

**PITFALLS OF PERFECTION: RETHINKING HAWTHORNE’S TREATMENT
OF SCIENCE AND THE DANGER OF EXTREMES IN “THE ARTIST OF THE
BEAUTIFUL” AND “THE BIRTHMARK”**

A Thesis

by

ALEXANDER NICHOLAS HAITOS

Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Chair of Committee,	Mary Ann O’Farrell
Committee Members,	Jessica Howell
	John J. McDermott
Head of Department,	Maura Ives

December 2015

Major Subject: English

Copyright 2015 Alexander Nicholas Haitos

ABSTRACT

My theme herein is Nathaniel Hawthorne's (1804-1864) treatment of science in his short stories, primarily "The Artist of the Beautiful" and "The Birthmark." In particular, I am interested in the caution he sounds against misusing the power of modern science, a caution that remains valuable for us today, enveloped as we are in its influence. The first part of this project centers on Hawthorne's diagnosis that the core of artistic and scientific practice involves a quest for perfection and desire to transform nature. The danger that awaits those who attend too exclusively to this quest is that they may become 'detached individuals,' to use the phrase of Josiah Royce. The second part of this project is an exploration of the dangers of this perfection-seeking, detached profile within the context of scientific practice, as depicted by Hawthorne in "The Birthmark." We see here that the detached scientist is not only a menace to himself, but also to others. Georgiana, Aylmer's wife, is reduced to a mere aspect of her being and led to her death; Aminadab, Aylmer's lab assistant, is used only as a source of labor.

We learn, then, not only how Hawthorne thought about the relationship between art, science, and human nature, but also of the value of Hawthorne's diagnoses for contemporary society, for, as scientific and technological advancements become ever more pervasive aspects of contemporary life, the allures of such advances can easily make us lose sight of the human questions, of whether we are actually receiving nourishment from our engagement with new sciences and technologies or are falling prey to a deceptive dream.

DEDICATION

To those who are always excited by a good story.

ACKNOWLEDGEMENTS

I would like to thank my committee chair, Dr. Mary Ann O'Farrell, and my committee members, Dr. Jessica Howell and Professor John J. McDermott, for their guidance and support throughout the course of this research. Dr. O'Farrell's wise and prudent guidance throughout this undertaking has been both invaluable and enriching.

Thanks also go to my friends and colleagues and the department faculty and staff in both the English and Philosophy Departments who have buttressed my educational experience here at Texas A&M, making possible the work before you. I have thus incurred a vast intellectual debt which I hope to pay off through a lifelong engagement in teaching and educational service.

Finally, thanks to my parents, Nick and Karen Haitos, for their encouragement, and especially to my partner Deborah Strehle for her patience and support (i.e. putting up with lots of questions, complaints, and uncertainties, all while offering fruitful suggestions and incisive critique).

TABLE OF CONTENTS

	Page
ABSTRACT	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
CHAPTER I INTRODUCTION	1
Transformation in the Meaning of Science	5
Hawthorne and Pseudo-Science	10
Prospects	13
CHAPTER II AN IMBALANCE OF SPIRIT AND EARTH, OR: THE DANGER OF DETACHMENT	17
The Story	20
Spirit and Earth	24
The Quest for Perfection	34
The Detached Individual	45
The Dangers of Science Extend Beyond Those of Art	55
CHAPTER III “THE BIRTHMARK”—SCIENTIFIC SEDUCTION AND EXPLOITATION	58
The Story	59
Aylmer’s Self-Deception	63
Manipulation of Georgiana	75
Aminadab’s Laugh	94
CHAPTER IV CONCLUSIONS	104
REFERENCES	108

CHAPTER I

INTRODUCTION

I take as my theme herein Nathaniel Hawthorne's (1804-1864) treatment of science in his short stories, primarily "The Artist of the Beautiful" and "The Birthmark." In particular, I am interested in the caution he sounds against misusing the power of modern science, a caution that remains valuable for us today, enveloped as we are in its influence. We can take as an initial understanding of science that it is a group of practices that methodically investigate nature through carefully regulated questioning and experimentation. Cultural activities that depend in large part on the practical exhibition of scientific principles, such as technology, engineering, and medicine, are broadly implicated in Hawthorne's critiques precisely because they manifest scientific principles and are the concrete means for the entry of these principles into our lives. Some of these activities, advancements in technology and engineering especially, are themselves reenlisted in scientific practice through the development and design of experimental apparatuses. In some cases scientific inquiry is undertaken *for* its practical ramifications, for example, to find a cure for a disease or to figure out how to make a material strong and light enough for some particular purpose. It is these practical, technological developments that realize scientific power and effectiveness in the world and, as we shall see, are enmeshed in Hawthorne's vision and critique of science.

In taking up science as a theme in some of his short fiction, looking at and exploring its effects upon personal, social, and cultural interactions, Hawthorne refuses

to let us forget our common humanity and asks us to reflect upon the world we have built and are building for ourselves. The themes of power and mastery stand out in these stories, with the imperious capabilities and influence of “Science” and its practitioners placed on display. Yet the scientific quest is also cast as a spiritual, even artistic endeavor, one deeply rooted in human being in the world. Hawthorne does not shy away from ambiguity in constructing characters and texturing themes, and a rich tapestry depicting the complexity of human life, motivation, and the quest for knowledge can be put together from his stories. In this thesis I put together one such tapestry in the hope that it illuminates the relationship between the human situation and the ever-growing presence of science and technology within our culture, locally and globally.

Perhaps the most explicit message Hawthorne gives us about science is that we should beware the ever-tempting misuse of its power. Hawthorne draws our attention again and again to the incredible power over nature bequeathed by science, a power to manipulate and direct natural forces to human ends. There is of course great potential and promise in this power—this is why it is pursued—but Hawthorne also sees something far more ominous lurking in the expansive control of nature, namely, the ability to use and threaten one’s fellow human beings with increasing ease and efficiency.¹ Though Hawthorne’s stories raise a warning flag about some very dangerous

¹ I take Hawthorne, in the stories here considered, to exhibit a clear concern for the potentially harmful relationship between human beings and scientific practice. He does not appear to be as concerned with the scientific abuse of nature in its effects on animals and plants, though the story “Rappaccini’s Daughter” might complicate this rough distinction between the human and non-human. In any event, my focus here is on science and human beings, as important as are the effects of science on plants and animals. It is human beings, after all, who invented and practice scientific ways of examining and manipulating nature. C.f.

potential outcomes of scientific practice, a warning I find ever timely and serious because of the tremendous influence of scientific thinking on the technologies and activities of the modern world, I want to make it clear that my exploration of Hawthorne's concerns ought not to be interpreted as the raising of a war cry against the sciences or as the heralding of some future dystopia. My aim instead is to focus upon the existential import and consequences of scientific practice, broadly construed, as outlined by Hawthorne in some of his short fiction. By existential import, I mean anything brought to bear in some way on these questions: Do we, transient and finite beings, matter? Why? And if so, how so? Just what scientific knowledge and power is capable of and how we should comport ourselves to this omnipresent aspect of modern culture are my primary concerns.

While past examinations of Hawthorne and science have focused on the relationship between science and religion, on that between science and art, on the many facets of Hawthorne's characters, and on acknowledging his role in establishing the genre of "science fiction," my exploration inflects these concerns in a different way, focusing on the philosophical and existential resonances of Hawthorne's stories for the present day.² What do Hawthorne's stories reveal about the general structures of

Nathaniel Hawthorne, "Rappaccini's Daughter," in *Mosses from an Old Manse*, Centenary Edition, vol. 10, *The Works of Nathaniel Hawthorne* (Columbus: Ohio State University Press, 1974), 91–128.

² See, for example, the following articles and studies: Millicent Bell, *Hawthorne's View of the Artist* (Albany State University of New York, 1962); Barbara Eckstein, "Hawthorne's 'the Birthmark': Science and Romance as Belief," *Studies in Short Fiction* 26, no. 4 (Fall 1989): 511–19; Howard B. Franklin, *Future Perfect: American Science Fiction of the Nineteenth Century* (New York: Oxford University Press, 1968); R. B. Heilman, "Hawthorne's 'The Birthmark': Science as Religion," *South Atlantic Quarterly* 48 (1949): 575–83; Toshikazu Masunaga, "Nathaniel Hawthorne in the Age of Science and 'The Birthmark,'" *Kwansei Gakuin University Humanities Review* 15 (2010): 79–92; Edward H. Rosenberry, "Hawthorne's Allegory of Science: 'Rappaccini's Daughter,'" *American Literature: A Journal of Literary*

scientific practice and about our approach to and appropriation of these practices within our culture? The theme of science and the conjoined issues of power and meaning in human relationships are important and it is worth reexamining and recasting what Hawthorne says on these matters.

Acting as a cornerstone to this way of thinking is the idea that what Hawthorne says about science through his short stories is still of great relevance for contemporary culture and our interpretation of (that is, the meaning we give to) scientific practice. The message sounded still resonates. That this should be so, though, requires a bit of explanation. The sciences are very different now than they were in the early and mid-19th century. And Hawthorne's stories about science and crazed scientists involve alchemy, magic, and ancient, occult lore. Hawthorne himself was more interested in pseudo-sciences such as mesmerism than in fields we today more readily identify as scientific—physics, for example. In order to take up Hawthorne's stories and interpret what they say about scientific practice as meaningful for us now, in the 21st century, I must clear the ground and show why what Hawthorne says about science (taken in its 19th century meanings) could be relevant to what we in the 21st century understand as science. This

History, Criticism, and Bibliography 32, no. 1 (March 1960): 39–46; Mary E. Rucker, "Science and Art in Hawthorne's 'The Birth-Mark,'" *Nineteenth-Century Literature* 41, no. 4 (March 1, 1987): 445–61.

The following two studies are especially helpful for the synoptic view they give of scholarship on Hawthorne's short stories. I have found Newman's book especially helpful in this regard. Nancy L. Bunge, *Nathaniel Hawthorne: A Study of the Short Fiction*, vol. 41, Twayne's Studies in Short Fiction (New York: Twayne Publishers, 1993); Lea Bertani Vozar Newman, *A Reader's Guide to the Short Stories of Nathaniel Hawthorne*, Reference Publication in Literature (Boston: G.K. Hall, 1979). For more recent scholarship on Hawthorne, the *Nathaniel Hawthorne Review* publishes "Current Bibliographies" regularly. A survey of these bibliographies shows that much of the work currently being done on Hawthorne does not concern the role of science in his short fiction.

Additional scholarship pertaining to Hawthorne's short stories is listed in the "Supplemental Sources Consulted" subsection of the reference section of this thesis.

task will take up most of the rest of this introduction, at the end of which I shall delimit my project and briefly outline the body of the thesis.

Transformation in the Meaning of Science

Considering the task at hand, it is fortunate for us that the 19th century was the time when a great deal of current scientific terminology and disciplinary boundaries were established, for potential lines of connection between the past and present meanings of science are thus more easily spotted. The social sciences came into being during the middle of the century. “Biology” was coined as a term and was established as an independent science. “Science” itself was coming to be used equivalently with, and would eventually replace, the older term “natural philosophy.”³ These are only a few obvious signs that the modern approach to science was flowering, a link from that time to ours. The content and specific methods of the particular sciences were different then than they are at present, however. What comes to mind now when one thinks of chemistry is not what would have come to mind for a person in the early 1800s. Yet there is a connection. The ideas that underlie the explosion of autonomous scientific disciplines and the rise of the catchall term “science” itself go back much farther than the 19th century and still hold sway in the present. There is a continuity of history here, a thread by which Hawthorne’s thoughts about science can reach us, meaningfully, today.

Before the term “natural philosophy” was usurped by “science,” it underwent its own shift in meaning that reached its critical stage during the 17th century. It is this shift

³ One will find both terms used in Hawthorne’s stories, though “natural philosophy” usually appears as simply “philosophy.”

that marks the emergence of science in its modern sense and, in broad presuppositions about inquiry and experimentation, characterizes an attitude that runs through the many particular sciences from then until today. A brief version of this story runs as follows.⁴

During much of the medieval period, mathematics and natural philosophy were considered distinct areas of knowledge, distinct sciences, a division that stems from Aristotle's classification of the branches of knowledge, their objects, and the methods for learning about these objects.⁵ Natural philosophy was directed towards the natures of things, that is, their internal principles of movement and change. It explored causes, why natural things are the way they are. Aristotle conceived of this as an inexact science because its subject matter (motion and motive causes) did not admit of absolute precision. Mathematics, by contrast, was concerned with number, ratio, geometrical relations, and other abstract invariables, and proceeded by way of axiomatic proof (exemplified by geometry). "Middle sciences," such as optics, mechanics, and astronomy, lay between mathematics and natural philosophy and were considered part of neither, though they were exact sciences. They dealt with parts of the natural world and so were not part of mathematics, yet their methods and scope were so narrow and focused on quantification that they did not concern themselves with the broader

⁴ In my retelling of this history, I rely primarily on Edward Grant, *A History of Natural Philosophy: From the Ancient World to the Nineteenth Century* (Cambridge: Cambridge University Press, 2007). This book is very well done, especially with regard to the important influence of medieval thought on the scientific revolution. Some other relevant works that I have consulted include: Alfred North Whitehead, *Science and the Modern World* (New York: The Free Press, 1967 [1925]); James Trefil, *Science in World History, Themes in World History* (London: Routledge, 2012); David M. Knight, *Science in the Romantic Era* (Aldershot: Ashgate, 1998); Andrew Cunningham and Nicholas Jardine, *Romanticism and the Sciences* (Cambridge: Cambridge University Press, 1990); Stefano Poggi and Maurizio Bossi, eds., *Romanticism in Science: Science in Europe, 1790-1840*, vol. 152, Boston Studies in the Philosophy of Science (Dordrecht, Boston: Kluwer Academic, 1994).

⁵ See Grant, *A History of Natural Philosophy*, 308.

questions of natural philosophy. For example, ancient and medieval astronomy was concerned with the precise measurement and calculation of astronomical phenomena, such as stellar positions and solar eclipses. It did not venture any theories as to the workings of the celestial bodies, the province of natural philosophy.

These exact “middle sciences” existed alongside but separate from natural philosophy for many centuries.⁶ It was the merging of these two independent branches of inquiry that yielded the great change in science that came to rapid fruition in the 17th century. Natural philosophy became mathematized and the exact sciences of astronomy, optics, and mechanics were freed from the restrictive bonds of pure calculation and prediction and nurtured by the quest for seeking the causes of and reasons for change. The ‘how’ and ‘why’ questions came together. An early champion of this reinvigoration of the sciences was Francis Bacon (1561-1626), who called natural philosophy the ‘Great Mother of the Sciences.’⁷ This is both a recognition of the continuity of natural philosophy and science and an early use of “natural philosophy” as a generic term for all the particular sciences, as it was commonly used in the 19th century. (“Science” began to be used as just such a generic term in the 19th century as well, and it is still used that way now.) One of the most splendid fruits of this mixture of natural philosophy and the middle sciences was Isaac Newton’s (1642-1727) *The Mathematical Principles of Natural Philosophy* (1687), a title that would not have made sense to medieval Aristotelians due to the conjunction of mathematics and natural philosophy. This work

⁶ Ibid., 303.

⁷ Ibid., 305-307.

laid out a system that dominated western physical theories until the end of the 19th century.

More than historical details, what interests us are the changes in scientific practice that attended the merging of the exact sciences with natural philosophy. These changes link the science of Hawthorne's day to our own.

First, there is a certain spirit of inquiry that characterizes modern science. In part, though, this spirit goes back even farther than the scientific revolution of the 16th and 17th centuries. As Edward Grant writes, "the spirit of inquiry remains essentially what it was in the Middle Ages: an effort to advance a subject by probing and poking around with one or more questions to which answers are sought, after which more questions are posed, in a never-ending process."⁸ This method drives modern science, then and now, including the social sciences that gained autonomy in the 19th century and the ongoing development of technology.⁹ So, though the particular techniques, instruments, and procedures of the particular sciences have changed tremendously from Hawthorne's time to ours, a general method, or spirit, of inquiry underlies these various endeavors, from medieval alchemy to modern chemistry.¹⁰ More than the specific features of any particular science, Hawthorne's stories probe this spirit and its effects, and side-effects, on other facets of human being, especially those of moral consequence. This is why they still speak to us.

⁸ Ibid., 327.

⁹ Ibid.

¹⁰ That this method or spirit underlies scientific inquiry is true even if one's personal motivation for practicing a science is directed towards fame, wealth, or some other end, for to achieve such a goal through the practice of science the 'probing and poking around' with questions must still be done. We need not now consider deceivers who present fabrications as if they were genuine scientific results.

A significant change between the medieval approach to inquiry into nature and that of the “new” science is the increased significance given to experimentation. Medieval scholars and theologians, following Aristotle, thought that experimentation intruded into nature and artificially distorted it; nature, the internal principle of movement, manifests itself obviously and “naturally,” and invasive procedures can alter the natural course of things, giving us false information.¹¹ So, in the medieval Aristotelian tradition, plain observation is more informative than experimentation. During the 16th and 17th centuries, by contrast, the “use of experiments to coax nature to yield her secret operations by artificial means” became a vital aspect of the advancement of the sciences.¹² A presupposition of this shift in thinking is that nature is not malleable, as it would have to be if experiments could distort it, but characterized by ironclad law. Straining experimentation is of no danger to necessity. This idea is related to the increasing mathematization and quantification of natural philosophy, mathematics being the paradigm science of necessary connections and conclusions.

Experimentation proved its effectiveness by the fact that the “secrets” learned led to increasing power over nature, the ability to make the world yield to human desires and activity. The dramatic development of various technologies since the 17th century, the pace of invention, the Industrial Revolution, and the computing revolution, all attest to the growing power of humanity over nature. Rene Descartes (1596-1650), a major intellectual figure in the blossoming scientific revolution, declared that with the new

¹¹ Grant, *A History of Natural Philosophy*, 283.

¹² Ibid.

science we are capable of becoming “the lords and masters of nature.”¹³ Francis Bacon, too, took “the true and legitimate goal of the sciences” to be “to endow human life with new discoveries and resources,” an endowment achieved through the extension of “the power and empire of the human race itself over the universe of things.”¹⁴ The quest for power over and the ability to control nature remains an underlying motive force of science; it is a presupposition of scientific practice and the application of scientific knowledge to human concerns. By taking power and experimentation as themes in his stories oriented by science and scientists—think here of “Dr. Heidegger’s Experiment,” “The Birthmark,” “Rappaccini’s Daughter,” and “Ethan Brand”—Hawthorne cuts to the heart of the matter. Power over nature is not the only motive behind scientific inquiry, but power abused has, almost by definition, the greatest potential to harm and denigrate other aspects of the human endeavor.

Hawthorne and Pseudo-Science

At this point I take myself to have outlined a core spirit of scientific inquiry that Hawthorne’s era shares with ours. Since this spirit is that with which Hawthorne engages in his tales, his diagnoses of the effects of the scientific quest on human life might remain of the utmost relevance almost two hundred years later, if these diagnoses were well made. But questions might be raised. How familiar was Hawthorne with the development of science going on around him? What about Hawthorne’s interest in

¹³ Rene Descartes, “Discourse on the Method,” in *Descartes: Selected Philosophical Writings*, trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (Cambridge: Cambridge University Press, 1988), 20–56; 47. *The Discourse on The Method* was originally published in 1637.

¹⁴ Francis Bacon, *The New Organon*, ed. Lisa Jardine and Michael Silverthorne, Cambridge Texts in the History of Philosophy (Cambridge: Cambridge University Press, 2000), 66 [first two quotations], 100 [third quotation]. *The New Organon* was originally published in 1620.

pseudo-sciences, such as mesmerism and phrenology? Might his interest in these fields, combined with his suffusing occult practices and magic into his stories, mean that Hawthorne's message is directed toward bygone eras, not toward anything particularly relevant to contemporary society?

In fact, Hawthorne was more interested in pseudo-sciences and the newly emerging social sciences than he was in what we today would call the "hard sciences," like physics and chemistry.¹⁵ But it is vitally important to remember that the term "pseudo-sciences" did not exist in the early 19th century. These fields were sciences alongside the others. It might be worth mentioning, too, that in some of the pioneering work done leading to the scientific revolution, alchemy and astrology were considered sciences alongside mechanics, optics, and medicine.¹⁶ What marks a field of inquiry or human endeavor as a pseudo-science rather than a science is a contentious issue. Speaking broadly, in instances like those of mesmerism and phrenology the results of practice did not square with observed phenomena; the theories broke down. And the methods used and inferences made lacked rigor or were based on thin reasoning and faulty assumptions. For example, in 19th century racial science, basic physical characteristics, such as the shape of the skull and the volume of the cranial cavity, were correlated with intelligence and moral character, facets of the human person now rightly

¹⁵ See Taylor Stoehr, *Hawthorne's Mad Scientists: Pseudoscience and Social Science in Nineteenth-Century Life and Letters* (Hamden: Archon Books, 1978). The whole book treats of relevant issues, but see especially chapter ten.

¹⁶ Grant, *A History of Natural Philosophy*, 308.

considered far too complex to be marked by basic physical features.¹⁷ The standards used to orient this whole system of “objective” measurement were, implicitly, Eurocentric, meaning white Europeans and Americans emerged at the top of the hierarchy of human races, and black Africans invariably found themselves at the bottom.

Despite the faults we may now find in older “pseudo-sciences” (such as 19th century ‘racial science’), at the time of their inception and flourishing they purported to be “genuine” sciences, just like physics and chemistry. All this means is that the general aims and the spirit of inquiry—of asking questions, probing and prodding nature, designing instrumentation, experimenting, asking new questions, and so on—were shared by all these particular fields, scientific and pseudo-scientific. I chose the example of racial science above because the aim at mastery of nature, “the true and legitimate goal of the sciences,” is exhibited in a particularly strong and unflattering light. Presuppositions and execution were different, perhaps flimsy in the case of the pseudo-sciences, but 19th century pseudo-science and science co-inhabit the same mental or psychological space. They are investigations into nature, a search for the reasons behind things, for nature’s secrets, an attempted step along the path to lordship over the universe. Thus when Hawthorne writes about alchemy, occult knowledge, and magic, he is treating of things that, interpreted literally as scientific doctrines, have little relevance to us today; however, Hawthorne approaches these phenomena in their commonality

¹⁷ For further, much more detailed discussion, see, for example, Nancy Stepan, *The Idea of Race in Science: Great Britain, 1800-1960* (Hamden: Archon Books, 1982); Ann Fabian, *The Skull Collectors: Race, Science, and America’s Unburied Dead* (Chicago: University of Chicago Press, 2010).

with science as he knows it, a commonality that extends to the present.¹⁸ We should, then, think carefully about Hawthorne's reflections on experimentation and power. What we learn might help us improve our own relationship to scientific practice so that we may become more authentic and humane in our living and not artificially narrowed by imposed, hidden forces. Such learning is an aspect of the existential import I mentioned earlier in this introduction, inviting critical reflection and restructuring of both our lives and our culture.

