ Although the linkage between The Bomb and Einstein has diminished since *Einstein as Myth and Muse* was published, coinciding with the end of the Cold War, Einstein’s image was long linked with that of the atomic bomb. Friedman and Donley continually show that there is a certain ambivalence towards Einstein. Hawking’s public persona is contradictory at times, but there is little ambivalence. Indeed, during the 1990s, it appeared that Hawking represented the scientist redeemed.⁸ Even those who claimed his book was incomprehensible respected his intellect. Indeed, those claiming his book was inaccessible often praised his intellect as part of their denigration of his ability to popularize. However, Hawking’s iconic status has recently been attacked in a manner familiar to anyone who has seen the industry surrounding the reporting of celebrity news.

Some elements of Hawking’s characterization have persisted for over thirty years. With his disability, this was likely unavoidable. However, the high opinion of Hawking’s mind has been a constant, despite his renunciation of a number of his theories. Furthermore, it is remarkable how the comments of a few of Hawking’s close friends and colleagues (Dennis Sciama, Kip Thorne) in the 1970s have become ensconced in Hawking’s public persona.

⁷ Friedman and Donley, *Myth and Muse*, 186.

⁸ Hawking is the most famous scientist in the post-Cold War context. The ending of the Cold War greatly reduced the fear of nuclear war, at the same time reducing the fear of physicists prevalent since 1945. It is also significant that Hawking is a theoretician and cosmologist. Even in a Cold War context, there would be little danger of him building doomsday weapons. Additionally, Hawking is not a biologist. With the ending of the Cold War the “area of concern” shifted from physics to biology. Today the fears of science are not of nuclear war, but of cloning, biological warfare (or bioterrorism), and a myriad of other research areas perceived as threatening. Finally, Hawking’s disability makes him physically very vulnerable. That vulnerability further reduces fear of him.

As interesting as those static parts are, characterizations that change radically are perhaps more so. The heroic Hawking becomes explicit for barely five years before becoming a hidden characterization in his fictional appearances. It is also interesting how one characterization of Hawking will prompt another. For instance, the juxtaposition of Hawking's mind and body led to implications of transcendence. This led many to humanize him.

In addition, the present study has brushed on some broader themes in the public understanding of science. For instance, references to the "Theory of Everything" or the Grand Unified Theory invariably draw upon religious imagery. Another is that all of Hawking's theories did less to bring him to the public's attention than the first year's sales of his first popular book. Likewise, Hawking was still being introduced every time he was referenced, even after selling millions of books, until he appeared on *The Simpsons*.⁹

In the introduction, one of the more potentially controversial concepts was that of a singular "public persona" for Hawking in American popular culture.¹⁰ As I have shown, there are definite continuities between the myriad representations of. This continuity is itself the best argument in favor of the idea of a "public persona."

⁹ Although I argue that *The Simpsons* was the capstone on a process that had been occurring for the better part of a decade, it is still an obvious commentary on the popularity of a single television show versus science.

¹⁰ Despite my attempt to problematize the concept by thinking pluralistically, there may well be those that want a more local community.

CHAPTER 8 EPILOGUE: LOOKING TO THE FUTURE

It is time to discuss the future. I feel confident in my claim that Hawking will continue to be an icon, in the same way he is now, in the short-term. I also feel confident that I know what Hawking's obituaries will look like.¹ However, the future of Hawking's public persona after his death is uncertain. Hawking has several things in his favor for the continuation of his iconic public persona. The first is Hawking radiation. Science fiction books,² in addition to more "rigorous" discussions of black holes, will continue to refer to Hawking radiation. It may seem pedestrian, but that Hawking has something named after him, and an interesting something at that, will keep him from being totally forgotten. The second factor in Hawking's favor is the combination of his current iconic status and his disability. Such an obvious "hook" will make it likely he will be widely

¹ At one point, I considered including several such obituaries as an appendix, but did not, partly because I was reminded it might be in bad taste, but mainly because there is a crucial "x-factor": I do not know how long such obituaries will be. There is a huge difference in how Hawking would be presented in a short obituary versus a major article. Another unknown is the way that Hawking will die. If he were to die from pneumonia or another clear complication of ALS, it would be quite easy to predict the kinds of articles that would be produced. However, if Hawking died in an accident, Jane and Lucy's claims that Elaine was abusing Hawking would resurface. This would produce a very different type of article. In any event, one can expect certain features of any obituary of Hawking. Highlights sure to crop up are:

- Hawking suffered from amyotrophic lateral sclerosis.
- Hawking was the author of the best-selling *A Brief History of Time*.
- Hawking was Lucasian Professor of Mathematics at Cambridge, the position once held by Isaac Newton.
- Hawking was widely considered the most famous living scientist and had been called the greatest scientist since Einstein.
- Hawking had appeared on *Star Trek: The Next Generation* and *The Simpsons*.
- And a possible ending: Hawking, like Einstein, spent much of the end of his life working on finding a "Theory of Everything." Hawking believed that such a theory would be akin to knowing "the Mind of God." Or: Perhaps Hawking has finally achieved his goal of knowing "the Mind of God."

² Alastair Reynolds, *Revelation Space* (New York: Ace Books, 2002; c2000), 103.

remembered. A parallel between the “hook” of Madame Curie as a woman and Hawking as disabled springs to mind. If nothing else, historians of science will eventually write widely about him. At the present, I do not know whether or not Hawking will ever reach the iconic saturation of Einstein and Newton. I think we will be in a position to tell, roughly ten years after Hawking’s death. If forced to bet now, the safe money would be that he will remain a widely recognized scientist, like Madam Curie, but that his iconic status will fade after his death.

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