Prospects

In the body of this thesis I shall interpret two stories: "The Artist of the Beautiful" and "The Birthmark." Other tales, such as "Ethan Brand," will serve an ancillary role. This project is divided into two parts. In the first, "The Artist of the Beautiful" is read as a depiction of two intertwined yet opposed principles that comprise the human person, namely, spirit and matter. An artistic impulse after perfection that guides technological craft is depicted as a spiritual quest, wondrous and noble yet

¹⁸ A brief note concerning magic: Though I did not concentrate on magic in what I wrote above, "natural magic" and the related search for imperceptible, or "occult," causes and forces—a primary example of an occult force being that which produces action at a distance, such as the ability of a magnet to attract iron—were important players in the transformation of science in the 16th and 17th centuries. What people searched for in things and sought to turn to their own ends under the name 'magic' (specifically 'natural magic') was appropriated as an object of study by the new science, which endeavored to explain the occult with its experimental method and mechanical philosophy. And the aspects of magic not so appropriated—though it is difficult to say precisely when science and magic decided to part ways—such as the part of necromancy concerned with the binding of spirits, were still a means of affecting the world so as to make it accord with our wills and desires. On the whole, the practice of magic was intended to alter the natural world to the benefit of the practitioner or patron. Thus when Hawthorne invokes magic in his science-themed stories, the phenomena in question are, in my judgment, sewn into the same tapestry as the broader scientific enterprise with which he concerns himself. There is a general search for secrets and dream of power at play. For more on natural magic, see Grant, *A History of Natural Philosophy*, 290-293. Charles Burnett, a noted scholar of medieval magic, recently gave an insightful interview about magic and its relationship to philosophy and science during the medieval period, available online. See Charles Burnett ("Charles Burnett on Magic"), interview by Peter Adamson, *The History of Philosophy Without Any Gaps*, podcast audio, July 10, 2015, accessed July 14, 2015, <http://www.historyofphilosophy.net/magic-burnett>.

perhaps foolhardy. In other stories, such as “The Birthmark,” Hawthorne depicts science as such a spiritual quest, drawing a link between the erotic impulse towards beauty and that towards scientific knowledge, perfection, and power. But the material element of humanity is just as important as the spiritual, for Hawthorne, and is not to be shunned, though in appearances it is not so noble. In fact, Hawthorne at times seems to favor this aspect of humanity. In Hawthorne’s stories, the tensions between his characters and their failures never indicate the proper balance between spiritual striving and earthly sense, instead outlining the dangers of exclusion. Can such a balance ever be reached? Or, with John Dewey, does precariousness striate our being in the world, making stability a work-in-progress, an object of our efforts whose attainment is always finite?

Though matter and spirit are in unresolved tension in Hawthorne, we may take as a starting point a text from Heraclitus (fl. c. 500 BCE): “An unapparent connection is stronger than an apparent one.”¹⁹ Exploring the connection of matter and spirit in “The Artist of the Beautiful” will give us a sense of the complexity and internal variance that exists within the human person as Hawthorne understands it. We shall also see Hawthorne acknowledging that science and technology, rightly undertaken, fulfil an important yearning within the human soul. Yet even in its best form, there are dangers to this quest, from the weight of the earth and from flying into thin air. For example, during and after the scientific revolution the design of the clock was the favorite analogy for God’s design of the world. By making Owen Warland, the Artist of the Beautiful, a

¹⁹ Heraclitus, fragment 22B54, in Patricia Curd, ed., *A Presocratics Reader*, trans. Richard D. McKirahan (Indianapolis: Hackett Publishing Company, 1996), 34.

watchmaker, Hawthorne seems to be saying that we play at being God when we try to extend our mechanical and scientific powers over nature. The further message is, as human beings and not divinities we cannot but fail at this task. That is, beware the danger. We are earthbound creatures and cannot sustain a too-high leap into the clouds. Adopting a phrase from the American philosopher Josiah Royce, I call the chief danger that faces practicing scientists as well as others confronted with the practical effects of the scientific mentality that of the “detached individual.”²⁰

To emphasize this danger, in the second part of this project I shall take up “The Birthmark,” focusing on the way scientific practice can spiral out of control, perhaps unbeknownst to the scientists themselves, and result in the manipulation and exploitation of their subjects. From this story we can elicit Hawthorne’s picture of the most dangerous aspects of scientific practice. Yet, as in “The Artist of the Beautiful,” Hawthorne neither wholly condemns anyone nor unreservedly praises them. Because Hawthorne acknowledges ambiguity and complexity throughout his stories, he provides rich fare to sustain long reflection.

Some themes that will be explored in this second part of the project include self-deception, enthrallment, complicity, and exploitation. The use of science in order to demean and control other human beings is a real danger. The women in Hawthorne’s stories attest to this, as does the history of racial science in the 19th century.

²⁰ See Josiah Royce, “The Hope of the Great Community,” in *The Basic Writings of Josiah Royce*, ed. John J. McDermott, vol. 2: Logic, Loyalty, and Community (New York: Fordham University Press, 2005 [1969]), 1145–63; 1156.

In the third part of this thesis, which is also its conclusion, I bring my exploration of Hawthorne's short fiction to a close by offering an overarching interpretation of how Hawthorne can and does help us think about the relationship between the human person and scientific practice.

CHAPTER II
AN IMBALANCE OF SPIRIT AND EARTH, OR: THE DANGER OF
DETACHMENT

Nathaniel Hawthorne wrote “The Birthmark” and “The Artist of the Beautiful” during 1843 and 1844, shortly after his marriage to Sophia Peabody and during his residence at the “Old Manse” in Concord. It is not surprising, then, that these two stories share themes in common. Foremost among them is the quest for perfection, which lies at the heart of both “The Artist of the Beautiful,” the focus of this chapter, and “The Birthmark,” the focus of the following chapter. Both of these stories depict a character striving after an ideal of perfection not manifest in the material world and who thus must create it, attempting to outdo nature. The perfection sought in each story has an aesthetic element, as indicated by the important role of beauty in both stories, and an element that seeks power over nature, for the desired perfection is not something that exists in nature and so must be created above it, superseding it. While Hawthorne sees at least a germ of nobility in this movement to surpass the natural, he is also worried about the effects of the quest for perfection upon the human practitioner, exemplified in his stories as the artist and the scientist, both of whose activities are oriented by this quest.

Science is implicated in the human quest for perfection because the quest for power, the ability to create and shape, is attendant upon the quest for perfection, and, as I discussed in the introduction, the practices of modern science are bound up with the quest for power. For to direct natural forces to our purposes, the sweet fruit of scientific

inquiry, it is necessary to develop power over them. And with this power it becomes possible to work towards perfections not found in nature. Indeed, a notebook entry consisting partially of fragmentary thoughts and story ideas made by Hawthorne in 1837 draws a connection between power, nature, and an errant human quest: “A person to spend all his life and splendid talents in trying to achieve something naturally impossible,—as to make a conquest over Nature.”²¹ This idea, often cited as anticipatory of both “The Birthmark” and “The Artist of the Beautiful,” signals the errancy or futility of trying to best nature, to conquer it, by forthrightly stating the impossibility of the task.²² Hawthorne makes the point of folly more bluntly in the following notebook entry, which immediately precedes the one above and relates directly to “The Birthmark:” “A person to be in the possession of something as perfect as mortal man has a right to demand; he tries to make it better, and ruins it entirely.”²³ Here the idea of perfection becomes explicit and, combining the ruination that follows upon arrogance of this text with the futility encapsulated in the first text, we can see that Hawthorne does not think well of attempts to push beyond the limits of nature. Since science has thus far granted us ever expanding control over natural forces, the question naturally arises of when and if this gain in power will cease, of whether it is possible to surpass nature, or at least to strain its limits. Thus “science”—or, more properly, the spirit of scientific inquiry—provides an ideal ground upon which to explore the folly of overreaching, of letting the

²¹ Nathaniel Hawthorne, *The American Notebooks*, Centenary Edition, vol. 8, *The Works of Nathaniel Hawthorne* (Columbus: Ohio State University Press, 1972), 165, lines 26-28.

²² C.f. Newman, *A Reader's Guide to the Short Stories of Nathaniel Hawthorne*, 19 & 29.

²³ Hawthorne, *The American Notebooks*, 165, lines 23-25; c.f. Newman, *A Reader's Guide to the Short Stories of Nathaniel Hawthorne*, 29.

desires for power, control, and the ability to create get out of hand. Such an exploration is woven into “The Birthmark” and its scientist character, Aylmer. In crafting this tale, Hawthorne exposes aspects of that scientific spirit of which we must be wary.

The artist as depicted in “The Artist of the Beautiful” is of a piece with the scientist of “The Birthmark” because he, too, tries to realize the ideal of perfection and outdo nature. Aylmer, the scientist of “The Birthmark,” and Owen Warland, the Artist of the Beautiful, both have the high purpose of spiritualizing matter and objectifying perfect beauty (that is, making it into an object or a material thing). Owen, then, gives us another glimpse at the problems that beset those who value ideal objectives more than human concerns. We may even say that, in these two stories, the distinction between artist and scientist breaks down; both artist and scientist seek to create an alternative to nature, to conquer nature.

I begin by considering “The Artist of the Beautiful” because it brings issues of perfection and power into focus by way of the aspects of spirit and earth, which terms Hawthorne uses to describe those principles that comprise human beings. This contrast between the spiritual and the material, or the ideal and the practical, is perhaps the primary metaphorical language with which Hawthorne discusses the complexities and tensions within the human person in his science-fiction tales. Discussing “The Artist of the Beautiful” will thus enrich the critique of science we find in a tale such as “The Birthmark,” but, more importantly, it will allow us to understand this critique in its full existential importance. Hawthorne’s characters in these stories are unbalanced individuals, where either too much spirit or too much earth predominates. Those who

seek perfection and power abound with spirit, but this serves only to isolate them; these characters are loners. In the present chapter I shall describe the broad problem that besets those who seek to surpass the limits of humanity and nature; namely, that their bond to fellow human beings withers. They become “detached individuals,” to use the apt phrase of Josiah Royce mentioned in the introduction.²⁴ I interpret this as Hawthorne’s most general critique of science, his existential warning. In the next chapter I shall draw out more specific critiques of science from Hawthorne’s tales, primarily “The Birthmark.”

Though both “The Artist of the Beautiful” and “The Birthmark” will be discussed throughout this thesis, each chapter has its focal tale and will include a brief synopsis of that story.

The Story

In “The Artist of the Beautiful,” Owen Warland is a watchmaker with an uncanny ingenuity who does not love his trade, though of all practical pursuits it is perhaps the one to which he is best suited. Owen is small and delicate of frame, inadequate for a physical profession requiring strength. But he has nimble fingers and an attentiveness to detail perfectly suited for working on watches and time pieces. Owen’s heart does not lie with the mechanism of watches, however. Indeed, Owen is averse to mechanism turned entirely towards utilitarian ends and thus cares little for the proper regulation of time in a clock. Such brute practicality throws his spirit, itself directed towards the Beautiful, into disarray. While young, he was “once carried to see a steam-engine, in the expectation that this intuitive comprehension of mechanical principles

²⁴ See Royce, “The Hope of the Great Community,” 1156.

would be gratified,” but instead “he turned pale, and grew sick, as if something monstrous and unnatural had been presented to him.”²⁵ We learn here that Owen possesses an ease with machinery and its principles but cannot abide a too-dominating physical presence, portending his secluded life and his interactions with other characters in the tale. It is curious that Owen shows an affinity for mechanism yet recoils so at a steam-engine, a grand machine symbolic of the technological and industrial advances of the 19th century United States and a pure manifestation of practical power, allowing people and goods to be moved around more quickly and easily. We are told that Owen’s “horror was partly owing to the size and terrible energy of the Iron Laborer.”²⁶ Taking into account that “the character of Owen’s mind was microscopic,” we can say that he was simply overwhelmed by the steam-engine.²⁷ We would miss something important, though, were we to overlook the possibility of Owen’s aversion to pure practicality. Without a rejection of the merely practical, we cannot make sense of both Owen’s sickness at the sight of the steam engine and the fact that he “cared no more for the measurement of time than if it had been merged into eternity.”²⁸ Since “[t]he Beautiful Idea has no relation to size,” both the steam-engine and the watch would seem to be, on the face of it, capable of manifesting beauty, and given Owen’s proclivity towards the diminutive we might expect him to embrace the watch.²⁹ But he does not, for its purpose is too utilitarian. (Owen never chose to be a watchmaker, but was forced into it by his

²⁵ Nathaniel Hawthorne, “The Artist of the Beautiful,” in *Mosses from an Old Manse*, Centenary Edition, vol. 10, The Works of Nathaniel Hawthorne (Columbus: Ohio State University Press, 1974), 447–75; 450.

²⁶ *Ibid.*, 450.

²⁷ *Ibid.*

²⁸ *Ibid.*, 451.

²⁹ *Ibid.*, 450.

family so that “his strange ingenuity”—that is, his orientation towards the beautiful—“might thus be regulated, and put to utilitarian purposes.”³⁰ So Owen lets the watches sit by as much as possible and concentrates upon his own work, a tiny mechanism in which he wishes to infuse the beauty with which his spirit communes.

It is with just such a scene of Owen at work that Hawthorne begins his tale. Peter Hovenden, a retired watchmaker and Owen’s former master, and his daughter, Annie, walk by Owen’s shop and see him engaged with “some delicate piece of mechanism” that is certainly not part of a watch.³¹ Peter Hovenden is dismissive of Owen and his strange ingenuity, as his productions are never fit for practical use in society. Hovenden is much more appreciative of Robert Danforth, the simple, blunt, affable blacksmith. Together, Hovenden and Danforth represent earth, matter, “the hard, coarse world.”³² As we shall see later, each is an image of a different aspect of earth, revealing complexity within Hawthorne’s use of this principle.

Over the course of the tale, and his life, Owen works on his minute machine but fails three times. Each time his work is destroyed. The first time, Owen accidentally wrecks his device after a conversation with Danforth because Danforth’s “hard, brute force darkens and confuses the spiritual element within” Owen.³³ “The vapor!—the influence of that brute force!—it has bewildered me, and obscured my perception. I have

³⁰ Ibid., 451.

³¹ Ibid., 447.

³² Ibid., 457.

³³ Ibid., 454.

made the very stroke—the fatal stroke—that I have dreaded from the first! It is all over—the toil of months—the object of my life! I am ruined!”³⁴

After throwing himself into watchmaking in earnest for a time, Owen ceases to be industrious and neglects his professional activity once again, instead spending his time wandering and frolicking in the woods and fields. At night he takes up work on the creation of the Beautiful. Annie, with whom Owen is entranced, stops by Owen’s shop one day and he becomes convinced that she is the one other person who might understand him and his work. But she gives his device the slightest touch and destroys Owen’s toil. “Go, Annie...I have deceived myself, and must suffer for it. I yearned for sympathy—and thought—and fancied—and dreamed—that you might give it me. But you lack the talisman, Annie, that should admit you into my secrets.”³⁵

Owen becomes a drunk, dulling his spirit with wine, until a butterfly comes into the bar in which he is drinking and flutters around his head. He then upends his wine and declares that it is time for him to be at work. This time, after months of work, Owen’s mechanism is destroyed by his own hand, purposefully. He does this after learning from Peter Hovenden that Annie is to be wed to Robert Danforth. Owen becomes ill and grows plump; it seems as though his spirit has left him. Eventually, he takes up his work again for a reason “not recorded,” and this time completes it.³⁶ He presents it to Annie as a belated wedding gift, in her home, by the hearth, with Robert Danforth, their child, and old Peter Hovenden all present. It is a magnificent mechanical butterfly, infused with

³⁴ Ibid.

³⁵ Ibid., 460.

³⁶ Ibid., 466.

Owen's spirit, the spirit of "perfect beauty" realized.³⁷ It has a soft, living glow and delights all when it flies, except for Peter Hovenden, who remains disdainful of the whole project. All does not end well, though, for the butterfly is crushed, to the amusement of Peter Hovenden, by the small Danforth child, a child who "seemed moulded [sic] out of the densest substance which earth could supply."³⁸ Despite this, Owen does not feel distraught by the destruction of his work, as he had previously. He learned to take nourishment from the idea of beauty itself, greater than any sensible manifestation could be. This is the note upon which the tale ends.

Spirit and Earth

"The Artist of the Beautiful" is clearly a story from which we could learn how Hawthorne thought about art, artists, and artistic creation at this stage in his life. Some of this will come into play here, though I want to emphasize the dual principles of spirit and earth (or matter) through which Hawthorne casts his tale. All of the characters here are unbalanced and can be taken to represent one side or the other. On the side of spirit, proud and lonely, we have Owen Warland; on that of earth, Peter Hovenden and Robert Danforth, surely, but also Annie. Owen hopes that Annie can straddle the divide as the "interpreter between Strength and Beauty," but this hope is never realized in the story, and Annie's initial imbalance is heralded by her part in the second ruination of Owen's mechanism.³⁹ There is some reason to think that the young Danforth child, "the little Child of Strength," is, alone among the characters of the tale, indeterminate so far as

³⁷ Ibid., 470.

³⁸ Ibid., 469.

³⁹ Ibid., 468.

spirit and matter are concerned.⁴⁰ Though he bears a resemblance to Peter Hovenden in Owen's eyes, a likeness mentioned several times in the closing pages of the story, Owen also sees the child as a being partially "redeemed from [Hovenden's] hard scepticism into childish faith."⁴¹ With this childish faith seems to come an openness to beauty, as the little Danforth also seems more aware of the mystery of the butterfly than the adult characters.⁴² Most tellingly, the butterfly alternately lights and grows dim on the child's finger when it only seemed to wither on that of Hovenden. There is some of the "doubt and mockery" that saps the butterfly in the child, but also "childish faith" that nurtures it.⁴³ Hawthorne seems to imbue the child with the wide range of human potentiality, as yet unchanneled by the growth of the person within society. (The destruction of the butterfly at the end of the tale may be the decisive moment that determines the child as a solid representative of earth, though I think until this event we ought to reserve judgment about the child.) The adults are all so channeled and askew, laying bare the strengths and faults of spirit and earth.

But what do these principles, spirit and earth, signify?⁴⁴ It will be helpful here to set out a series of associations derived from the story in order to better contrast the two.

When Owen recovers his spirit after its third plunge towards earth, he is said to again be

⁴⁰ Ibid., 475.

⁴¹ Ibid., 474.

⁴² Ibid.

⁴³ Ibid., 473, 474.

⁴⁴ What I discuss under the names "spirit" and "earth" are also called the "head" and the "heart" in Hawthorne scholarship. As an early and important example, see F.O. Matthiessen, *American Renaissance: Art and Expression in the Age of Emerson and Whitman* (New York: Oxford University Press, 1941), 179-368, esp. p. 347. I take the two sets of terms to be virtually synonymous for my purposes, though I cannot say nuances and distinctions will not appear when a particular scholar's understanding is examined more closely. Speaking generally, we may think of "head" and "heart" as the inner or psychological names for the more elemental sounding "spirit" and "earth."

a being of “thought, imagination, and keenest sensibility.”⁴⁵ So both intellect and fantasy—the faculties of ‘the mind’ generally speaking—are associated with spirit, as is a ‘sensibility’ which I take to be a sort of intuitive power of appreciation for the spiritual and its earthly manifestations. Beauty, immateriality, eternity, delicacy, and a general detachment from materiality and thus spatial determination are all associated with spirit in Hawthorne’s tale. On the side of earth we have matter, strength, practicality, fact, and industry. Spirit is idealistic and otherworldly; earth is realistic and embodied.⁴⁶ Perhaps most interestingly, the bonds of human community and sympathy are also associated with earth. The numbers in the story alone are telling. Spirit is isolating, represented only by Owen, who works by night and cannot make himself properly understood by the people of his community. Looking to Hawthorne’s other tales, the tendency of the overactive spirit and intellect toward isolation is driven home most strongly by the character Ethan Brand from the story of that name.⁴⁷ In this tale we meet Ethan Brand, a lime burner who sought to discover the Unpardonable Sin. In his efforts he cultivated his intellect to the height of its capabilities and, as it happened, cultivated the Unpardonable Sin as well: an unrepentant detachment from the concerns and bonds of the human

⁴⁵ Hawthorne, “The Artist of the Beautiful,” 466.

⁴⁶ See Hawthorne’s story “The Hall of Fantasy” for an image of the not-of-this-world place in which ideas and ideals are created and honored, tinting the windows that look upon our matter-of-fact, actual world. The narrator of this story is a practical man, a man of earth, touring the Hall. Though he tries to deride the Hall and its denizens at all turns, he cannot completely or consistently deny the value of fantasy in human life, at least in moderation.

Nathaniel Hawthorne, “The Hall of Fantasy,” in *Mosses from an Old Manse*, Centenary Edition, vol. 10, *The Works of Nathaniel Hawthorne* (Columbus: Ohio State University Press, 1974), 172–85.

⁴⁷ See Nathaniel Hawthorne, “Ethan Brand,” in *The Snow-Image and Uncollected Tales*, Centenary Edition, vol. 11, *The Works of Nathaniel Hawthorne* (Columbus: Ohio State University Press, 1974), 83–102.

community. Hawthorne shows us the extreme edges of spirit going hand in hand with isolation, a path with which Owen flirts throughout his life.

The rest of the characters in “The Artist of the Beautiful” tend towards the earthy side of the spectrum. Robert Danforth is consistently presented as affable, if a bit blustery, and is adept enough at his craft to support a family. He marries Annie and they have a child; human bonds are strengthened and created. Further, Danforth is associated with fire, with warmth, either that of his forge or that of the home fireplace. The final scene of the tale takes place with the Danforth family present in their home before the hearth—a scene of “plain and sturdy nature.”⁴⁸ We can say, then, that the hearth symbolizes human fellowship, an important aspect of earthiness for Hawthorne. Indeed, Danforth’s association with either forge or hearth throughout the story emphasizes what is most attractive about earth for Hawthorne; namely, human purpose and affection.⁴⁹ Peter Hovenden’s dismissal of all that is not material and practical is the ugly side of the coin. Taking the movements of Owen’s butterfly as a sign, the aspect of earth embodied by the Danforths does not seem to be as harmful to spirit as that embodied by Hovenden, for the butterfly does not dim on the fingers of Annie or Robert as it does when Peter’s touch approaches, or, sometimes, the child’s. Earth and spirit can coexist when the

⁴⁸ Hawthorne, “The Artist of the Beautiful,” 468.

⁴⁹ C.f. Bell, *Hawthorne’s View of the Artist*, 105. If anyone should doubt Hawthorne’s attraction to the fires of the hearth, a reading of his sketch “Fire-Worship” will dispel this doubt. See Nathaniel Hawthorne, “Fire-Worship,” in *Mosses from an Old Manse*, Centenary Edition, vol. 10, *The Works of Nathaniel Hawthorne* (Columbus: Ohio State University Press, 1974), 138–47.

“atmosphere of doubt and mockery” that attends the reductive materialism and crass utilitarianism of the “hard, coarse world” does not suffocate spirit.⁵⁰

We can see from these last considerations that the contrast between spirit and earth is not simply the old philosophical duality of soul and body, though this distinction resonates within that of spirit and earth. Hawthorne’s distinction of two principles has a much wider compass, embracing a complicated understanding of the aspects of the human person in which many gradients can be found. A firm metaphysical duality need not be ascribed to spirit and earth. Instead, Hawthorne is describing two general impulses or powers that reside within each of us and blend in myriad ways: a sort of intellectual, imaginative, abstracting impulse and a practical, material, social impulse. That spirit and earth can blend for Hawthorne is demonstrated by Owen’s facility with machinery, his aptitude as an engineer (though in Owen’s case spirit and earth nevertheless remain in tension, him clearly favoring spirit). The human mind and person is of course bewilderingly complex, but there is merit to Hawthorne’s construal of dual principles that characterize the urge to activity as it is shaped by the desire for a better life. In deciding how to live and live better, do we favor the inward interests of knowledge and the attempted fulfillment of ethereal ideals or the outer securities of a useful, steady job and good friends? In the broad strokes used to bifurcate much of human endeavor, do we favor theory or practice? The quest for perfection that characterizes the artistic-scientific endeavor Hawthorne critiques is but an extreme determination of the spiritual/mental drive in human life over against the earthy.

⁵⁰ Hawthorne, “The Artist of the Beautiful,” 471 [first quotation], 457 [second quotation].

I mentioned above that Hawthorne's characterization of the dual principles of spirit and earth has merit. The sort of merit it has is phenomenological, meaning that Hawthorne is appealing to our own experiences of human life. Should we find his descriptions of spirit and earth insightful and compelling, we must take the further diagnoses in his tales seriously. These are diagnoses of the dangers of imbalance, of an overactive drive towards perfection and desire for control over nature, and of the abuse of the power of knowledge. I myself strongly relate to Hawthorne's descriptions. During my time at university, both undergraduate and graduate, I have consistently worried about overfilling my time with study and leaving the needs of my body, physical and social, unattended. The positions of Owen Warland, and even of Aylmer in "The Birthmark," are relatable: the desire to explore, to learn, to extend one's thought into a grand shape and work to see it in the world and even to fashion the world and one's actions in accord with it. So, too, is the isolation, even the loneliness, of these characters something with which those in the business of 'mind' and 'knowledge' must contend, as is the paradox that as knowledge grows the ability to communicate it with one's fellows dwindles. When Owen reaches the height of his accomplishment and imbues matter with spirit, he comes to the conviction that the rest of the world lacks the "discernment" to fully appreciate what has been done, that others "could never say the fitting word, nor feel the fitting sentiment" appropriate to the gravity of his work.⁵¹ Thus Owen finds himself cut off from the world, denied the "perfect recompense" of his endeavor, which

⁵¹ Ibid., 472.

would be a genuine appreciation and understanding of his achievement.⁵² But there is a gap in the communicative connection, one Owen finds filled with a “secret scorn.”⁵³ In this way Hawthorne suggests that to travel the road of spirit can be isolating. The problem of understanding and being understood becomes an impasse, potentially unstable and dangerously situated on the border of intolerance, a border Peter Hovenden has crossed. Owen’s extreme sensitivity and allergic reaction toward the presence of Peter Hovenden and Robert Danforth is its own version of intolerance and a failure of understanding. His pacific demeanor at the end of the story does not signal renewed efforts at communication, but abandonment of such efforts in favor of lone contemplation of the beautiful. The difficulty of communicating with others what one truly knows well remains a problem throughout the story, and it is an eminently relatable difficulty.

Complementing this relatability of the problems of spirit, I also find the forge of Danforth appealing. As with Owen, Aylmer, Ethan Brand, Dr. Rappaccini, Dr. Heidegger, and more, it represents a side of me underdeveloped. I recognize values in earth that I have not yet cultivated within myself and this recognition often feels like a lack. Robert Danforth’s repeated admonition to Owen that “I put more main strength into one blow of my sledge-hammer, than all that you have expended since you were a ‘prentice” rings true and even serves to create a small guilt.⁵⁴ Might not my efforts at intellectual growth pale in comparison to the work of those who retrieve and fashion the

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid., 453.

very materiality upon which modern societies are built? Am I not *homo faber*? I affirm my choice of life and pursuits, but this does not preclude self-doubt from creeping in, nor the urges to work with material, to farm, to gather, to extract, to fashion. I have even had the thought, without “The Artist of the Beautiful” in mind, that beginning my day with a few hours of smithing—yes, my fantasy involved being a blacksmith—and spending the rest teaching a single class and reading and writing would provide a fulfilling and balanced life. The desires to aid others and the community, to build and to be of use, and to formulate webs of thought and pursue ideals—to exercise body and mind—are all compresent in the human being. This is the phenomenological appeal Hawthorne makes.

An addendum to this appeal is that despite containing both spirit and earth, very few people, if anyone, can claim to be balanced. People tend this way or that, approaching the world in ways that lean toward spirit or toward earth. In the two tales under consideration, and in others such as “Ethan Brand,” “Rappaccini’s Daughter,” and “Dr. Heidegger’s Experiment,” Hawthorne does not present us balanced characters.⁵⁵ They exhibit aspects of spirit and earth, often in explicit and pronounced ways, whether in physical countenance or action. Yet the suggestion of the stories is that balance is what is needed, or at least a bridge of understanding, an “interpreter between Strength and Beauty.”⁵⁶ These stories describe the failures and/or the unsavory actions of hyperspiritual persons and often depict the purely earthy in unflattering ways, whether

⁵⁵ C.f. Matthiessen, *American Renaissance*, 347: “Hawthorne seldom portrayed his characters in a state of grace, since he was too thoroughly aware of how the heart as well as the head could go perversely astray.”

⁵⁶ Hawthorne, “The Artist of the Beautiful,” 468.

through bodily deformity, ugly personalities, or dull simplemindedness. Taking an example from “The Birthmark,” the contrast between Aylmer, “a type of the spiritual element,” who kills his wife Georgiana through blind arrogance, and Aminadab, his lab assistant of “indescribable earthiness” whose very being seems “grimed with the vapors of the furnace,” shows us that the extremes are not attractive.⁵⁷ Hawthorne’s depictions of such binaries as Aylmer-Aminadab and Owen-Peter Hovenden cannot help but indicate a missing third term through triangulation, one between the extremes and who can navigate both, interpreting between them.

Thus we can say that these stories are warnings against exclusive alliance with spirit or earth. The general dangers are as follows: an excess of spirit leads to losing touch with reality, characterized by isolation and a disregard for the relational strands that bind us to the natural world and to one another; with an excess of earth the focal energy of the individual is consumed by communal and practical activity, leading to a leveling of the self into commonality, a ‘one size fits all’ attitude which is, ironically, too narrow for the variety of life. Both excessively spirit-filled and excessively earthy individuals exhibit telescopic vision that excludes the breadth of human experience. On the one side we have the high-minded and foolish pride of Aylmer and the lonely work of Owen that speaks to no one, and on the other the arrogance of Peter Hovenden who dismisses all that does not accord with the universal lockstep of the town clock. Owen Warland alternates between the two; when his delicate mechanism first falls to pieces, he

⁵⁷ Nathaniel Hawthorne, “The Birthmark,” in *Mosses from an Old Manse*, Centenary Edition, vol. 10, The Works of Nathaniel Hawthorne (Columbus: Ohio State University Press, 1974), 36–56; 43.

retreats into the regularity of professional work and gains the acceptance of the many while his spirit dims.

But caution is required here. For if Hawthorne's phenomenological appeal is compelling, as I find it to be, the reader is drawn into sympathy with both the spiritual and telluric elements of the tales. Hawthorne is often sympathetic toward his spirited characters while describing their failures and downfall. Aylmer and Ethan Brand here come to mind, and Owen Warland is presented in such a sympathetic light that we cannot say he has a downfall in the same way as characters such as Aylmer and Ethan Brand do. Some reasons for this difference between the scientists and the artist will be suggested later. Hawthorne oftentimes also puts wise words or enticing sentiments into the mouths or actions of earthy characters otherwise designed to repulse us, or at least made to appear too simpleminded to be wholly attractive. We can think here of Aminadab's portending and wise mumble that he would not remove Georgiana's birthmark were she his wife, or of the ruddy comfort of the fires of Danforth's forge and hearth.

So we can see an ambivalence here, between spirit and earth, and the suggestion, never concretized into a character, of a much needed balance. Both spirit and earth have attractive and unattractive aspects and must be blended in some way that Hawthorne does not and likely cannot work out in his stories. The tales present, though, a critique of imbalance, particularly of the dominance of the spiritual element in humanity. The drive Hawthorne most closely ties with this spiritual element is, as I have mentioned before, that which aims at perfection. The quest for perfection ties together the artist and

scientist and is a laudable endeavor, though it can veer into danger. The time has come for a closer look at how Hawthorne casts this quest in “The Artist of the Beautiful” and “The Birthmark,” keeping in mind the principles of spirit and earth which frame his portrayal.

The Quest for Perfection

“The Birthmark” is a tale depicting a scientist, Aylmer, so entranced by his ideals that, in pursuing them, he walks into the murder of his wife, Georgiana. In the first paragraph of this story Hawthorne writes, “The higher intellect, the imagination, the spirit, and even the heart, might all find their congenial aliment in pursuits which, as some of their ardent votaries believe, would ascend from one step of powerful intelligence to another, until the philosopher should lay his hand on the secret of creative force, and perhaps make new worlds for himself.”⁵⁸ This sentiment underlies the intellectual desire to penetrate nature’s mysteries and to turn the knowledge gained to our use. Science is one such pursuit that seeks to ascend the scale of nature, surpass nature, and control it; art is another, though that through which it seeks to surpass nature has less compulsive force than that of science. (I shall return to this point at the end of this chapter.) Owen’s butterfly, considered here as a work of art, is small and ultimately a mystery to others; Aylmer’s certitudes and experimental confidence turn tragically upon Georgiana, costing her her life. Hawthorne says that we do not know whether Aylmer possessed the highest degree of faith in the ability of science to make new worlds, but he was nevertheless devoted “too unreservedly” to scientific study and took

⁵⁸ Ibid., 36.

pride in his knowledge of nature's mysteries and his attendant ability to produce nostrums capable of producing profound "discord in nature."⁵⁹ Likewise, Owen Warland "considered it possible, in a certain sense, to spiritualize machinery; and to combine with the new species of life and motion, thus produced, a beauty that should attain to the ideal which Nature had proposed to herself, in all her creatures, but has never taken pains to realize."⁶⁰ The desire is for creative power, the ability to bend, shape, and supersede nature in order that the ideal be made real. It is the quest for perfection, and the reshaping of nature this quest requires, that links the practices of art and science as similar expressions of the spiritual aspect of our being. To exert the creative powers of spirit over the material, a practical activity grounded in spiritual principles—a mediating link of sorts—is needed, engineering being but one example. Hawthorne suggests that this quest to transform nature so as to achieve perfection provides a "congenial aliment" for our minds, nourishment for the proper development and adequate realization of our humanity. Thus the scientific and artistic endeavors, as well as those activities that concretely realize the transformative power of spiritual principles, such as medicine and engineering, are honorable, noble, and perhaps even necessary.⁶¹

This entwining of art and science around the common quest for the perfection and transformation of nature has its roots in nineteenth century Romantic thought. I shall not trace the specific route through which this idea reached Hawthorne. Instead, I shall

⁵⁹ Ibid., 36 [first quotation], 46 [second quotation].

⁶⁰ Hawthorne, "The Artist of the Beautiful," 465-466.

⁶¹ C.f. Wilfred M. McClay, "The Lessons of Failure: Matter and Spirit in Nathaniel Hawthorne's 'The Artist of the Beautiful,'" in *Modes and Facets of the American Scene: Studies in Honor of Cristina Giorcelli*, ed. Dominique Marçais (Palermo: Ila Palma, 2014), 79-94; 93.

focus on an important philosophical statement of this idea, one that became an originating moment for subsequent Romantic thought, both in Germany and abroad. I have in mind Immanuel Kant and his *Critique of the Power of Judgment* (1790).⁶² Though Hawthorne is more directly responding to Ralph Waldo Emerson than to Kant, Kant's ideas about art, beauty, and nature, are a taproot for the writings on art and aesthetics that follow.⁶³ In this *Critique* Kant develops his ideas about art and nature in a way meant to bridge a perceived gulf between his theoretical and practical philosophies. It is through judging something as beautiful that a congeniality between human ends, human powers, and the natural world is revealed. The technical details are unimportant here; what is important is that Kant finds in judgments of beauty a sign that we are at

⁶² Immanuel Kant, *Critique of the Power of Judgment*, trans. Paul Guyer and Eric Matthews, The Cambridge Edition of the Works of Immanuel Kant (Cambridge: Cambridge University Press, 2000). In the following discussion I draw primarily from the first part of Kant's *Critique*, the "Critique of the Aesthetic Power of Judgment."

⁶³ This is true in both the German and American contexts. Kant was influential on Emerson primarily through Samuel T. Coleridge. For a thorough examination of Coleridge's influence on Emerson, see Samantha Harvey, *Transatlantic Transcendentalism: Coleridge, Emerson, and Nature*, Edinburgh Studies in Transatlantic Literatures (Edinburgh: Edinburgh University Press, 2013), and c.f. Robert D. Richardson, *Emerson: The Mind on Fire* (Berkeley: University of California Press, 1995), esp. pp. 92-93, 143, 234, 249, 357-358, & 449. To get an idea of how Emerson interpreted and used Coleridge and Kant, one should read Emerson's 1842 piece "The Transcendentalist," readily available online or in Ralph Waldo Emerson, *Nature, Addresses and Lectures*, ed. Edward Waldo Emerson, Centenary Edition, vol. 1, The Complete Works of Ralph Waldo Emerson (Boston: Houghton Mifflin, 1903). For Kant's general influence on philosophy in the United States, especially on the movement that came to be known as "pragmatism," see Murray Murphey, "Kant's Children: The Cambridge Pragmatists," *Transactions of the Charles S. Peirce Society* 4, no. 1 (1968): 3-33.

As a brief aside, an interaction between Hawthorne and Emerson as reported by Matthiessen is revealing as concerns the distinction between spirit and earth here under consideration. Evidently, Hawthorne viewed more than just the characters in his stories in these terms. "One time [while Hawthorne and Emerson were walking] they called on farmer Hosmer, the untutored philosopher whose wisdom Emerson had praised in *The Dial*. Hawthorne was suspicious of the effect of this, as he had previously been of the self-conscious assumption of equality on the part of the intellectuals with the workers at Brook Farm; he wondered whether Emerson might not have done the yeoman harm by putting him in print, since his character seemed less natural than before. Yet the novelist was amused to sketch the contrast between this 'man of sturdy sense, all whose ideas seemed to be dug out of his mind, hard and substantial, as he digs potatoes,' and his admirer, 'the mystic, stretching his hand out of cloud-land, in vain search for something real,'" in Matthiessen, *American Renaissance*, 194. This interaction provides an instance in which Hawthorne's preference for the earthy shows.

home in the world, and at home in such a way that we may impose our ends onto nature and that nature will indeed receive them. For Kant, the purpose of a beautiful thing cannot be grasped conceptually, though we cannot help but see the beautiful thing as purposive to some end. This of course strains the mind. This paradoxical encounter with beauty throws the mind, specifically the imagination and the understanding, into a ‘free play’ which allows our sensitive and cognitive powers to come into accord, unrestrained as they are by determinate concepts, with the result that our overall powers of thinking are strengthened.⁶⁴ In this free play the ideas of reason—the capstone of human being for Kant—find their way into our thinking about nature and we feel a symbolic accord between these ideas and the beautiful things in the world, an accord that speaks of nature’s congeniality to these ideas.⁶⁵ Thus it is possible that the moral law, which demands an ideal order, a ‘kingdom of ends,’ can indeed be made manifest in the world; the ideal can be made real.

At issue here is the imposition of the human onto the non-human. As I mentioned in the introduction, the origins of modern science incorporate as an end the mastery of nature, explicitly expressed by such scientific luminaries as Francis Bacon and René Descartes. With Kant, striving for the beautiful becomes another means of transforming nature, indeed the primary conduit through which such transformation can be achieved. The creation and appreciation of art, itself guided by nature, guides us in coming to

⁶⁴ C.f. Kant, *Critique of the Power of Judgment*, §§9, 10, 53.

⁶⁵ C.f. *Ibid.*, §§42, 57-59.

know how our powers may be most effectively received in and by nature.⁶⁶ Of the pinnacle of beautiful art for him, poetry, Kant writes:

It strengthens the mind by letting it feel its capacity to consider and judge of nature, as appearance, freely, self-actively, and independently of determination by nature, in accordance with points of view that nature does not present by itself in experience either for sense or for understanding, and thus to use it for the sake of and as it were as *the schema of the supersensible* (emphasis mine).⁶⁷

The key phrase here is “schema of the supersensible,” which indicates that the productive task of art is to prepare the way for the supersensible—ultimately, human reason—to become manifest, to rework and reform nature so that it reflects the rule we give it (the law of freedom, or of reason in its practical aspect, in Kant’s terms). In other words, for Kant our practical task is to make the supersensible, or human rationality, sensible insofar as is possible. This can be accomplished in our personal, moral lives by acting in accord with (rational) duty and can be spread through nature using art as a gateway (a ‘schema’). In Hawthorne’s language, the supersensible is the spiritual: art is a preparation for, and in exquisite instances the culmination of, spirit infusing earth. The preparation Kant has in mind is that art strengthens our spiritual capacities and serves as a lure for our energies such that the ideal of human power and perfection can be realized. We can think here of Owen’s lifelong determination in his pursuit of beauty, waver

⁶⁶ See *Ibid.*, §§42-53, esp. §§44, 52, 53.

⁶⁷ *Ibid.*, §53 (5:326-327).

though it did from time to time, and the vision of its Reality he achieved through his crafting of the butterfly.⁶⁸ (Though Owen's crafting of the butterfly certainly conforms to this idea of the spiritual gaining a foothold in the sensible world through the energies of art, we cannot press Owen too far into the service of Kant's idea, as Hawthorne was skeptical about the effects of spirit coming to dominate over earth, as shall be discussed shortly.)

For Kant, it is through experiencing and expressing beauty that we come to see our effectiveness in and over nature, and science is one of the ways in which we can exercise this power, guided by the ideals embodied in beautiful art. Kant intimates this union of art and science under the guidance of beauty when he writes: "Beautiful arts and sciences...prepare humans for a sovereignty in which reason alone shall have power."⁶⁹ The highest expression of beauty is the ideal of beauty, described by Kant in the difficult §17 of the *Critique of the Power of Judgment*. As an ideal, it is not actual in the way a beautiful painting is. Nevertheless, the ideal of beauty can exercise great influence over the affairs of the world in that it is an alluring presentation of the maximal transformation of nature, of the natural order brought into accord with the rational order. In the ideal, a new order of nature, created by humanity, is represented as fully real, as having fully superseded the given order. It is this ideal that genius, the creator of beautiful art, strives to emulate through the exercise of imagination.⁷⁰ And the scientist can turn her discoveries toward the earthly construction of the ideal through the use and

⁶⁸ Hawthorne, "The Artist of the Beautiful," 475.

⁶⁹ Kant, *Critique of the Power of Judgment*, §83 (5:433).

⁷⁰ See *Ibid.*, §17 (5:232) & §49 (5:314).

creation of technologies, extending the dominion of humanity over nature. To actively seek after the ideal of beauty, to quest after perfection, entails one try to overcome nature and stand forth as a creator in one's own right. Kant would say that both art and science are grounded in and aim at the transformation of nature in accord with an ideal, representable as the ideal of beauty. In this sense, the ideal of beauty plays an important role in both artistic and scientific endeavors. This is Kant's view as bequeathed to the Romantics, and in its general features it is also taken up by Hawthorne in "The Birthmark" and "The Artist of the Beautiful."⁷¹

That Owen Warland is driven by a desire to make concrete the ideal of beauty is clear in "The Artist of the Beautiful." It is an explicit premise of the story. Neither is Aylmer's drive for perfection hidden in "The Birthmark." Indeed, Aylmer's fixation on Georgiana's birthmark and his desire to correct "what Nature left imperfect" in her echoes Kant in an eerie way, for in Kant the true ideal of beauty is only capable of realization in the human form.⁷² (If the ideal of beauty is symbolic of a deep accord between the rational/spiritual and the natural/earthy, what could be capable of a greater expression of beauty than that corporeal being whose very being includes rationality?) With this connection in mind, Georgiana becomes an overt critique of this way of construing and attempting to achieve beauty, perfection, and power. Aylmer's failure to achieve the ideal—indeed, the inability of the ideal to be realized in a human body—and

⁷¹ For an excellent and eminently readable account of Kant's influence on Romanticism, see Isaiah Berlin, *The Roots of Romanticism*, ed. Henry Hardy (Princeton: Princeton University Press, 1999). See also the following article, which examines some historical details not present in Berlin's more general treatment, Jason M. Peck, "Vertigo Ergo Sum: Kant, His Jewish 'Students' and the Origins of Romanticism," *European Romantic Review* 26, no. 1 (February 2015): 45–57.

⁷² Hawthorne, "The Birthmark," 41; Kant, *Critique of the Power of Judgment*, §17.

the types of danger his actions illustrate thus serve to undermine Romantic notions of beauty as well as make us question the confidence placed by society in intellectual and scientific activities. Hawthorne's message, and my thesis in this chapter, is that to search after perfection in this way, to allow spirit total dominance in our activities, is folly.

One can find such a critique even in the relatively sympathetic treatment of the artist in "The Artist of the Beautiful." According to Millicent Bell, Hawthorne takes up the Romantic or idealistic view of art in "The Artist of the Beautiful" and pushes it "so far that it becomes a criticism of itself."⁷³ I am inclined to agree with Bell in the following sense: though Hawthorne exhibits convincingly the positive value of art and of humanity's spiritual tendencies, the most extreme claims of the Romantic view, those that reach for ecstatic heights to establish the sovereignty of the human over the natural, are seen to fray when exposed to the rough conditions of earthly life. The narration of the story puts us on the side of Owen and his quest and ushers us towards feeling that the lack of spiritual drive and appreciation among some people is a "calamity."⁷⁴ But at a lower level than the explicit narration, a critique is woven into the imagery that forms the background of the story. Owen Warland, the Artist of the Beautiful, is a watchmaker, and since the later Middle Ages the watch or clock had been the favorite analogy for divine purpose infusing creation. The analogy of the watchmaker with God is probably best known today from the work of William Paley (1743-1805).⁷⁵ By making Owen a watchmaker and an artist striving to create what nature "has never taken pains to

⁷³ Bell, *Hawthorne's View of the Artist*, 95.

⁷⁴ Hawthorne, "The Artist of the Beautiful," 466.

⁷⁵ See, for example, William Paley, *Natural Theology: Or, Evidences of the Existence and Attributes of the Deity, Collected from the Appearances of Nature* (London: R. Faulder, 1802).

realize,” Hawthorne invites us to see Owen as aspiring to a place above God, a sure sign of egotism and self-absorption.⁷⁶ This is a major pitfall of overemphasizing spirit at the expense of earth.

The critique is furthered by the qualities exhibited by the beautiful in Owen’s work. Though Owen manages to bring Beauty into this world after a life of arduous work and many setbacks, this beauty fails to enrich the lives of others. Annie and Robert Danforth are impressed, but seem to regard Owen’s butterfly only as a marvel. There is no indication that contact with it will alter their daily routines. Danforth is the same at the end of the story as he is at the beginning, declaring that “There is more real use in one downright blow of my sledge-hammer, than in the whole five years’ labor that our friend Owen has wasted on this butterfly!”⁷⁷ Peter Hovenden remains utterly unimpressed, and the Danforth child crushes the butterfly with little fanfare. For Kant, there is a certain communicability to the beautiful that enables its leavening influences on the mind to be felt widely. This communication fails in “The Artist of the Beautiful.” More, before the child breaks the butterfly, the narrator of the story remarks that Annie admired her child far more than the butterfly “with good reason.”⁷⁸ What this means is not expanded upon, though I read it as an advocacy for the earthly that serves to temper our understanding of the detached spirituality Owen exhibits in the closing pages of the story. In any case, the slight against Owen’s achievement is evident.

⁷⁶ Hawthorne, “The Artist of the Beautiful,” 466.

⁷⁷ Ibid., 472.

⁷⁸ Ibid., 474.

The form the beautiful takes may indicate a critique as well. On the one hand, beyond the inclinations of Owen, there does not seem to be a reason that the ideal of beauty takes the form of a butterfly, indicating that beauty has no intrinsic relationship to dimensionality. As we learn when the butterfly is revealed: “In its perfect beauty, the consideration of size was entirely lost. Had its wings overarched the firmament, the mind could not have been more filled or satisfied.”⁷⁹ Large or small, all can be equally beautiful. Yet a mechanical butterfly finely wrought and infused with spirit might strike one as little more than a “Dutch toy,” as Peter Hovenden says of Owen’s work.⁸⁰ Though Owen certainly achieves something in crafting the butterfly, it is a personal achievement. This is in part due to the incommunicability of the beautiful, mentioned above. There is no “interpreter between Strength and Beauty,” no link between the soaring heights of spirit and the plain earth, at least not here, not now.⁸¹ Owen comes to realize that “the reward of all high performance must be sought within itself, or sought in vain.”⁸² This is a wise insight, echoed later by John J. McDermott as ‘the nectar is in the journey, and nowhere else.’⁸³ Indeed, Hawthorne suggests in “The Birthmark” that seeking spiritual insight and advancement through an asymmetrical or forced relationship with others leads to myriad problems, as we shall see in the following chapter. First, we must look more closely at the inward-looking tendency of those who seek for perfection.

⁷⁹ Ibid., 470.

⁸⁰ Ibid., 448.

⁸¹ Ibid., 468.

⁸² Ibid., 473.

⁸³ McDermott has several variations on this line. See, for example, “the nectar is in the journey and not in its final destination,” in John J. McDermott, “Why Bother: Is Life Worth Living? Experience as Pedagogical,” in *The Drama of Possibility: Experience as a Philosophy of Culture*, by John J. McDermott, ed. Douglas R. Anderson (New York: Fordham University Press, 2007), 223–35; 231.

“The Artist of the Beautiful” ends on a rising, ethereal note, clearly reminiscent of Platonism, of a reach beyond the material world: Owen’s “spirit possessed itself in the enjoyment of the Reality [of Beauty].”⁸⁴ A serene ending, to be sure, but it suggests that Owen’s spiritual, artistic gain is only personal. Is this always the case? Can personal spiritual growth benefit the community? I am inclined to say certainly yes, but Hawthorne seems to say that the *purely* spiritual pursuit of art, seeking after perfection, after the ideal of beauty, collapses into a solipsistic enjoyment of the beautiful, detached from the broader concerns that beset the human community. Not only can no one else fully and appropriately appreciate Owen’s butterfly, but Owen loses, or “had risen out of,” his ability to feel disappointment and frustration at his not being understood by others.⁸⁵ And he even becomes detached from his own creation. After the destruction of the butterfly Owen “looked placidly at what seemed the ruin of his life’s labor,” signaling the death of the expressive impulse and his retreat into the internal “enjoyment of the Reality.”⁸⁶ Given the warm tone surrounding the forge and hearth in this story and Annie’s “good reason” for favoring her child over the butterfly, I do not think Hawthorne advocates such a spiritual retreat. Rather, Hawthorne implicitly suggests that the value of spiritual pursuits comes in part from their being tempered with earth. That is to say, personal growth is certainly an integral aspect of human life, but it must take place within and return to a human context, a human community. The detachment of the individual from this context leads to an emaciation of the spirit, despite that the spirit

⁸⁴ Hawthorne, “The Artist of the Beautiful,” 475.

⁸⁵ *Ibid.*, 472.

⁸⁶ *Ibid.*, 475.

itself yearns for this separation in the cultivation of its creative powers. Hawthorne's character of Ethan Brand is an outstanding example of this idea, as I shall discuss shortly. This detachment is characteristic of both the artist and scientist, though through the yield of scientific inquiry and the broad acceptance of science within society makes the scientist's detachment all the more threatening.

The Detached Individual

To recapitulate briefly: striving after the beautiful, aiming at perfection, is portrayed by Hawthorne as a deeply human quest, noble, worthwhile, but fraught with dangers. To seek after perfection is to try and recreate or refashion what exists in order to improve it, that it embody a standard higher than that which nature actually displays. Science and art each promise creative power, the power to control and manipulate nature and bend it to our own desires and ideas. Simply seeking betterment or improvement follows the same pattern, the same desire to refashion. By this I mean that the Perfect need not be a conscious goal of action, that simply seeking to improve some device or situation also requires a vision of how the given order could be better. To seek improvement does not necessarily fall into the limit case exhibited by Aylmer, for example, but the danger is that a desire for amelioration can slip into the extreme desire to realize perfection, to 'spiritualize matter.' To the Owens and Aylmers of the world, to idealists and champions of spirit, perfection is the ideal pinnacle that existence can someday possibly, hopefully exhibit, but, as portrayed by Hawthorne in the stories here considered, the quest to achieve it subsumes the individual in a relentless activity that

drives a wedge between the seeker of the ideal and the human community.⁸⁷ For we grasp perfection only as an idea, we do not grasp it as such by our senses, and in an effort to make perfection real we must strive for total control over materiality in order that we may shape it just so. The individual becomes isolated from society, partially out of necessity in order to pursue the requisite study, contemplation, and reflection that impels the growth of intellect and of our creative powers, and partially as a side effect of continually climbing after the ideal, away from earth. Spirit becomes isolated from earth despite the fact that the spirit must work on earth, on matter, in order to create it anew. This is the paradox that traps Aylmer and Owen. Said another way: the quest for beauty or perfection is absorbed in materiality and yet is disconnected from it. This disconnectedness can lead to delusion and a disregard for the humanity of others.

In Aylmer, this paradox is depicted as follows. On the one hand, he is “a type of the spiritual element,” a representative of this element of humanity; on the other, he works on the material world through science, indeed is immersed in it.⁸⁸ In fact, Aylmer’s actions and desires point to his conviction that *all* lies within the material world and is thereby subject to the manipulations of his science, improvable—perfectible—by the infusion of spirit. “He handled physical details, as if there were nothing beyond them; yet spiritualized them all, and redeemed himself from materialism, by his strong and eager aspiration towards the infinite. In his grasp, the veriest clod of

⁸⁷ C.f. Matthiessen, *American Renaissance*, 228: “What terrified Hawthorne most about the isolated individual was the cold inability to respond to ordinary life...”

⁸⁸ Hawthorne, “The Birthmark,” 43.

earth assumed a soul.”⁸⁹ The spiritualization of matter is the transformation of the natural (the material, earth) in accord with the ideals of spirit (‘the infinite,’ perfection, Beauty).⁹⁰ Thus Aylmer thinks he can perfect Georgiana and remove her birthmark, the symbol of imperfection and human mortality. The yield of Aylmer’s delusion, as we learn it to be, is (undeserved) scientific arrogance, a lack of compassion for all that intrudes upon the completion of his goal, and a willingness to exploit and use others. The usefulness and practicality of science pursued rightly is rendered dangerous as scientists overstep their bounds.

In Owen, the paradox is exhibited from the opposite direction, so to speak. Owen, also representing the ‘spiritual element’ of humanity, hates the practical and material, does his best to distance himself from it, and yet must work within it to try and transcend it. Though he shudders in the presence of steam engines and dislikes many aspects of his profession, watchmaking, his artistic work is but an ultimately delicate and fine piece of machinery. Owen indeed imbues spirit into the mechanical, the lack of which repulsed him, but the result is quickly destroyed and cannot truly be shared with the broader human community. Unlike Aylmer, whose tale ends tragically, Owen does receive spiritual nourishment from his endeavor. This is a sign that Hawthorne did not

⁸⁹ Ibid., 49.

⁹⁰ According to Matthiessen, “‘The ideal’ that Hawthorne wanted to project in art was ‘the real’: not actuality transformed into an impossible perfection, but actuality disengaged from appearance.” See Matthiessen, *American Renaissance*, 264. With Matthiessen’s point in mind, it might seem that the ‘spiritualization of matter’ represents the ideal of art for Hawthorne. I have nothing against this interpretation of Hawthorne in principle; however, given the important role of “impossible perfection” in the stories here under consideration, my use and understanding of the term “spiritualized matter” reflects the possibility that the process of spiritualization can overshoot ‘the ideal’ and attempt to transform the actual into “an impossible perfection.” For Hawthorne, matter may stand in need of some spiritualization in order to properly nourish human life, but he was also aware of the dangers of overeager or heavy-handed spiritualization.

think that the artistic/scientific quest is worthless or without purpose, if pursued without falling prey to extreme desires and ambitions.

Neither Aylmer nor Owen overcome the disconnectedness from materiality that characterizes their striving after beauty and perfection, and Hawthorne does not give us in any tale a character who adequately balances the spiritual *eros* with earthy existence. Both Aylmer and Owen, in order to perfect their craft and hone their powers, retreat into isolation. Diligent work and study are necessary for the cultivation of creative powers and of the intellect, yet the necessary isolation is unhealthy for human development if taken to the extreme, as Hawthorne's tales attest.⁹¹ We may call this separation from earth the plight of the "detached individual," recalling the aforementioned phrase from Josiah Royce. For Royce, the detached individual is the person "who belongs to no community which he loves and to which he can devote himself..."⁹² To be without a community is to center all things on oneself, a situation in which the spirit begins to rot. As Aristotle says, human beings are 'political animals,' and in total retreat from society the bonds that constitute and support humanity begin to give way. For looking only upon itself, detached, spirit finds no external commitments, wills, or bounding forces of any kind to limit its desire for unlimited ascent. But for Royce, as for Hawthorne, "mere detachment, mere self-will, can never be satisfied with itself, can never win its goal."⁹³ This is finitude seeking the infinite; this is the quest for perfection, an ideal of spirit that cannot be realized in full due to the ineluctably earthbound nature of existence. "The

⁹¹ C.f. Newman, *A Reader's Guide to the Short Stories of Nathaniel Hawthorne*, 27.

⁹² Royce, "The Hope of the Great Community," 1156.

⁹³ Ibid.

Artist of the Beautiful” and “The Birthmark” illustrate precisely this point, adding that the desire to realize perfection is not only beyond our powers but can also wreak havoc in the human sphere.

We might get a better sense of the individualism that leads to detachment by drawing another connection. Nietzsche, according to Royce’s interpretation of him, provides an example of such individualism. Royce writes as a summary of Nietzsche’s view that “what the self needs is power, and power is not to be won by attempting to please a world of slaves.”⁹⁴ The point I wish to make is that what Nietzsche calls ‘the will to power’ is associated with ‘the detached individual.’ Seeking power over others breaks horizontal bonds that embed one within the community in the effort to create guiding strings that can be used to manipulate. The would-be master must separate herself from loyal engagement with that over which power is to be held to truly gain that power. It is the same whether mastery over nature or over human beings is desired; to continually seek after power is to loosen one’s bonds to the world in which we live.⁹⁵ And as we discussed above, the quest for power is implicit in the quests for perfection and beauty, for power is required in order to attempt any refashioning of nature. In “The Artist of the Beautiful” and “The Birthmark,” Hawthorne weaves these ideas together within the practices of the artist and the scientist, portrayed as detached individuals.

⁹⁴ Josiah Royce, “Individual Experience and Social Experience as Sources of Religious Insight,” in *The Basic Writings of Josiah Royce*, ed. John J. McDermott, vol. 2: Logic, Loyalty, and Community (New York: Fordham University Press, 2005), 1015–37; 1028.

⁹⁵ Note that I am speaking here about seeking after power and not the possession of power itself. The reason for this is that I believe there is a difference between seeking after or being desirous of power and having power thrust into one’s hands. It does not seem to me that simply receiving power necessarily leads to detachment, though the subsequent exercise of that power may.

The epitome of Hawthorne's version of the detached individual is found in his character Ethan Brand. In "Ethan Brand," Hawthorne writes of a man who searched for, and eventually found, the "Unpardonable Sin." This greatest of all sins is found at the end of the path on which both Owen and Aylmer find themselves. It consists in the total dominance of the intellect, the extreme determination of spirit, and in the calcification of the heart and our other earthy sensibilities. In this story, Ethan Brand returns to his old lime kiln after he has found the Unpardonable Sin and spends the night in conversation with the new lime burner, his son, townsfolk, and other guests. After everyone else has retired, just before he throws himself into the lime kiln at the end of the tale, Ethan Brand reflects upon how he reached his current state. Hawthorne's writing here is powerful and illuminating and worth reproducing at length, for it perfectly characterizes the extreme situation of detachment and the dangers lurking within.

...deep within his mind he was reviewing the gradual, but marvelous change, that been wrought upon him by the search to which he had devoted himself... He remembered with what tenderness, with what love and sympathy for mankind, and what pity for human guilt and wo, he had first begun to contemplate those ideas which afterwards became the inspiration of his life; with what reverence he had then looked into the heart of man, viewing it as a temple originally divine, and however desecrated, still to be held sacred by a brother; with what awful fear he had deprecated the success of his pursuit, and prayed that the Unpardonable Sin might never be revealed to him. Then ensued that vast

intellectual development, which, in its progress, disturbed the counterpoise between his mind and heart. The Idea that possessed his life had operated as a means of education; it had gone on cultivating his powers to the highest point of which they were susceptible; it had raised him from the level of an unlettered laborer, to stand on a star-lit eminence, whither the philosophers of the earth, laden with the lore of universities, might vainly strive to clamber after him. So much for the intellect! But where was the heart? That, indeed, had withered—had contracted—had hardened—had perished! It had ceased to partake of the universal throb. He had lost his hold of the magnetic chain of humanity. He was no longer a brother-man, opening the chambers or the dungeons of our common nature by the key of holy sympathy, which gave him a right to share in all its secrets; he was now a cold observer, looking on mankind as the subject of his experiment, and, at length, converting man and woman to be his puppets, and pulling the wires that moved them to such degrees of crime as were demanded for his study.... Thus Ethan Brand became a fiend.⁹⁶

This is a very rich passage for the themes considered herein. There are a couple of items especially worthy of note. First, Ethan Brand, like Owen and Aylmer, does not begin his journey, his quest for knowledge and reformation, with malintent. Indeed, neither Owen nor Aylmer seems cognizant of any adverse effects of their activities. Owen's quest for beauty is, if anything, more of an inconvenience to others than it is

⁹⁶ Hawthorne, "Ethan Brand," 98-99.

harmful to them; Aylmer is unaware, or perhaps forcefully self-deceptive, of the true effects of his actions. Ethan Brand is more self-reflective than either Owen or Aylmer, and it is he who acknowledges the harm in his activities, both to his own spirit and to other people, and continues on despite this recognition. As Wilfred McClay points out in his fine article on matter, spirit, and failure in Hawthorne, “the relentless transformation of the recalcitrant material world into our frictionless and uncomplaining servant is not the same thing as the cultivation of spirit.”⁹⁷ The quest for perfection has a noble purpose, inclusive of personal growth and betterment of the world. But as we have seen, the single-minded pursuit of this goal tends to emphasize power over the world and in truth does not yield the intended cultivation of spirit. Rather, spirit becomes detached and begins to wither, eventually turning into marble like that of Ethan Brand.

Second, a lopsided emphasis on the development of the mind breaks one away from the “magnetic chain of humanity.” This detachment transforms Ethan Brand into a “cold observer” and provides him the necessary insulation for “pulling the wires” of his fellow human beings. The warmth of Danforth’s forge and hearth is gone. Becoming a detached individual is the great danger Hawthorne sees in the extreme predominance of spirit and intellect in human life, and his warning is that to so sever the bonds of humanity can create dangerous, even monstrous, individuals. The difference between Ethan Brand and Aylmer is that Ethan Brand is aware of his position whereas Aylmer slips into patterns of surveillance and manipulation seemingly without self-awareness. Owen does not fall into the pattern of Ethan Brand because he is absorbed in his art, not

⁹⁷ McClay, “The Lessons of Failure,” 93.

in the practices and experimentation of scientific inquiry. Owen is still detached from human society, but his utter disdain for things of practical use spares him from walking side by side with Aylmer. This contrast is suggested by the different ways in which Aylmer and Owen relate to materiality, discussed earlier in this section. Thus even with respect to the quest for perfection there is a difference between art and science; namely, that science is more concerned with external power and control than is art, and is therefore more dangerous to the human community. In other words, science reveals itself as more dangerous than art (at least in “The Artist of the Beautiful” and “The Birthmark”) because of the expansive physical control it gives us over nature and the psychological control it can exert over individuals in virtue of its impressive successes and the prestige thus garnered.⁹⁸ Think here of the automatic deference given to any claim supported by “a recent study” and of the idolization of Silicon Valley technology gurus. This is not to declaim all merit to these phenomena, but simply to point out how science has grown into an Authority in many facets of human life.

As I have been obliquely suggesting, becoming a detached individual is a process, not the result of flipping a binary switch. I do not think that Owen and Aylmer are completely detached individuals, but are on the path sketched out by Ethan Brand.⁹⁹

⁹⁸ I do not want to make an absolute claim about whether science or art is more dangerous when it goes awry. Between “The Birthmark” and “The Artist of the Beautiful,” science is presented as the more dangerous of the two pursuits, though both are presented as misguided when pursued unreservedly. For more on the dangers of science, see the last section of the present chapter and the entire following chapter.

⁹⁹ Owen’s emotional removal from the Danforth family as well as his own butterfly and his immaterial, spiritual enjoyment of Beauty at the end of “The Artist of the Beautiful” might suggest complete detachment, but I do not think it is appropriate to say “complete.” For the tale suggests, through his behavior and the narration during the scene in the Danforth home, that Owen had attained his spiritually “pure” apprehension of Beauty upon his concretization of Beauty in the butterfly. Yet he still decides to

Indeed, we may wonder whether a *completely* detached individual is even possible. Ethan Brand, after his culminating self-reflection cited above, immolates himself in the lime kiln. A pure fiend is a being so removed from the earth that it has no place here. But Owen and Aylmer are not so detached. They still share some ties with the human community. Hawthorne represents these connections using love. Both Owen and Aylmer are in love, a heartfelt endeavor characteristic of earth, and this love plays a role in motivating their actions. In fact, it is Aylmer's tie to Georgiana, intermixed with his desire for perfection, that allows him to manipulate her so, as we shall see more fully in the following chapter. Aylmer is mentally, intellectually, detached from humanity but still exists in the world and participates in human bonds. In "The Birthmark," Hawthorne reduces these connections to two, those with Georgiana and Aminadab. The human bonds left to Aylmer are the conduit through which the effects of his detachment from others are made manifest. It is the Aylmers of the world, often manipulative and dangerous by neglect and blindness, of which we must be wary, not the Ethan Brands, a much rarer breed. By being influential within human society while simultaneously being detached from it in the formulation and pursuit of its aims, science places itself in a precarious position. Scientists might, without conscious intent on their part, find themselves in the position of Aylmer, with decisions about experiments, applications, treatments, being made with little or no thought afforded to the full range of consequences on the affected people. Technology and medicine offer many examples of

attend the Danforths, to bring the butterfly to them and exhibit it. As removed as Owen was becoming, his connection to humanity was not yet totally severed by the end of the story.

this, often of the kind where a dangerous design flaw or side-effect is deliberately un- or misreported for the sake of higher profits.

The Dangers of Science Extend Beyond Those of Art

A good portion of this chapter was devoted to speaking of art and science in similar terms. Now, at the end, we have seen differences start to emerge. To prepare for the discussion of science in the next chapter I wish to reiterate a couple of the reasons we shall now be devoting more attention to “The Birthmark” and its characters, Aylmer, Georgiana, and Aminadab, than to Owen Warland. In “The Artist of the Beautiful” and “The Birthmark,” both art and science are involved in a quest to realize perfection, to spiritualize matter. But Owen’s version of this quest is not as dangerous to others as is Aylmer’s. Why might this be so?

First, Aylmer commands great *scientific* knowledge, meaning that he works in conjunction with material and practical reality, whereas Owen works in revulsion of the practical. We must not misconstrue Aylmer’s relationship to the material as cooperative, though he does work with it more willingly than does Owen. It is Aminadab who handles all of the practical details of Aylmer’s experiments. Aylmer is master over the material and uses it, paying it mind only insofar as it aids him. In this attitude lies the danger of detachedness, often taken to be freedom from the material. Science enables freedom from materiality by enabling mastery over it. Aylmer’s peculiar blend of spirit and earth involves mastery and lordship rather than community and cooperation, whereas Owen might be thought of as a “purer” spirit, though this word is not quite right because Owen still works with matter in an effort to spiritualize it. Rather than marshal

the resources afforded by scientific and technological advancement, Owen focuses his efforts on a personal scale and looks solely to aesthetic form as the means to transcend nature, not scientific power.

Second, though art is an important aspect of human expression and cultivation it remains easy to dismiss it as trivial, as Peter Hovenden does by calling Owen's works "Dutch toys."¹⁰⁰ Science, though, proclaims its relevance loudly and entices people with its promises of power, certitude, and understanding. The practical advances enabled by the application of scientific knowledge speak its praises and pile evidence against its detractors. In short, Hawthorne portrays science as an endeavor that has more ready connections to material life than does art, though this crust of earth veils the elements of mastery and control implicit in scientific practice.

Perhaps the starkest difference between Aylmer and Owen Warland is that Aylmer's work directly manipulates another human being, infringing upon her dignity. Owen's aversion to practical pursuits might make his creation skewed and unsuitable for the earthiness of human life, but it saves him from experimenting upon others and from the 'unpardonable' path of Aylmer and Ethan Brand. By taking up science and the power contained within, by cultivating his intellect at the expense of his heart, Aylmer imbalances himself in a way that proves supremely dangerous to others. It is the role of

¹⁰⁰ That Hawthorne sometimes tended to think in this direction is evidenced by this entry in his notebook from 1840, anticipatory of "The Artist of the Beautiful": "To represent a man as spending life and the intensest labor in the accomplishment of some mechanical trifle,—as in making a miniature coach to be drawn by fleas, or a dinner-service to be put into a cherry-stone." See Hawthorne, *The American Notebooks*, 185. Not present in this entry is the emphasis on art and beauty that we find in "The Artist of the Beautiful," an emphasis which makes the word "trifle" less apparently appropriate for Owen's butterfly. Whether or not Owen's work is indeed a trifle is one of the questions with which the story leaves us.

science in cultivating and exercising this dangerous power that I explore in the rest of this thesis.

CHAPTER III

“THE BIRTHMARK”—SCIENTIFIC SEDUCTION AND EXPLOITATION

“The Birthmark” is above all a story about a person whose aesthetic desiderata for earthly existence outstrip the ability of that existence to meet them. The desire for such perfection drives him to attempt a transformation of nature through a spiritualization of matter. Hawthorne does not favorably portray this attempt to force the earth beyond its limits, for Aylmer fails and Georgiana is killed.

In the previous chapter, through “The Artist of the Beautiful,” we discussed the way in which the quest for perfection is embedded in both artistic and scientific endeavors. This is largely a matter of the power of aesthetic ideals in guiding our efforts to control and transform nature, turning it to our human benefit. To become consumed with these ideals, though, and to focus all of one’s energies into their realization is one road to becoming a detached individual, as Hawthorne shows us through his character Ethan Brand. Extreme self-will, a narrow absorption into the desires of the self and a disregard for others, is the crucial feature of a detached individual.

Now, in the present chapter, we shall explore Hawthorne’s depictions of the effects of such an individual relentlessly pursuing an ideal of aesthetic perfection using the powers afforded by modern science. The detached individual practicing science proves himself to be extremely dangerous, not least because the power over nature gained through scientific inquiry feeds into and encourages his pursuit of perfection and its imposition onto the world. Yet Hawthorne does not outright condemn the pursuit of

spiritual and aesthetic ideals; there is something noble in searching after the stars that Hawthorne does not seem to want to abandon. This and other ambiguities and complexities will emerge through the following reading of “The Birthmark,” which will take each character in the story as a touchstone, in turn: first Aylmer, then Georgiana, then Aminadab. We shall see that self-deception, the allure of power and of comfort, and a disregard for the humanity of others all play a role in how Hawthorne understands the dangers that can attend scientific practice. With Georgiana and Aminadab in particular, we learn how Hawthorne thought about the dangers the detached scientist poses for other people. Hawthorne’s diagnosis of these issues is complex, but, using terminology from the previous chapter, we can state the general theme as follows: it is earth that is exploited in the course of scientific inquiry, though both earth and spirit suffer as a result of this situation.

The Story

“The Birthmark,” written in 1843, is a cautionary tale that depicts a scientist, blindly confident in the power afforded him by science, who is obsessed with perfection and blunders into the ruination of his loving wife. Not only does Georgiana die, but her sense of self, of value, of importance is manipulated prior to her demise.

“The Birthmark” is set “[i]n the latter part of the last century,” presumably meaning in the late 18th century.¹⁰¹ This is not so long ago that Hawthorne’s readers would dissociate the story from their own time and lives; the tale’s temporal ambiguity maintains the sense of its relevance. Indeed, this ambiguity is such that we might take

¹⁰¹ Hawthorne, “The Birthmark,” 36.

“the latter part of the last century” to mean the latter part of the last century, whatever the century, from the perspective of the reader. This sense of perpetual relevance fostered by the tale’s temporal ambiguity is important because a major influence in Hawthorne’s creation of Aylmer and of the plot of the “The Birthmark” is taken from the early 17th century, the life and person of one Sir Kenelm Digby, a gifted natural philosopher who had “studied almost every branch of human science” and who was rumored to have killed his young wife with “viper-wine.”¹⁰² But, as discussed in the introduction to this thesis, there is a through-line between the newly mathematicised natural philosophy of the 17th century and the continuing efforts of contemporary scientific inquiry. Aylmer’s situation with respect to his own scientific achievements and knowledge, his proclivities, temptations, and blind spots, can thus be taken as a general representation of the situation besetting all scientific inquirers. Such a broad interpretation of Aylmer’s character is supported by a comment the narrator of “The Birthmark” makes while describing Georgiana’s perusal of Aylmer’s lab journal: “Perhaps every man of genius, in whatever sphere, might recognize the image of his own experience in Aylmer’s journal.”¹⁰³ This is all to say that “The Birthmark” is projecting its warnings over the entire scientific enterprise and beyond, warnings about which all intellectually inclined persons must be wary. Aylmer may be an isolated character, but “Aylmer” is not an isolated phenomenon.

¹⁰² Alfred S. Reid, “Hawthorne’s Humanism: ‘The Birthmark’ and Sir Kenelm Digby,” *American Literature* 38, no. 3 (November 1966): 337–51; 339 [first quotation], 337 [second quotation].

¹⁰³ Hawthorne, “The Birthmark,” 49.

There are three characters in this story: Aylmer, an accomplished scientist; Georgiana, his beautiful and devoted wife who has a small, red, hand-shaped birthmark on her cheek that becomes more noticeable as she pales; and Aminadab, Aylmer's lab assistant.

Aylmer has recently wed the lovely Georgiana but becomes obsessed with her birthmark. His obsession gives rise to revulsion and infects Georgiana; she, too, comes to despise the mark on her cheek. Finding it the only thing separating Georgiana from incarnated human perfection, the two retreat to Aylmer's laboratory and Aylmer endeavors to use the power of science to bend nature and remove the accursed birthmark, meaning to render perfection where nature has fallen short. Aylmer leaves Georgiana in fantastical but isolated apartments adjacent to his lab, periodically coming to speak with her, show her some of the scientific wonders he keeps on hand or can produce at whim, and check on her between periods of work. The narration remains with Georgiana, Aylmer entering and leaving several times over the course of the story. Eventually Georgiana follows Aylmer into his lab and observes him at work, frenetic, crazed, entirely unlike his calm demeanor when he visited the apartments. Georgiana still does not know any details of Aylmer's plan, and she now demands to know the risks of their mutual undertaking. Only now does she learn that she will be exposed to danger, though this means nothing to her in comparison to the blight her birthmark has become in her eyes. Aylmer finishes the preparation of his cure and gives it to Georgiana, confident; Georgiana consumes it willingly. In his blinding obsession with the birthmark, Aylmer neglects consideration of Georgiana's mortality and humanity,

experiments upon her, and, with his final “cure,” kills her. Aminadab’s laughter echoes throughout the last pages of the story.

Georgiana’s birthmark is a sign of human imperfection, and her death a reflection of human imperfectability. The birthmark reminds Aylmer that “mortality clutches the highest and purest of earthly mould, degrading them into kindred with the lowest,” that we are ineluctably things of the earth.¹⁰⁴ From the story we know that the crimson birthmark upon Georgiana’s cheek “bore not a little similarity to the human hand,” though precisely what the birthmark *is*, what it means for us as readers, is a matter open to interpretation.¹⁰⁵ Many interesting ideas have been put forward, including reading the birthmark as an aspect of the female body or as the power of Georgiana’s womanly desires and Aylmer’s/Hawthorne’s attendant sexual anxiety. It has even been suggested that the story is “a fantasy of abortion.”¹⁰⁶ Regardless of the specific interpretation we wish to give the birthmark, one thing seems clear (and is shared by every interpretation I have come across): the birthmark is tied to Georgiana’s physicality, marking her as an earthly creature. This is sufficient for my purposes in this chapter.

As the narrator in the story says of the crimson hand, “it was the fatal flaw of humanity which Nature, in one shape or another, stamps ineffaceably on all her productions, either to imply that they are temporary and finite, or that their perfection

¹⁰⁴ *Ibid.*, 39.

¹⁰⁵ *Ibid.*, 38.

¹⁰⁶ For a brief survey of some of these readings of Georgiana’s birthmark, see Megan Marshall, “Sophia’s Crimson Hand,” *Nathaniel Hawthorne Review* 37, no. 2 (Fall 2011): 36–47. The text quoted above is on 38. Marshall is quoting Brenda Wineapple. Marshall’s article also discusses Sophia Hawthorne nee Peabody’s use of a seal that included a small, outstretched hand. Marshall discovered this seal on one of Sophia’s letters, stamped in red wax. She then discusses the potential importance of Sophia’s pregnancy to “The Birthmark.”

must be wrought by toil and pain.”¹⁰⁷ Such a visible reminder on the body of his wife was not, and could not have been, easy for Aylmer to bear, aspiring as he did to perfection. His “eager aspiration towards the infinite” carries within it the seeds of body-disgust, as all bodies are “temporary and finite.”¹⁰⁸ The appearance of Georgiana’s birthmark is tied to the flux of bodily life, the tiny hand “now vaguely portrayed, now lost, now stealing forth again, and glimmering to-and-fro with every pulse of emotion that throbbed within her heart,” a pattern of appearances that Aylmer regards as a “defect.”¹⁰⁹ By the end of the story Aylmer learns—or should have learned—that toil and pain do not yield human perfection in this world, that the aesthetic perfection sought by spirit cannot be made manifest in earthly form. The erasure of Nature’s stamp is the disappearance of Georgiana’s lifeblood. When confronted with a birthmark he acknowledges not to be merely superficial but deeply rooted in Georgiana’s being, Aylmer does not hesitate to try and remove it, does not hesitate to marshal his considerable knowledge and the resources of modern science to try and master and improve nature. In this way Aylmer embodies the scientific drive unrestrained, seeking power and perfection to the exclusion of other concerns.

Aylmer’s Self-Deception

An aspect of Aylmer’s implication in the ideas and methods of the sciences is that he deceives himself about the consequences of his actions, which prevents him from squarely recognizing the position in which he has put himself and how this affects

¹⁰⁷ Hawthorne, “The Birthmark,” 38-39.

¹⁰⁸ *Ibid.*, 49 [first quotation], 39 [second quotation].

¹⁰⁹ *Ibid.*, 38.

others. Aylmer is not Ethan Brand; he has not consciously acknowledged and accepted himself as a detached individual, standing aloof from humanity; he still cares, he loves Georgiana, entwined though this love may be with his love of science.¹¹⁰ Self-deception allows the detached individual to exist without full self-recognition.

A chief source of Aylmer's self-deception is hubris, specifically his confidence in Science as a method for inquiring into nature and for manipulating the natural order. The scientific pursuit of knowledge has grasped Aylmer and fills him with a euphoric energy and optimism. Despite initial failures and hardships in creating a concoction to remove Georgiana's birthmark, Aylmer proceeds doggedly with his work, coming to Georgiana "flushed and exhausted" but glowing about the prospects of his science.¹¹¹ This glow stems from a sense of the immense power that can be created, controlled, and released by modern science. Hawthorne portrays this power as almost magical, illustrated by Aylmer's harmless yet wondrous optical conjurations effected for Georgiana's enjoyment: "Airy figures, absolutely bodiless ideas, and forms of unsubstantial beauty came and danced before her, imprinting their momentary footsteps on beams of light."¹¹² Yet this image of "airy figures" does not suggest substantive power, and we are told that these same conjurations, light tricks, were taught to Aylmer from among the "profounder lore" of science, creating a contrast that calls into question the actual profundity of Aylmer's scientific inheritance.¹¹³ Furthermore, the

¹¹⁰ C.f. *Ibid*, 37: "His love for his young wife might prove the stronger of the two; but it could only be by intertwining itself with his love of science, and uniting the strength of the latter to its own."

¹¹¹ *Ibid.*, 46.

¹¹² *Ibid.*, 44.

¹¹³ *Ibid.*

“unsubstantial beauty” of these dancing wisps draws our attention to the aesthetic dimension of scientific production, hinting that aesthetic desiderata play a role in both scientific and artistic activity. Recalling our discussion of Kant from the previous chapter, it is through the appreciation and production of beautiful things that the powers of the human mind are freed to operate synergistically at their full capacity and can be most effectively turned to the transformation of nature, including scientific modes of so transforming.¹¹⁴ Aylmer embraces this idea of aesthetic ideals informing and entwining with scientific practice, while Hawthorne expresses skepticism about the value of this union by having the “profounder lore” of science yield beautiful yet “airy” apparitions and by having Aylmer’s other demonstrations to Georgiana fail, for example the blight of the rapidly growing and quickly reproducing flower and the portrait of Georgiana done by “a scientific process of [Aylmer’s] own invention” in which the birthmark is the only distinct feature.¹¹⁵ With the ephemeral dancing forms in particular, Hawthorne undercuts the idea that the products of scientific inquiry are all of deep importance for human life. Much of it is a light show, enjoyable, perhaps even of limited use, but of little help to our spiritual lives.¹¹⁶ And if, as the narration suggests, such tricks are

¹¹⁴ It is in the latter part of Kant’s *Critique of the Power of Judgment*, the “Critique of the Teleological Power of Judgment” where he treats of issues that surround investigations into and judgments about nature that we might describe as ‘scientific.’ Though it is difficult to succinctly outline the scope of Kant’s *Third Critique*, one could do worse than to say that this work is Kant’s investigation into the relations between aesthetics, nature, and scientific inquiry. See Kant, *Critique of the Power of Judgment*, §§61-91.

¹¹⁵ C.f. Hawthorne, “The Birthmark,” 45.

¹¹⁶ This potential uselessness of the more entertaining or ‘artistic’ aspects of science to our spiritual lives is Hawthorne’s point, or at least it is what the above passages in the story suggests to me, not necessarily my own. Emphasis must be laid on the word “potential,” though, for Hawthorne does not clearly advocate the view that what is artistic and spiritual in science is useless; indeed, a strand in “The Birthmark” regards Aylmer’s spiritualizing aims as high and holy, as will be discussed later in the body of this chapter. And beyond the question of ephemera, there is also the question of whether certain scientific advancements or

among the heights of scientific achievement, perhaps scientists are overconfident in and misjudge the place and importance of their craft in human life. Aylmer, though, is confident in his science.

But Aylmer's scientific power has much deeper and more severe manifestations than simple visual productions. Beyond removing a mere birthmark, which he decries is a comparatively simple task, Aylmer has no doubts that "the plainest scientific logic" can realize the alchemists' golden draught and create the elixir of life, a potion of immortality.¹¹⁷ Aylmer sees no upper limit to the power of science, and this lack of

technologies can aid our spiritual life indirectly, such as by reducing the need for people to engage in time-consuming, mundane pursuits. The dishwasher and the washing machine come to mind (inventions that did much particularly for women, though the invention and introduction of these items into society was a double-edged sword, coupled as they were with a new industry for keeping women busy in the house—though one particular task no longer takes as long, a multitude of new things becomes available so that more and yet more housework can be accomplished. C.f. Simone de Beauvoir's *The Second Sex*, esp. her chapter on "The Married Woman," in particular pp. 468-485). In such cases, technology does seem to be of help, or at least can be if consumerist and sexist forces do not overwhelm the individual. Even in this direction, though, Hawthorne sounds an existential warning. Such technology can cut us off from our past, from tradition, inadvertently making the pool from which we can appropriate meaning and value that much shallower. This is the message of the story "Fire-Worship," for example. While we may find it difficult to take Hawthorne's attacks on technological advancements seriously—I know the dishwasher has helped me a great deal—his worry shows great astuteness. It does seem to me that a culture of technology, such as our own, reduces the past to something 'bygone' and refocuses all of our attention to the present, to the latest advancements, versions, and models that are available. John J. McDermott calls this cultural phenomenon 'the danger of obsolescence,' and worries that as the past withers so does our ability to build and maintain for ourselves a 'secular liturgy' from which we can get some existential purchase. I am not talking about becoming beholden to the past here, but rather am suggesting that meanings that continue into the present from out of a community, a tradition, from out of history, can serve as shield wall against the buffeting winds and caprices of the present. Capital and market forces are intertwined with, and in large part drive, trends in technological advancement and availability. To be wholly at the whim of such forces is to fall prey to what Martin Heidegger calls *das Man*, the They, the overwhelming and leveling influence of 'the public,' and to lack the footing required in order to stand up in your own right as your own person. The warning is that the unchecked and unthoughtful spread of technology makes it easier to lose oneself in the They, for the resources provided by the past become unavailable. It is from out of the past that an authentic future can emerge.

See Hawthorne, "Fire-Worship"; Martin Heidegger, *Being and Time*, trans. Joan Stambaugh and Dennis J. Schmidt (Albany: State University of New York Press, 2010), esp. §§25-27; Simone de Beauvoir, *The Second Sex*, trans. Constance Borde and Judith Thurman (New York: Alfred A. Knopf, 2010), 468-485.

¹¹⁷ Hawthorne, "The Birthmark," 46.

limitation does not bother him. For Aylmer's attitude toward science generally is that "its virtuous potency is yet greater than its harmful one."¹¹⁸ Furthermore, Aylmer acknowledges that science puts within our grasp things beyond nature, capable of upsetting the natural order—but of course the scientist who can produce such discordant effects would not do so. Concerning the "universal solvent" of the alchemists, Aylmer tells Georgiana that "a philosopher who should go deep enough to acquire the power [of turning things vile and base into gold] would attain too lofty a wisdom to stoop to the exercise of it."¹¹⁹ To Aylmer's mind, with the attainment of scientific knowledge comes an equivalent moral growth. For Hawthorne, this is a crucial point about which Aylmer deceives himself.

We are provided with numerous signs throughout the story that moral wisdom is not partnered with scientific knowledge, culminating with the death of Georgiana. The very examples Hawthorne uses force us to ask whether Aylmer perceives his science through rose-colored glasses. Why were the alchemists searching for a means to transmute things into gold if not to transmute things into gold? Why not into something worthless if we are not going to actually effect the transmutation? And consider how proud Aylmer is of his ironically named "Elixir of Immortality," a "precious" super-

¹¹⁸ *Ibid.*, 47.

¹¹⁹ *Ibid.*, 46. As discussed in the introduction, during Hawthorne's time—and even more so at the time "The Birthmark" is set—the people who would now be called scientists were called "natural philosophers." "Scientist" as a term came into common use during the 19th century. We should bear in mind, though, that Hawthorne may also be looking back to the antique terminology in order to make a point. Hawthorne blurs the distinction between the old, "magical" ways of thinking and the new science that emerges and grows from the 17th century onward. He mentions, for example, several medieval and renaissance authors who were associated with magic and alchemy as having a prominent place in Aylmer's scientific library. See Hawthorne, "The Birthmark," 48.

poison capable of killing almost instantaneously.¹²⁰ He confidently states: “By its aid I could apportion the lifetime of any mortal at whom you might point your finger.”¹²¹ Aylmer does not fail to mention that this includes those who rule the world. Proud of his work and his scientific achievements, Aylmer does not see the dissonance between his assurances of wisdom and his almost gleeful assertion of power over kings and thus the earth.

We are given no sign in the story that Aylmer has considered how he might make good on this assertion. This is important for two reasons. First, it asks us to consider the substantiality of Aylmer’s claim to power. Is he deluding himself about his capabilities? It is likely more difficult and more time consuming to get into a position to poison a world leader than Aylmer imagines. I say this mostly because I do not think Aylmer has thought about concrete action, only about how potent his poison is and about the abstract possibilities of having such a liquid. These possibilities seem to revolve around the fantasy of saving lives; Aylmer claims he could kill anyone should “the welfare of millions” call for it.¹²² It seems that Aylmer focuses on such fantasies—fantasies that, we should note, put Aylmer in the position of grand moral arbiter—in order to justify his having such a potion in his cabinet. Such fantasies show that Aylmer’s aspirations after power are in full command of his imagination.

This brings us to the second point: Aylmer does not appear to think through the implications and potential consequences of his scientific advancements and

¹²⁰ Hawthorne, “The Birthmark,” 47.

¹²¹ Ibid.

¹²² Ibid.

achievements. Instead of asking himself to what end he might realistically need such an astoundingly potent poison, Aylmer exhibits a measure of dishonesty and self-deception by looking only at the potentially good outcomes—largely hypothetical and fantastical—and turning a blind eye to the potentially bad.¹²³ For my part, this situation seems akin to claiming that the possession of a variety of high-powered automatic rifles is ‘for protection’—the possessor might exhibit the utmost responsibility with these weapons, having no ill intent whatsoever, but ‘protection’ cannot be the only reason for their possession. A certain thrill at possessing such power must be involved, acknowledged or not. Likewise, Aylmer enjoys having his poisons and potions in part because of their capabilities and justifies this possession to himself by focusing on their virtuous possibilities in his virtuous hands. Georgiana, aghast at the power of Aylmer’s poison, rightly asks him, “Why do you keep such a terrific drug?” to which Aylmer replies, “Do not mistrust me, dearest! . . . its virtuous potency is yet greater than its harmful one.”¹²⁴

Given that the context of this conversation centers on Aylmer’s ability to kill or not kill

¹²³ Being able to foresee the potential consequences and practical ramifications of a scientific idea during the initial development and exploration of that idea is a Herculean, if not impossible, task. For potential consequences and applications are endless, unfathomable and unforeseeable. For example, the early development of the atomic model of matter and of quantum mechanics did not, could not, take the future development of nuclear fission based weaponry into consideration. What I want to call attention to in bringing up Aylmer’s neglect to consider the harmful possibilities of his science is the following. There is a prevalent attitude about scientific facts, about data, within the scientific community and our culture generally that more is better, that each fact and each idea ought to be explored fully, and that such researches will on the whole benefit society—and so scientific ideas can be developed without too much thought as to their applications. It is the “march of progress,” and indeed “progress” seems to require such omission. For how are we to advance if we are always busy tracing out possible outcomes, possibilities that may be entirely off the mark? This is not an easy question to answer. We can always be blindsided. The middle ground between excessive caution and reckless development is not easy to find. The worry Hawthorne expresses through Aylmer is that, like Victor Frankenstein, scientists will look up from their lab benches too late and see that they have created a monster (that is, something that is no longer under our exclusive control or directed by our initial intentions). While the question above remains unanswered, Hawthorne would advocate for more caution than is currently shown.

¹²⁴ Hawthorne, “The Birthmark,” 47.

who he pleases by means of this poison, for him to downplay the harmful potency of the elixir seems deceitful and almost contradictory, to say the least, and suggests his supreme confidence in the virtue of his own judgments. This conversation, though, as well as the arc of the story leading to Georgiana's death at Aylmer's hands, suggests that Aylmer's self-image is not entirely honest, that he deceives himself about the motives that drive his scientific energies and their potential effects. The quest after power cloaks itself in virtue.

Perhaps the most distressing aspect of Aylmer's self-deception, looked at from the perspective of one potentially affected by his actions, Georgiana specifically and any earthly creature more abstractly, is that he catches a glimpse of his true motives early in the story but is soon swept up by his obsession, as if the moment of clarity never occurred. Before Georgiana and Aylmer retreat to Aylmer's laboratory, even before they agree to remove the birthmark, Georgiana prods Aylmer to open up about a dream he had had, for she was disquieted by his unconscious outburst, "It is in her heart now—we must have it out!"¹²⁵ In this dream, Aylmer was trying to remove the birthmark with a knife, but the deeper he cut the deeper the tiny hand receded, until it reached Georgiana's heart, upon which the hand had "caught hold."¹²⁶ At this point, though, Aylmer was resolved to cut it out. The truth within this dream, about which he had practiced "an unconscious self-deception," shocks Aylmer: "Until now, he had not been aware of the tyrannizing influence acquired by one idea over his mind, and of the lengths

¹²⁵ Ibid., 40.

¹²⁶ Ibid.

which he might find in his heart to go, for the sake of giving himself peace.”¹²⁷ The “guilty feeling” that overcomes Aylmer upon recalling the dream suggests that the dream operation did not go well, though the dream’s ending is never mentioned in the story.¹²⁸ Or perhaps Aylmer felt guilty for so intensely desiring to remove a mark that need not be removed; it only “needs” to be removed for the sake of Aylmer’s own peace of mind, not because it poses a medical threat to Georgiana’s health or well-being.¹²⁹ Aylmer’s realization of the birthmark’s dominion over his mind, made possible through the reading of a dream, is both a correct diagnosis of his mental state as regards Georgiana’s birthmark and is very short lived.¹³⁰ Almost immediately after coming to this awareness Aylmer tells Georgiana that “he is convinced of the perfect practicability of its removal,” his guilt seemingly dissipated and the suggestion that the birthmark reaches to the core of Georgiana’s being either forgotten, dismissed, or found to be a surmountable obstacle of secondary importance.¹³¹ The remarkable clarity of Aylmer’s dream is quickly overrun by his obsessive drives and his accompanying blindness to signs that the worries which surfaced in his dreams are becoming true. As one example, later in the story, Aylmer tells Georgiana that the cure for her birthmark cannot be

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Georgiana’s own repugnance regarding her birthmark will be discussed later.

¹³⁰ As far as I can tell, the idea that has acquired a “tyrannizing influence” over Aylmer’s mind is either the birthmark itself or the idea of perfection. In either case Georgiana’s birthmark can be said to dominate his mind, for in the latter case the birthmark would then be the stain upon perfection that must be removed. And given what we know about Aylmer’s scientific pursuits and aspirations, namely, his desire to spiritualize matter and his distress at being “so miserably thwarted by the earthly part [of human nature],” it seems likely that the physical mark itself would only obsess Aylmer as an obstacle to the realization of spiritual perfection in earth (see Hawthorne, “The Birthmark,” 49). In other words, I do not think it makes a difference whether ‘the crimson hand’ or ‘perfection’ tyrannizes Aylmer’s thoughts and dreams, for they are aspects of the same neurosis.

¹³¹ Hawthorne, “The Birthmark,” 41.

superficial but “demands a remedy that shall go deeper” without recalling the traumatic dream of cutting deeper and deeper into her and the guilt that attended it.¹³² In a more blunt failure (or perhaps refusal) to read signs, Aylmer tells Georgiana that her birthmark “has clutched its grasp into your being, with a strength of which I had no previous conception”—except Aylmer did have such a conception and has, consciously or unconsciously, chosen to ignore it.¹³³

Accompanying Aylmer’s self-deception regarding the virtue of his motives and desires, he fitfully and selectively recognizes the limitations of science. At the very beginning of “The Birthmark” we are told that Aylmer might not possess the utmost faith in the ability of humanity to unlock “the secret of creative force” through science and gain “ultimate control over nature.”¹³⁴ Later, it is intimated that Aylmer acknowledges the inability of science to truly create in the way nature creates: “...our great creative Mother, while she amuses us with apparently working in the broadest sunshine, is yet severely careful to keep her own secrets, and, in spite of her pretended openness, shows us nothing but results. She permits us indeed, to mar, but seldom to mend, and, like a jealous patentee, on no account to make.”¹³⁵ And he expresses worry about the discord that would result from setting up an order opposed to the natural: “He more than intimated, that it was his option to concoct a liquid that should prolong life for years—perhaps interminably—but that it would produce a discord in nature, which all the world, and chiefly the quaffer of the immortal nostrum, would find cause to

¹³² Ibid., 47.

¹³³ Ibid., 51.

¹³⁴ Ibid., 36.

¹³⁵ Ibid., 42.

curse."¹³⁶ Yet he does not worry about “correct[ing] what Nature left imperfect” in the case of Georgiana’s birthmark.¹³⁷ No reason is given why one case of overstepping nature would produce “discord” while another is a matter of “correction.” On what basis does Aylmer judge nature and discern where it is has properly apportioned being and where it has erred? The answer must be that Aylmer in his “eager aspiration towards the infinite” looks to the spiritual ideal of perfection as the standard of judgment.¹³⁸ But the question remains unresolved, for again we can ask: why is mortality not an imperfection in need of correction like Georgiana’s birthmark is? This version of the question is especially pressing since Aylmer views the crimson hand as “the symbol of his wife’s liability to sin, sorrow, decay, and *death*.”¹³⁹ With the information provided in the story, I can see no ‘scientific’ or ‘objective’ reason for Aylmer to judge the propriety of removing Georgiana’s birthmark and of creating a potion of immortality differently. Given his acknowledgment of the limitations of science, expressed above, I think we must say that Aylmer views the removal of the birthmark favorably because of his need for its removal, because of his desire for peace. By treating the matter of the birthmark’s removal as one of “perfect practicability” from the scientific standpoint, ignoring or forgetting his own reservations about overstepping nature in other cases, Aylmer disguises his personal preferences—in this case his obsession with Georgiana’s birthmark—in the veneer of scientific objectivity.¹⁴⁰ The case of Georgiana’s birthmark

¹³⁶ Ibid., 46.

¹³⁷ Ibid., 45.

¹³⁸ Ibid., 49.

¹³⁹ Ibid., 39 [emphasis mine].

¹⁴⁰ Ibid., 41.

appears to him to be exceptional, though as we learn Aylmer would have been better served not to think of it this way. Despite flashes of insight, Aylmer inevitably falls back into a pattern of self-deception and enacts the consequences he foresaw and perhaps feared for himself.

After Aylmer proudly tells Georgiana about some of the things he has done and can do with his science, Georgiana gives a wonderful reply. “‘Aylmer, are you in earnest?’ asked Georgiana, looking at him with amazement and fear; ‘it is terrible to possess such power, or even to dream of possessing it!’”¹⁴¹ I am suggesting that Georgiana is right to be worried, that Aylmer is deceiving himself by not attempting to trace out the web of implications from his actions, instead directing all of his attention towards the scientific overcoming of his “problem,” Georgiana’s birthmark. As R. B. Heilman writes of Aylmer, “he cannot discipline that part of himself which aspires to infinite power.”¹⁴² But though Georgiana expresses disquiet about the products and achievements of Aylmer’s science, she ultimately goes along with his plan, his experiments, and she does so earnestly and willingly. The promise of an achievable, realizable miracle overwhelms her. But Georgiana also comes to despise her birthmark to such an extent that, if it cannot be removed, she would no longer want to live. Georgiana, at least in part, stands for those people on the receiving, rather than the practicing, end of science, and the dangers to which she is exposed reveal how Hawthorne thought about the potential effects of a (detached) scientist on others.

¹⁴¹ *Ibid.*, 46.

¹⁴² Heilman, “Hawthorne’s ‘The Birthmark,’” 577.

Manipulation of Georgiana

It is early in “The Birthmark” when we see Georgiana internalize Aylmer’s obsession with her birthmark and turn desperately to her husband’s scientific prowess to resolve the issue. During the first conversation about the birthmark initiated by Georgiana, before they go to the laboratory, Georgiana exclaims, “Either remove this dreadful Hand, or take my wretched life! You have deep science! All the world bears witness of it. You have achieved great wonder! Cannot you remove this little, little mark, which I cover with the tips of two small fingers?”¹⁴³ Aylmer of course is delighted to attempt the birthmark’s removal. But it was not long before this that Georgiana was not bothered by the small crimson hand; she and others even called it a “charm.”¹⁴⁴ It only troubles her after Aylmer remarks on it, in the same breath declaring it to be a mark of imperfection and announcing the possibility of its removal. What the scientist says is a problem is a problem, and science is turned to as the answer. Aylmer controls the conversation, the issue at hand and the resolution, and Georgiana is caught in his wake.¹⁴⁵ Speaking more generally, successes in the advancement of science and technology—new theories, new technologies, new medicines—generate authority, even reverence, for science, allowing people to trust in science to diagnose and solve their problems. Hawthorne warns us to be critical of this trust and of the issues raised as

¹⁴³ Hawthorne, “The Birthmark,” 41.

¹⁴⁴ *Ibid.*, 37.

¹⁴⁵ Though I shall not focus my analysis of Georgiana’s manipulation and exploitation on her gender, this is an important and interesting line of inquiry. Regarding the play of science and gender in “The Birthmark” I refer the reader to the following article as a starting point: Stephen Hartnett, “‘It Is Terrible to Possess Such Power!’: The Critique of Phrenology, Class, and Gender in Hawthorne’s ‘The Birth Mark,’” *Prospero: Rivista Di Culture Anglo-Germaniche* 5 (1998): 5–26.

problems by scientists. (We must remember that to be critical does not mean to be dismissive.) The birthmark is Aylmer's problem, stemming from his own preoccupation with perfection, not Georgiana's.

In the case of Georgiana and Aylmer, their personal relationship and feelings of love play into Georgiana's acquiescence to Aylmer's will. Georgiana's insecurity is also a factor, troubled as she is that Aylmer "cannot love what shocks" him, and she is clearly in the less dominant position in this marriage.¹⁴⁶ But it is likely that her fixation on the birthmark only becomes as strong as it does because the possibility of a solution is dangled before her. Aylmer broaches this subject to Georgiana for the first time by asking, "has it never occurred to you that the mark upon your cheek might be removed?"¹⁴⁷ The possibility of removal is presented to Georgiana before Aylmer admits that the mark shocks him "as being the visible mark of earthly imperfection."¹⁴⁸ In this way she is primed to say, remove it! And this is in fact what she does say. She demands that either the birthmark or her life should be taken away—a stark and unequivocal statement—and then immediately reminds Aylmer, or perhaps just tells herself, that he has "deep science."¹⁴⁹ As evidenced by the intense interest she displays in reading through Aylmer's lab notebook and the powerful way in which this reading affects her, we can say that Georgiana is enthralled with Aylmer's science, the powers it gives him, and the ideals for which he aims. Thus she takes up his problem and his answering

¹⁴⁶ Hawthorne, "The Birthmark," 37.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid., 41.

course of action as her own—this despite the fact that the methods and nature of “Science” are not all that clear to her.¹⁵⁰

Georgiana’s subsumption into the folds of Aylmer’s science and his will become clearer once we look at the magical and religious elements that pervade Hawthorne’s presentation of science in “The Birthmark.” These elements bring into the light those aspects of scientific power not based solely on knowledge, namely, the advantages the practitioners of science gain through belonging to a select group, science’s ability to entice through its promises and the successes of its practical results, and its growing into an Accepted Authority. By casting science in magical and religious terms, Hawthorne seems to want to bring our attention to precisely these non-knowledge-based aspects of scientific power, reminding us that there is more at stake here than the “pure” acquisition of knowledge.

When Aylmer marshals his scientific wares to entertain Georgiana, he shows her a vessel of earth that soon sprouts a flower, an ‘ephemeral race’ of Aylmer’s devising.¹⁵¹ Upon seeing the flower grow and bloom, Georgiana exclaims, “It is magical!... I dare not touch it.”¹⁵² Georgiana here ascribes the adjective ‘magical’ to something extraordinary and alluring, the operational principles of which she does not understand. Her lack of familiarity and understanding causes hesitation, maybe even a bit of fear. This hesitation and lack of understanding among non-scientists, which reactions are not necessarily bad in themselves, can lead to an easy acquiescence to the scientist or technologist or

¹⁵⁰ See *Ibid.*, 48-49, for Hawthorne’s description of Aylmer’s notebook and Georgiana’s reading of it.

¹⁵¹ *Ibid.*, 45.

¹⁵² *Ibid.*

whoever is seen to possess adequate knowledge of the matter at hand—Aylmer’s “Nay, pluck it” followed by Georgiana’s pluck.¹⁵³ Normally, we would not think twice about such a case of accepting authority; Aylmer is both knowledgeable and Georgiana’s husband, a trusted companion. But, in the context of the story as a whole, Hawthorne asks us to consider a scientist detached from broader human concerns, focused solely on his own goals of knowledge and power, even to the point of deceiving himself about his motives, and the discord that can be wrought by such a person.¹⁵⁴ Such an individual brings to our attention the fact that the sense of mystery that shrouds the scientific enterprise in the popular imagination (including Georgiana’s) can be a liability, revealing the possibility of exploitation through the misuse of scientific authority.¹⁵⁵ For science, like magic, is both alluring and, above all, mysterious to the uninitiated. Indeed, the term ‘magic’ remains oddly apt in descriptions of the way many people relate to the mysterious yet real effectiveness of scientific principles. Turn a few dials here, put some fuel in there, and shortly you are off at remarkable speed. Take this pill and your swelling will come down. To many, the operations of technology developed on scientific principles operate as if by...magic. So by presenting science in magical garb, Hawthorne expresses one aspect of his worry that the scientific mentality creates “cold and purely intellectual” individuals capable of exploiting others by the position given to them by their knowledge; namely, that the mysterious, secretive, exclusive, ‘magical’ aspect of

¹⁵³ Ibid.

¹⁵⁴ This generic description not only fits Aylmer, but also Ethan Brand, Dr. Rappaccini, and Dr. Heidegger.

¹⁵⁵ The operations and principles of “science” might always be shrouded in mystery to some degree given the impossibility of anyone’s mastering the enormous breadth of scientific knowledge. This shroud extends over scientists as well, who are not immune to thinking of science in magical terms.

science allows the scientist to “convert man and woman to be his puppets.”¹⁵⁶ This claim will be given further definition later in this section.

Though we are assured that magic has no part in modern science, even scientists occasionally describe the power unlocked by science as something magical, capable of creating anything we desire. Aylmer “was confident in his science, and felt that he could draw a magic circle round [Georgiana], within which no evil might intrude.”¹⁵⁷ So Aylmer, too, sometimes views his science as magical, though in his case this perception feeds into his conviction in the power of his science, for example, his faith in its ability to repel or remove that which he deems evil or unwanted (the birthmark). Aylmer even refers to himself as a “sorcerer” at one point, which projects an image of him as unlike other human beings, an outsider of sorts, strange and capable of nearly anything due to his ability to control and manipulate natural forces.¹⁵⁸ (Aylmer’s referring to himself as a “sorcerer” is also a sign of his megalomaniacal tendencies.) In this way the association of science with magic allows Hawthorne to emphasize the desire for power he sees within the aspirations of the intellect.

Science entralls people, attracts converts, precisely because it offers power over the world and a sense of control. Though science cannot accomplish everything right now, we see that limitless ambition seeps into scientific practice—embodied by Hawthorne in the excesses of Aylmer, Ethan Brand, and Dr. Rappaccini. And we should

¹⁵⁶ For the first quotation, see Hawthorne, “Rappaccini’s Daughter,” 100. For the second quotation, see Hawthorne, “Ethan Brand,” 99. The more general worry that I describe in the sentence above can be seen fairly clearly in the long text from “Ethan Brand” quoted at the end of the previous chapter, or to be found on pages 98-99 of that story.

¹⁵⁷ Hawthorne, “The Birthmark,” 44.

¹⁵⁸ *Ibid.*, 49.

note that science is so successful within society largely because it makes good on many of its promises; nature does yield to our advances and we are given wondrous, life-altering technologies designed by brilliant scientific minds. Quite a few of the successes, such as the steam engine, the airplane, penicillin, and the computer, have significantly altered the way we carry on in life. And since the essential practice of experimentation in science encourages the expectation of failure as the price of success, and since the failures themselves can occasionally be turned into successes (as, for example, a failed hypothesis can yield an unexpected discovery), failures are not seen to mar the overall viability of the scientific endeavor. The relative inconsequence of scientific failures is illustrated by Hawthorne through Aylmer's string of "mortifying failures" in his attempts to demonstrate his science to Georgiana, failures soon forgotten as he continues on with his work, confident as ever.¹⁵⁹ Such resilience to failure is in part a virtue of scientific practice, as failure can guide future inquiry. But since the failures of science are of slight weight when compared to its tremendous successes, these successes are taken as evidence that that the authority vested in science is well-deserved and can induce people to accept this authority. My point here is not about whether or not science deserves its authority, but to indicate a way in which the structures of scientific practice contribute to its authority. Science's promise of power and its making good on that promise help establish an authority not easily shaken by failure.

The topic of the authority brings us to the religious aspect of science, for Hawthorne casts the strength with which scientific authority can grasp a person in

¹⁵⁹ Ibid., 46.

religious terms. In an important article, R.B. Heilman draws our attention to the frequent use of religiously charged language in “The Birthmark.”¹⁶⁰ Words such as “miracle,” “faith,” “mysteries,” “holy,” “heavenly,” and “prayed” appear throughout the story describing the activities of Aylmer and the reactions of Georgiana. On the basis of Hawthorne’s use of this language, Heilman finds that “Aylmer has apotheosized science,” a claim that seems to me to be eminently plausible.¹⁶¹ For example, Aylmer studies “antique naturalists” who “were believed, and perhaps imagined themselves, to have acquired from the investigation of nature a power above nature, and from physics a sway over the spiritual world.”¹⁶² This desire to hold sway over the spiritual world reminds us of Aylmer’s early attempts “to fathom the very process by which Nature assimilates all her precious influences from earth and air, and from the spiritual world, to create and foster Man, her masterpiece.”¹⁶³ Though Aylmer gives up this particular task, he does not hold other *wonders* and *miracles* to be out of reach, such as the alchemists’ draught, an elixir of immortality, and even the creation of “a being less perfect than [Georgiana].”¹⁶⁴ Not only has Aylmer apotheosized science, but he has virtually placed himself in the position of God. Georgiana, on the other hand, is left in the position of a faithful worshiper. Upon reading Aylmer’s notebook, the Book of Science, Georgiana tells him that “[i]t has made me worship you more than ever.”¹⁶⁵

¹⁶⁰ Heilman, “Hawthorne’s ‘The Birthmark,’” see, for example, p. 576.

¹⁶¹ *Ibid.*, 583.

¹⁶² Hawthorne, “The Birthmark,” 48.

¹⁶³ *Ibid.*, 44.

¹⁶⁴ *Ibid.*, 41; see p. 46 for Aylmer’s statements about the alchemists’ draught and the elixir of immortality.

¹⁶⁵ *Ibid.*, 49.

Through such texts Hawthorne is calling our attention to the way that scientific activity has assumed a religious force in its dedicated practitioner and, by dissemination, in the larger culture. That is, science plays the same role as religion in terms of offering some ultimate explanation of the world, of reality. Both speak to us about our place in the universe and about ‘what’s really going on here.’ Hawthorne is not setting science and religion in opposition, but suggesting that the cultural acceptance of science shares many psychological features with the spread of religious beliefs; science is contiguous with religion. Aylmer and Georgiana share a *faith* in the powers science, one that holds even in the face of Aylmer’s missteps in the laboratory (for example, the failure of his portrait of Georgiana). And even if certain people knowingly reject the scientific worldview, its influence still grows with the increasing dependence of modern societies on advanced technologies. Hawthorne was worried about the effects of this growth of scientific influence, as his depictions of scientists attest, and well he should have been. In our own time, science as popularly understood has for many people replaced religious faith. By assuming an at least somewhat religious mantle, science attempts to elevate itself, its methods and aims, above reproach. “Doubt not my power,” Aylmer tells Georgiana.¹⁶⁶ In this way, it becomes more difficult to question scientific findings or the scientific method, though people still do so (some dogmatically, some with intellectual reasons). For many people, the mere presentation of something as scientific

¹⁶⁶ Ibid., 41.

automatically increases the credibility with which that thing is viewed. Science, for better or for worse, has gained a religious prestige.¹⁶⁷

In this assumption by science of the religious pedestal, Hawthorne sees that scientific thought can become its own justification apart from any consideration of the human person. The accumulation of scientific knowledge becomes an end-in-itself, and if pursued to the exclusion of all other ends disaster results. As expressed in “Ethan Brand,” a scientist with such narrow focus becomes “a cold observer, looking on mankind as the subject of his experiment, and, at length, converting man and woman to be his puppets, and pulling the wires that moved them to such degrees of crime as were demanded for his study.”¹⁶⁸ Hawthorne is worried that as the ends of science become all encompassing, so, too, will the disregard for human life can become total. He expresses this worry in a description of Dr. Rappaccini from “Rappaccini’s Daughter,” a brilliant doctor who cultivates extremely poisonous plants in the course of his research and has slowly exposed and infused his daughter with these plant toxins so that she may tend the garden and continue his work. Hawthorne writes that Dr. Rappaccini “cares infinitely more for science than for mankind. His patients are interesting to him only as subjects for some new experiment. He would sacrifice human life, his own among the rest, or whatever else was dearest to him, for the sake of adding so much as a grain of mustard-

¹⁶⁷ This is one of the themes of Anthony Standen’s *Science is a Sacred Cow*, an influential mid-twentieth century assault on the place of science in modern society. See Anthony Standen, *Science Is a Sacred Cow* (New York: Dutton, 1950).

¹⁶⁸ Hawthorne, “Ethan Brand,” 99.

seed to the great heap of his accumulated knowledge.”¹⁶⁹ Though there is no analogous description of Aylmer in “The Birthmark,” we can see the images of Ethan Brand and Dr. Rappaccini in Aylmer’s obsession with Georgiana’s birthmark, a circumscribed aspect of her total being.

The possibility that the aim at scientific knowledge and power will crowd out other ends is why danger lurks always in the scientific enterprise. Scientific knowledge unlocks power over the natural world and this quest for power over nature is what Hawthorne warns us cannot be disciplined; power is gained in the quest for power, and scientific activities thereby justify themselves. The close connection between scientific knowledge and power allows Ethan Brand to justify “pulling the wires that moved” his human puppets by claiming that this manipulation is “*demande*d for his study,” which study will reveal to him new wires and new ways of tugging at the old ones.¹⁷⁰ Science of course does more than this, it can and does do much good for us, but what Hawthorne worries about is the human element being relegated to a position of inferiority or dropped from consideration altogether, that we will become Ethan Brand’s puppets or merely a birthmark, a condition. In “Ethan Brand” Hawthorne writes that to give up

¹⁶⁹ Hawthorne, “Rappaccini’s Daughter,” 99-100. I should note that Hawthorne expresses some skepticism about the complete veracity about this description of Rappaccini, given in the story by his rival Professor Pietro Baglioni. In my judgment the description expresses a real concern of Hawthorne’s and seems to be accurate of Rappaccini for almost the entire story. Perhaps Dr. Rappaccini himself would have assented to it. Hawthorne’s skepticism emerges in the very last moment of the tale, when Rappaccini is described as “thunder-stricken” at the death of his daughter, Beatrice, who has died at the conclusion of his ‘experiment’ to bring young Giovanni Guasconti into the fold of the garden as his daughter’s companion (see p. 128). In this way, by having Beatrice’s death affect Rappaccini so, Hawthorne suggests that it is very difficult to completely extirpate oneself from all human relationships and feelings. This is why Ethan Brand, who seems to have accomplished this, is called a “fiend” (see “Ethan Brand,” 99). But if the above description of Dr. Rappaccini is thus not entirely accurate, he does come very close to fitting it.

¹⁷⁰ Hawthorne, “Ethan Brand,” 99 [emphasis mine].

“holy sympathy” with humanity is to give up the “right to share in all [of human nature’s] secrets.”¹⁷¹ Thus he attaches the weight of a transgression to the overzealous and exclusive pursuit of scientific study. Science is a heady draught according to Hawthorne, and we must beware when doing something ‘for science’ becomes more important than the consequences of so doing.

But at the same time, an aspect of this religious quality of science we have been discussing is that science bestows a measure of comfort. There are answers to be had. We can figure out how to treat that ailment, how to remove that birthmark. Georgiana asks Aylmer if he can indeed remove her birthmark, to bring comfort to them both—“Is this beyond your power, for the sake of your own peace, and to save your poor wife from madness?”—and Aylmer replies that he feels “fully competent to render this dear cheek as faultless as its fellow.”¹⁷² Comfort and answers are seductive. Georgiana places her faith in Aylmer and his science; she is fascinated by him and his endeavors and even comes to worship him. In this way, by giving herself up to Aylmer, she is complicit in her own captivity and exploitation. We can make the point incisively by saying: Georgiana is, quite literally, enthralled by science. To fully understand this claim we must shift our reading of both Aylmer and Georgiana’s love for him to a symbolic level, for on the surface it seems that Georgiana’s submission is more to Aylmer than to science.

¹⁷¹ Ibid.

¹⁷² Hawthorne, “The Birthmark,” 41.

First, in the opening paragraph of the story, we are told that Aylmer “had devoted himself...too unreservedly to scientific studies, ever to be weaned from them by any second passion.”¹⁷³ Indeed, his love for Georgiana can only exist and sustain itself “by intertwining itself with his love of science.”¹⁷⁴ Thus our first image of Aylmer is of a person wholly engrossed in scientific pursuits, so much so that he cannot even love his wife on her own terms but must subsume her within his single passion.¹⁷⁵ There is only room for one thing in Aylmer’s life: science. All else must orient itself by this guiding light, or be cast aside. Aylmer and his science cannot be teased apart. It requires only a small step into the realm of symbolism to see Aylmer as the representation or embodiment of science.

Second, Georgiana loves Aylmer, or at least admires and worships him. Given the strength with which science has taken hold of Aylmer’s being, I do not see how Georgiana could come to feel anything towards Aylmer without having or developing parallel feelings about science. What part of Aylmer could she come to love without the science being there, too, shaping that very part? As Aylmer’s feelings for Georgiana are entwined with his feelings for science, so Georgiana cannot feel for Aylmer in separation from his science. Indeed, the first sentence of the story tells us that the two lovers share “a spiritual affinity, more attractive than any chemical one.”¹⁷⁶ This suggests Georgiana found Aylmer’s scientific spirit deeply congenial to her own

¹⁷³ Ibid., 36.

¹⁷⁴ Ibid., 37.

¹⁷⁵ Aylmer’s tendency to microscopic fixation on one thing and his corresponding inability to take into consideration the breadth of what is beyond this single thing reaffirmed in his obsession over the small mark on Georgiana’s cheek.

¹⁷⁶ Hawthorne, “The Birthmark,” 36.

dispositions. This line of thought is supported by Georgiana's reading of Aylmer's lab notebook. Becoming acquainted with Aylmer's scientific achievements, failures, and aspirations leads Georgiana to "worship [Aylmer] more than ever," as has already been mentioned.¹⁷⁷ Georgiana's love of Aylmer, or adoration, if that word is preferred, is bound up with science, just as the reverse is true. Thus, taking the step into symbolic interpretation again, we may say that enthrallment with science is symbolized by Georgiana's worship of Aylmer.

As the thrall of Aylmer/science, Georgiana is more willing to accept what is done to her for she has given something of herself over to the procedures of modern science. As Georgiana says to Aylmer just before she drinks the liquid meant to remove the accursed birthmark, "I joyfully stake all upon your word."¹⁷⁸ She has abdicated responsibility for herself, to Aylmer, yes, but also to the science he embodies. In this abdication, founded in love, faith, and fascination, Georgiana is complicit in her fate.¹⁷⁹ Resistance is lessened and the pursuit of perfection and the exercise of power over nature proceed without hindrance.

For his part, Aylmer, representative of a science that cannot look beyond itself, treats Georgiana as an object of scientific inquiry and manipulation.¹⁸⁰ Aylmer brings

¹⁷⁷ Ibid., 49.

¹⁷⁸ Ibid., 53.

¹⁷⁹ C.f. Heilman, "Hawthorne's 'The Birthmark,'" 582: "she is less the innocent victim than the fascinated sharer in magic who conspires in her own doom."

¹⁸⁰ For another great example of how Hawthorne depicts the treating of other human beings as mere objects of inquiry and manipulation, see Nathaniel Hawthorne, "Dr. Heidegger's Experiment," in *Twice-Told Tales*, Centenary Edition, vol. 9, *The Works of Nathaniel Hawthorne* (Columbus: Ohio State University Press, 1974), 227–38. In this tale, more lighthearted than "The Birthmark," "Ethan Brand," or "Rappaccini's Daughter," old Dr. Heidegger invites three old "friends" to his strange home, gives them a potion that restores their youth, and observes the consequences. He fails to mention that this elixir is

Georgiana into a fragrant, enchanting, and fabulously strange boudoir within the large apartments that serve as his laboratory and keeps her confined there while he works. Georgiana, the object of scientific investigation, is isolated so as to be manipulated more effectively. In time she begins to glean from Aylmer's questions to her that "she was already subjected to certain physical influences, either breathed in with the fragrant air or taken with her food."¹⁸¹ Though Aylmer receives general consent from Georgiana to remove her birthmark, she consents without knowledge of what might be done to her, and, importantly, Aylmer never volunteers such information. Aylmer acts in secrecy, not telling her what he is doing, when he is doing it, or the risks involved. Aylmer only tells Georgiana of the danger of their undertaking after he "already administered agents powerful enough to do aught except to change [her] entire physical system."¹⁸² Indeed, when asked why he hesitated to reveal to Georgiana the many failed attempts to remove the birthmark, Aylmer replies it was because there is danger. Should the presence of danger not have led Aylmer to talk to Georgiana *immediately*? Keeping such knowledge from Georgiana can only mean that Aylmer did not want to frighten Georgiana out of continuing; he did not want his work interrupted or halted; he *must* prove that he can remove the birthmark and surpass nature. Georgiana suffers because of Aylmer's myopic quest after perfection. Aylmer manipulates Georgiana's physiology and uses her as an extension of his laboratory equipment. Attending this covert manipulation and confinement is the surveillance of the scientific subject. Georgiana is monitored and

temporary. As Nancy Bunge writes, "Dr. Heidegger is Aylmer grown old" (see Bunge, *Nathaniel Hawthorne*, 33).

¹⁸¹ Hawthorne, "The Birthmark," 48.

¹⁸² *Ibid.*, 52.

interviewed by Aylmer. Surveillance is here an instrument of power, providing knowledge from which to base further manipulation. Isolation, observation, and manipulation are all marks of the ways Aylmer treats Georgiana *as if* she were merely a natural object, like a rock, and could be handled as such.

Furthermore, we cannot forget Georgiana does admire Aylmer's scientific achievements greatly, especially after looking through his lab journal, which only serves to increase her acquiescence to Aylmer's behaviors. Georgiana places herself in Aylmer's care and, according to Mary Rucker, "does not actively assert her autonomy and thus requires nothing of the artist except regard for her physical attractiveness."¹⁸³ This is another way of saying that Georgiana has been reduced to materiality, to her body, and retains only use-value. The same can be said of Beatrice Rappaccini, from Hawthorne's tale "Rappaccini's Daughter," for just as Giovanni "eventually limits Beatrice's selfhood to her poisonous body, Aylmer profanely circumscribes Georgiana's selfhood to her physicality—more precisely, to her marred cheek."¹⁸⁴ Reduced to matter, to earth, these women can simply be used. Aylmer looks at Georgiana as a sculpture to perfect, as a problem to overcome. Humanity need not be a consideration. Beatrice's final moments and death, though, are an act of rebellion against the objectifying behaviors of her father and Giovanni; Georgiana's death is not such an act, but instead represents her total embrace of Aylmer's will.¹⁸⁵ Georgiana stands apart from Beatrice in

¹⁸³ Rucker, "Science and Art in Hawthorne's 'The Birth-Mark,'" 455.

¹⁸⁴ *Ibid.*, 456.

¹⁸⁵ I do not mean to suggest that Aylmer's will is that Georgiana die, only that Georgiana has completely given herself over to whatever decisions Aylmer makes, abdicating responsibility for herself. It is of course a matter up for debate whether or not Aylmer did mean to murder Georgiana, whether death is the

that she is a “fascinated sharer” in Aylmer’s project, a position which allows Aylmer to ignore Georgiana’s full humanity and work towards his ends that much more easily.¹⁸⁶ An issue symptomatic of this reduction of humanity is Aylmer’s guiltless secrecy, despite the danger to which he exposes Georgiana. Aylmer does not initiate Georgiana into any of his knowledge, though she proves herself interested in his work and the tomes in his laboratory. Rather than with respect, Georgiana is treated as an object of scientific manipulation, a position she accepts willingly through her devotion to Aylmer, the embodiment of pure Science. Aylmer’s insatiable will and overly active intellect transform the living world of nature into material for use.

Through “The Birthmark” as well as “Ethan Brand,” “Rappaccini’s Daughter,” and other tales, Hawthorne expresses a worry that scientific activity exacerbates and accelerates a dehumanizing vision of others through the tremendous power that can be unleashed through scientific and technological means. It is easier to do greater harm more quickly thanks to science, and, crucially, science may encourage such

perfection sought. There are many interesting aspects of the text that support such an interpretation, including Georgiana’s statement that she would gladly take a “dose of poison” from Aylmer’s hand and the fact that Aylmer’s final cure looks strangely like the super-poison from earlier in the story (Hawthorne, “The Birthmark,” 51). I have not taken up this strand of interpretation here because the fact that Aylmer does in fact manipulate and kill Georgiana is more important for my discussion than whether or not Aylmer meant to kill her. Either his detachment from humanity and obsessive pursuit of perfection prevents him from recognizing the value of human life (specifically Georgiana’s)—for he does acknowledge the danger of their endeavor—or it has made him think of death as perhaps the crucial aspect of his attempt to realize perfection. Either way, he is not giving adequate consideration to the humanity of his subject, Georgiana, and is attempting to make material a spiritual idea of perfection and causing harm in the process. This is the important point for me. I should mention, however, that I favor the interpretation that Aylmer did not intentionally kill Georgiana. As incomplete evidence I offer the following. Georgiana feels herself fit to die and might wish to do so in order to be free of the birthmark “[s]ave on your account, my dearest Aylmer” (Hawthorne, “The Birthmark,” 53). And Aylmer says to Georgiana: “You are fit for heaven without tasting death! ...But why do we speak of dying? The draught cannot fail” (Hawthorne, “The Birthmark,” 53).

¹⁸⁶ Heilman, “Hawthorne’s ‘The Birthmark,’” 582.

dehumanizing vision. Confinement, surveillance, secrecy, and the attendant hierarchical power structure all play a role in the execution of scientific exploitation as represented by Hawthorne.¹⁸⁷ They are all employed as methods of oppression, ideally exerting power without detection by the influenced party. Add to this the captivating, religious force of science and its ability to gain converts, and the issue of detection becomes less important. Willing, if perhaps under-informed, subjects have been created.

An important aspect of this analysis of manipulation and exploitation at the hands of science is that the scientists, who enact the surveillance and keep the secrets, need not be conscious of the full scope of their actions. Aylmer shows that exploitation through science need not be carried out with an ill will.¹⁸⁸ The very way he has taken up science colors the way he sees the world and interacts with it. Aylmer does not wish Georgiana harm or purposely betray her trust, but immersed in scientific activity, “he failed to look beyond the shadowy scope of Time.”¹⁸⁹ In these shadows he loses sight of Georgiana’s humanity. “The momentary circumstance was too strong for him.”¹⁹⁰

¹⁸⁷ These themes, present in “The Birthmark,” also play a prominent role in “Rappaccini’s Daughter,” where they perhaps stand out more emphatically: Beatrice is confined to the poisonous garden by her father, Dr. Rappaccini, and is watched by Giovanni, who himself is manipulated into “secret” rendezvous with Beatrice by Rappaccini. Rappaccini, meanwhile, watches them both and secretly effects the transformation of Giovanni into a poisonous being like Beatrice. See Hawthorne, “Rappaccini’s Daughter.”

¹⁸⁸ Aylmer may have had an ill will, may have intentionally murdered Georgiana, but this is, like so much in Hawthorne’s stories, a matter cast ambiguously. For my part, I take seriously Aylmer’s statement to Georgiana after she declares herself fit to die: “You are fit for heaven without tasting death! . . . But why do we speak of dying? The draught cannot fail” (Hawthorne, “The Birthmark,” 53). Whatever interpretation one adopts, that Aylmer can be plausibly interpreted as not having consciously planned Georgiana’s murder, but instead as rushing into it madly in an attempt to bring perfection into earthly form, means that we recognize the potential disconnect between intentions and consequences.

¹⁸⁹ Hawthorne, “The Birthmark,” 56.

¹⁹⁰ *Ibid.*

Despite the dangers, Hawthorne, ever comfortable to dwell in ambiguity, does not outright say we ought not to pursue science. Georgiana, while dying after consuming Aylmer's draught, declares to Aylmer: "You have aimed loftily!—you have done nobly! Do not repent, that, with so high and pure a feeling, you have rejected the best that earth could offer."¹⁹¹ The suggestion is that the higher aim of science, the perfection to which Aylmer aspired for Georgiana, is a noble aim. Despite Aylmer's failures, self-deceptions, and manipulative behavior, the task which he set himself is above all that and should not be cast aside cavalierly. The power and perfection promised by science continues to allure; science is a worthwhile pursuit. However, we should bear in mind that this sentiment is expressed by an acknowledged worshipper of the scientist in question.

In the paragraph after Georgiana's declaration, the final paragraph of "The Birthmark," the narrator comments in a rather remorseful tone: "Thus ever does the gross Fatality of Earth exult in its invariable triumph over the immortal essence which, in this dim sphere of half development, demands the completeness of a higher state."¹⁹² This text, and the close of the story in general, has a strongly religious quality. We are told that the "immortal essence" cannot completely unfold itself in this "dim," earthy existence, that it demands to be separated from this world and enter a higher one. This broadly Christian sentiment suggests that Georgiana's death shall bring her "completeness." Yet the "Fatality of Earth" is said to "triumph over the immortal

¹⁹¹ Ibid., 55.

¹⁹² Ibid., 56.

essence.” Why is this? The answer is suggested by the next sentence in the story. “Yet, had Aylmer reached a profounder wisdom, he need not thus have flung away the happiness, which would have woven his mortal life of the self-same texture with the celestial.”¹⁹³ Aylmer could have done better, could have reached a “profounder wisdom” that would bring spirit and earth into a happier union. His failure to do so is the triumph of earth over spirit. The possibility of success denies that the pursuits of earth-bound spirit are purposeless.

This “profounder wisdom,” though, sounds like religious wisdom, suggesting that Hawthorne is nudging us in the direction of abandoning scientific truth in favor of religious truth. But recall that Aylmer “apotheosized science,” placing himself in the position of a deity.¹⁹⁴ It is this dominating, self-confident, macho science that pervades “The Birthmark.” Perhaps, then, it is science that has taken up a religious mantle, science that views its ends as *the* ends, science that is pursued without consideration for other spheres of human endeavor, that is to be abandoned, not science generally. In this way, the religious care of spirit remains intact and with its own domain and the pursuit of science can be measured and guided by other, more humane ends. The brevity and abstractness of Hawthorne’s ending, though, means that all interpretations, including the brief one I just gave, soon become speculative. The true dominating tone of the ending is that of Hawthorne’s cultivated ambiguity.

¹⁹³ Ibid.

¹⁹⁴ Heilman, “Hawthorne’s ‘The Birthmark,’” 583.

In light of this, it seems appropriate to interpret Hawthorne's warning about science more in the manner of, 'careful, this is serious!', rather than, 'do not do this.' But how serious this matter is! For Hawthorne the great evil is that we may forget the humanity of others and thus become inhuman ourselves, that we may become detached individuals. And, as we have seen in this section, scientific practice can amplify the danger the detached individual poses towards others, providing an ever-expanding base of power which is dangerous when wielded indiscriminately and unreflectively.

Aminadab's Laugh

Turning to the character of Aminadab, Aylmer's lab assistant, gives us the opportunity to recast the foregoing ideas in terms of earth and spirit, as well as to examine another type of exploitation at the hands of science.

Aminadab does not occupy a position in the foreground of the story, though he is crucial in that he is the one who sets up, runs, and sees to all of the practical details of Aylmer's experiments, despite being "incapable of comprehending a single principle."¹⁹⁵ Without Aminadab and the work he does, it is unlikely anything would have happened, meaning the creation of Aylmer's "miracle cure" would not have been effected, save perhaps in thought. Hawthorne is clear in juxtaposing Aminadab's earthy, practical nature to Aylmer's spiritual, intellectual engagement with science.

Aminadab's "vast strength, his shaggy hair, his smoky aspect, and the indescribable earthiness that incrusts him" puts his body at the forefront of his

¹⁹⁵ Hawthorne, "The Birthmark," 43.

character.¹⁹⁶ As embodied beings, all human beings contain the potential to be treated only in accord with materiality, like rocks in a quarry. Georgiana is reduced to her birthmark and is treated, manipulated, as a scientific object. Aminadab is not reduced to the subject of experimentation as is Georgiana, but instead is reduced to his capacity for labor. He is exploited not in the sense of having his person infringed or altered by scientific processes or as a result of being enthralled by the wonders of science, but rather as a being put to work, more or less ignored, taken for granted, yet necessary for the success of the entire enterprise. Stephen Hartnett treats Aminadab as an “archetypal immigrant worker,” and I think the critique of class, industrial labor, and race issues that can be developed out of such a reading is telling.¹⁹⁷ What I want to highlight is that Aminadab represents the exploitation of the Robert Danforth-types, the strong but perhaps simple people of the world, the earthy folk.

As mentioned above, Hawthorne depicts Aminadab as being unable to ‘comprehend a single principle’ and as possessing “great mechanical readiness.”¹⁹⁸ This suggests a lack of intelligence but a capacity for physical labor. But Aminadab also executes “all the practical details of his master’s experiments.”¹⁹⁹ Aminadab, as a representation of earth, is necessary for the creation of Aylmer’s scientific wonders. Equipment must be set up, calibrated; materials procured, distributed, and mixed; proper conditions maintained. We can see this in Owen Warland as well, himself possessing great mechanical readiness in addition to his passion for the spiritual. He is a mechanic,

¹⁹⁶ Ibid.

¹⁹⁷ See Hartnett, “‘It Is Terrible to Possess Such Power!’,” esp. p. 13.

¹⁹⁸ Hawthorne, “The Birthmark,” 43.

¹⁹⁹ Ibid.

despite his desire to reach beyond the material and be untouched by it. Owen's mechanical skill is absolutely crucial in the creation of his butterfly. But in Owen this earthy quality and his absorption with beauty come into conflict, turning his life into a war land, a struggle between his quest for the beautiful and the practical affairs to which his skills dispose him. In "The Birthmark" the mechanical and the intellectual-spiritual drives are separated into characters, Aminadab and Aylmer. Aylmer shuns the practical work with which Owen has facility, allowing the earthly to drop as far from his mind as possible. The result: a lab assistant who appears to be little more than an indentured servant or a slave and wild schemes to achieve perfection in his wife. Aylmer's detachment from the earthy aspects of his being causes only strife to those near him, for Aylmer puts himself above and before those around him, if not consciously at least in his actions. It is important to note that Owen, who maintains mechanical skill in his own person, does not manipulate and exploit those around him. He is not as detached from earth as is Aylmer. And Aylmer's engagement with science affords him more practical power and social prestige than is possessed by Owen, heightening the potential for danger.

Returning to Aminadab, though his appearances in "The Birthmark" are brief, his manner coarse, and his position subservient, Hawthorne also incorporates a touch of wisdom in Aminadab's character. As we remember from "The Artist of the Beautiful," there is value in the earth despite the proclivity of spirit to leave it behind. There has been a great deal of scholarly discussion about Aminadab's name, and I do not intend to

shed any light on that debate here.²⁰⁰ However, I wish to start with the Hebrew meaning of Aminadab in order to bring into relief the inhumanity of Aminadab's position as 'pure laborer.'²⁰¹ Conor Walsh points out that the meaning of Aminadab in Hebrew is "my nation is noble."²⁰² A contrast is evident at once, for Aminadab's physical appearance and manner as described in the story are anything but noble. For example, he is a "human machine," a "man of clay," a "clod," an "earthly mass."²⁰³ But these are Aylmer's names for Aminadab. What do we know of Aminadab that is not filtered through Aylmer's spirit-enamored mind? Aminadab uses few and simple words, mumbles, and the tone of his voice is "harsh, uncouth, [and] misshapen."²⁰⁴ He is of "low stature" and is incrustated in "indescribable earthiness."²⁰⁵ By contrast, Aylmer and Georgiana are both called noble (by one another) in virtue of their aspirations directed towards perfection. From all quarters within the story, it seems that Aminadab is unfit to be called noble.

²⁰⁰ See, for example, W. R. Thompson, "Aminadab in Hawthorne's 'The Birthmark,'" *Modern Language Notes* 70, no. 6 (June 1, 1955): 413–15; Edward S. Van Winkle, "Aminadab, the Unwitting 'Bad Anima,'" *American Notes and Queries* 8 (1970): 131–33; John O. Rees, "Aminadab in 'The Birth-Mark': The Name Again," *Names: A Journal of Onomastics* 28, no. 3 (September 1980): 171–82; Thomas Pribek, "Hawthorne's Aminadab: Sources and Significance," *Studies in the American Renaissance*, January 1, 1987, 177–86; Conor Walsh, "Aminadab in Nathaniel Hawthorne's THE BIRTH-MARK," *Explicator* 67, no. 4 (Fall 2009): 258–60. The general theme of this discussion concerns the potential origins of Aminadab's name and its significance. There are two main groups: one that traces the name back to the Bible and its Hebrew meaning, and one that views the name as an anagram of *bad anima*. Some commentators, like Rees, take neither side and try to deemphasize the importance of Aminadab's name by showing its many possible sources and by emphasizing Hawthorne's descriptions.

²⁰¹ Beyond the contrast afforded by this starting point, I do not want to attach too much extra-textual significance to Aminadab's name. I instead want to remain close to Hawthorne's descriptions in the story.

²⁰² Walsh, "Aminadab in Nathaniel Hawthorne's THE BIRTH-MARK," 258.

²⁰³ Hawthorne, "The Birthmark," 51 [first two quotations], 55 [second two quotations].

²⁰⁴ *Ibid.*, 46.

²⁰⁵ *Ibid.*, 43.

Might anything about Aminadab be noble, in any full sense? Probably not. But there is one moment when a hint of nobility, or a residue of wisdom that attaches to earth, emerges. Aminadab's wisdom is hinted at in his muttered sentiment upon learning of Aylmer's intentions regarding Georgiana: "If she were my wife, I'd never part with that birthmark."²⁰⁶ Aminadab recognizes Georgiana in her full humanity, physicality and body intact. This subtly inverts the clear hierarchy of power presented in the story with Aylmer and his scientific knowledge on top. There is wisdom in the earth that respects the finitude marking all human beings, meaning that finitude is considered an irreducible aspect of human life, not something that is to be corrected or transcended. The practices of science do not appear to foster respect for human finitude, focusing instead on the intellectual needs of the spirit and encouraging us to reach towards infinite power. The "nobility" of Aminadab may rest in his appreciation for that part of our humanity that a science which aims at perfection attempts to transcend, namely, our embodied finitude. Now, given the general coarseness that surrounds Aminadab, it might be that his awareness of Georgiana in her full finite glory is more of a raw, sexual appreciation of her physicality. Our only clue in this direction is that Aminadab was "looking intently at the lifeless form of Georgiana" before he said he would never remove the birthmark.²⁰⁷ This is why I said 'hint of nobility' and 'residue of wisdom' above. Aminadab's nobility is an extract distilled from his character, perhaps from a lusty desire after Georgiana, but is nonetheless a recognition of embodied life that Aylmer lacks.

²⁰⁶ Ibid.

²⁰⁷ Ibid.

Aylmer's lack of recognition of the irreducible materiality of human life not only shows itself in his attempt to remove Georgiana's birthmark, but also in his treatment of Aminadab. Aylmer does not speak respectfully to Aminadab, but gives orders. We are introduced to Aminadab by Aylmer's yelling his name while "stamping violently on the floor."²⁰⁸ Aylmer expects subservience from Aminadab and receives it, just as the material world has proved to be yielding under the probing questions of the sciences. Aminadab is a tireless worker and heeds Aylmer's commands, if not without comment then without hesitation. The only moment of rebellion we see from Aminadab (and rebellion may be too strong a word) comes at the very end of the story. Aminadab gives a "gross, hoarse chuckle," from who knows where in the laboratory, upon the gradual disappearing of Georgiana's birthmark.²⁰⁹ Aylmer initially interprets this as joy on the part of his faithful lab assistant, as Aminadab's "expression of delight."²¹⁰ But upon the revelation that the disappearance of Georgiana's birthmark is also the moment of her death, Aminadab's delight is revealed to be more malicious than Aylmer first thought. Aminadab laughs a second time upon Georgiana's death, signaling the exultation of the earthly in its "invariable triumph" over the pretensions of the spiritual.²¹¹ Though maintained in the service of Aylmer and his intellectual, spiritual, scientific quest, Aminadab retains a sense of the importance of the earthly in human life. We must notice, however, that in laughing, Aminadab revels in the inability of Aylmer to make Georgiana's body as he wants it to be, in the failure of spiritually inclined persons to

²⁰⁸ Ibid.

²⁰⁹ Ibid., 55.

²¹⁰ Ibid.

²¹¹ Ibid., 56.

exert full control over the conditions of bodily life. Aminadab recognizes the importance of Georgiana's body, but his delight at Georgiana's death is a sign of the baseness of a pure "man of clay" untempered by the life of spirit.²¹² For as earth has wisdom, so, too, can it be callous, rough, and unforgiving, as demonstrated by Aminadab's laugh. Furthermore, Aminadab's seemingly comfortable acceptance of his servitude suggests that the life dominated wholly by the concerns of earth and bereft of the reflections of spirit is not a free life. This suggestion is an echo of the Enlightenment sentiment that the use and development of human reason is "mankind's exit from its self-incurred immaturity."²¹³ Hawthorne, then, does not only warn us about the dangers of an exclusive preoccupation with spirit, but also reminds us that to swing to the antipode is also damaging to our common humanity.

Thinking back to "The Artist of the Beautiful," we can see the split within earth between its wisdom and its callous coarseness embodied by Robert Danforth and Peter Hovenden. Aminadab has a mix of Danforth's common sense and industriousness as well as a strong dose of Hovenden's hard, unforgiving nature. Just as there is nobility in spiritual aspirations—perhaps best captured by Owen's attitude upon finally completing his butterfly and by Georgiana's tender reassurance to Aylmer that he has aimed loftily and done nobly despite his failure—as well dangers wrought by an exclusive attachment to spiritual ideals, just so is there an aspect of earthiness that nurtures and sustains human life and an aspect that hardens human feeling. All of the characters considered

²¹² Ibid.

²¹³ Immanuel Kant, "An Answer to the Question: What Is Enlightenment?," in *What Is Enlightenment? Eighteenth-Century Answers and Twentieth-Century Questions*, ed. James Schmidt (Berkeley: University of California Press, 1996), 58–64; 58. Kant's essay was originally written and published in 1784.

thus far, Owen and Aylmer, Danforth, Hovenden, Aminadab, Georgiana, Annie, and Ethan Brand, are all different varieties of spirit, earth, and their combination. Danforth, Hovenden, and Aminadab are all different expressions of earth. Owen, Aylmer, and Ethan Brand are all different manifestations of the obsessions of spirit. In life there is no pure repetition of character. As for Annie and Georgiana—the women are more difficult to read, perhaps being the most human of Hawthorne’s characters. They suggest balance, though neither quite is balanced. Georgiana is the more interesting of the two, partly because she has a much more prominent role in “The Birthmark” than Annie does in “The Artist of the Beautiful,” but primarily because of the dignity with which she approaches her imminent death, telling Aylmer not to repent his rejection of “the best that earth could offer” for he acted out of purity of feeling.²¹⁴ The strength of Georgiana is clearly meant to invoke our admiration, as Hawthorne writes that Georgiana was an “angelic spirit” inside a “mortal frame.”²¹⁵ Indeed, Alfred Reid reads Georgiana quite positively: “She is the best that earth and heaven can offer here and now. She is humanity at its finest. She is strength, beauty, faith, and enlightenment. She is tenderness and self-sacrifice. . . . She can appreciate both the ideal and the actual. Even in death, she urges her husband not to repent of his aspirations.”²¹⁶ If this is so, and I am sympathetic towards such an interpretation of Georgiana, we must worry that the best among us can be led along and manipulated by more clearly self-absorbed individuals who look foremost to “unearthly” goals. Georgiana may be love and self-sacrifice, but she has

²¹⁴ Hawthorne, “The Birthmark,” 55.

²¹⁵ Ibid.

²¹⁶ Reid, “Hawthorne’s Humanism,” 351.

thrown herself in support of a quest that cannot succeed and one that pulls others in as materials for experimentation or for use as labor.

In her last moments Georgiana focuses on the truth that spiritual aspirations—projects that aim beyond oneself—add vigor, vitality, and meaning to human life. She is not wrong to praise Aylmer. The difficulty is reconciling such aims with the earthy conditions of life, something that Aylmer does not accomplish, nor does Owen Warland. This is the task Hawthorne leaves open before us, how we can be guided by ideals without letting their allure pull us to the ruination of human community. In the end, Aylmer aimed nobly but wreaked havoc as his exclusively spiritual, intellectual nature took the reins and directed his science towards his myopic goals. As far as science is concerned, the conclusion I draw from “The Birthmark” is that earth needs to be lifted from a position of exploitation and brought back into consideration during the scientific endeavor.

It is not easy to say what a refolding of earth into scientific practice would look like for Hawthorne. He offers a diagnosis but does little in the way of suggesting treatment. Recalling the reading I gave of the closing lines of “The Birthmark” earlier in this chapter, it seems likely that Hawthorne is calling for a religious turn. The “profounder wisdom” he suggests Aylmer might have attained involves looking “beyond the shadowy scope of Time, and living once for all in Eternity.”²¹⁷ But this seems to be an elevation of the religious above the scientific. Nothing is said about reforming Aylmer’s science as science. His other stories offer little more in the way of direct help.

²¹⁷ Hawthorne, “The Birthmark,” 56.

Hawthorne has brought a problem to our attention, and it is incumbent upon contemporary society to address the problem and attempt a solution, should we have the will to do so.

CHAPTER IV

CONCLUSIONS

It is clear that both “The Artist of the Beautiful” and “The Birthmark” contain messages concerning the role of art in human life and, especially in “The Birthmark,” about the intermingling of art and science. What these messages say, however, is much less evident. Hawthorne incorporates an element of frustrated and thwarted striving into the fabric of these stories that generates a sense of estrangement around the representative artist, Owen, and scientist, Aylmer. Both characters have a potentially nurturing vision that reaches beyond the material world, but one that ultimately alienates them from broader human concerns. The primary aim of this thesis was to elicit the messages surrounding this vision and the quest to realize it as Hawthorne depicts them. An underlying motive of mine in undertaking this project is my belief that Hawthorne’s insights, far from being relegated to his own age, are worth presenting anew for the benefit of contemporary reflection upon scientific practice and human meaning.

Though it might not seem like the artist and scientist should be grouped together, Hawthorne finds reason to so associate them in his effort to depict types of people “by their hidden desires or their deeper bond of suffering.”²¹⁸ To discern the ‘hidden desires’ that bind artists and scientists is a chief task of the second chapter (that is, the one following the introduction). Here, looking primarily at “The Artist of the Beautiful” but

²¹⁸ Matthiessen, *American Renaissance*, 239. This effort of Hawthorne’s began in earnest after his time at Brook Farm, a short-lived utopian community at West Roxbury, outside of Boston.

also at “The Birthmark,” we saw that a drive towards perfection and an attendant drive towards power underlie both artistic and scientific activity. At root is an aesthetic ideal that is yearned for and yet cannot manifest itself in or be understood by the messy material world. The allure of this ideal, offering vitality and meaning for human life, can be so strong that its seekers, the artist and the scientist, become detached from society and strain their relationships with other people. To become so detached is the great general danger that attends a life of overemphasized spirit. The connection between perfection and power is extremely important for understanding the danger posed by individuals obsessively focused on the attainment of their ideal end, a danger more fully explored in the chapter on “The Birthmark.” Hawthorne does not depict a life wholly absorbed in practical and material concerns, a life of earth, as an attractive alternative, but he does suggest there is something essential for human life in the hearth and forge of human life that perpetual stargazers miss—a something bound up with human community.

The third chapter shifts its focus from discerning the general features of the hidden desires of artists and scientists to how Hawthorne depicts the expression of these desires in “The Birthmark.” Here Hawthorne couples the extreme desire for aesthetic perfection with the power to alter and control natural forces afforded by science, a coupling that exacerbates and accelerates a dehumanizing vision of others. The danger posed to others by the detached individual becomes evident, namely, that humanity becomes less in their eyes than the attainment of their goal and consequently human beings be exploited and manipulated as needed. Other features or elements of this danger

are drawn out of the “The Birthmark,” including self-deception on the part of the detached individual, preventing them from attaining full awareness of the motives and consequences of their actions. Hawthorne astutely makes us aware of the psychological power science exerts over people by weaving magical and religious elements into his descriptions of science, a power that allows the scientist to find ‘willing’ participants for his studies. It is the potential for harm in this situation, exhibited by the scientist myopically focused on their problem or research program, that most worries Hawthorne.

In addition to this manipulation and exploitation for the purposes of scientific inquiry, “The Birthmark” less overtly brings another kind of exploitation to our attention. I am referring to the lack of consideration shown to the materials and the labor that make scientific inquiry—indeed all detached pursuits of spirit—possible. It is all too easy for the scientist or other individuals in positions of power to show disdain for the coarser aspects of existence, society, the body. But here again, Hawthorne shows us that to ignore earth is to begin a descent into inhumanity.

Throughout the thesis we have seen an unresolved tension between spirit and earth. Spirit is criticized in both “The Artist of the Beautiful” and “The Birthmark,” but earth is not presented as an adequate or appealing alternative. Hawthorne’s message is that we are to beware the exclusion of spirit or of earth from our lives. By implication, Hawthorne is suggesting a balance between spirit and earth is needed. But he never depicts such a balance. On the one hand, depicting a perfectly balanced person would be, from a literary standpoint, quite boring. On the other, Hawthorne was interested in examining actual types of people in search of ‘hidden desires and bonds of suffering’ he

could then make manifest in his writing—and actual people are not balanced. For this reason I think Hawthorne’s strength is in his diagnoses of desires and motivations and their implications, not in his depiction of resolutions. My effort here has been to interpret his diagnoses in two stories, hopefully to the enrichment of our understanding of Hawthorne and our thinking about the relationships between science, art, and human life. Following Hawthorne, it has not been to construct solutions. Hawthorne’s message concerning the dangers surrounding scientific practice strikes me as particularly valuable because, as scientific and technological advancements become ever more pervasive aspects of contemporary life, the allures of such advances can easily make us lose sight of the human questions, of whether we are actually receiving nourishment from our engagement with new sciences and technologies or are falling prey to a deceptive dream. Vigilance and awareness is required on our parts, perhaps especially among those who actively practice science.

REFERENCES

- Bacon, Francis. *The New Organon*. Edited by Lisa Jardine and Michael Silverthorne. Cambridge Texts in the History of Philosophy. Cambridge: Cambridge University Press, 2000.
- Bell, Millicent. *Hawthorne's View of the Artist*. Albany State University of New York, 1962.
- Berlin, Isaiah. *The Roots of Romanticism*. Edited by Henry Hardy. Princeton: Princeton University Press, 1999.
- Bunge, Nancy L. *Nathaniel Hawthorne: A Study of the Short Fiction*. Vol. 41. Twayne's Studies in Short Fiction. New York: Twayne Publishers, 1993.
- Burnett, Charles ("Charles Burnett on Magic"). Interview by Peter Adamson. *The History of Philosophy Without Any Gaps*. Podcast audio. July 10, 2015. Accessed July 14, 2015. <http://www.historyofphilosophy.net/magic-burnett>.
- Cunningham, Andrew, and Nicholas Jardine. *Romanticism and the Sciences*. Cambridge: Cambridge University Press, 1990.
- Curd, Patricia, ed. *A Presocratics Reader*. Translated by Richard D. McKirahan. Indianapolis: Hackett Publishing Company, 1996.
- de Beauvoir, Simone. *The Second Sex*. Translated by Constance Borde and Judith Thurman. New York: Alfred A. Knopf, 2010.
- Descartes, Rene. "Discourse on the Method." In *Descartes: Selected Philosophical Writings*, translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch, 20–56. Cambridge: Cambridge University Press, 1988.
- Eckstein, Barbara. "Hawthorne's 'the Birthmark': Science and Romance as Belief." *Studies in Short Fiction* 26, no. 4 (Fall 1989): 511–19.
- Emerson, Ralph Waldo. *Nature, Addresses and Lectures*. Edited by Edward Waldo Emerson. Centenary Edition. Vol. 1. The Complete Works of Ralph Waldo Emerson. Boston: Houghton Mifflin, 1903.
- Fabian, Ann. *The Skull Collectors: Race, Science, and America's Unburied Dead*. Chicago: University of Chicago Press, 2010.

- Franklin, Howard B. *Future Perfect: American Science Fiction of the Nineteenth Century*. New York: Oxford University Press, 1968.
- Grant, Edward. *A History of Natural Philosophy: From the Ancient World to the Nineteenth Century*. Cambridge: Cambridge University Press, 2007.
- Hartnett, Stephen. “‘It Is Terrible to Possess Such Power!’: The Critique of Phrenology, Class, and Gender in Hawthorne’s ‘The Birth Mark.’” *Prospero: Rivista Di Culture Anglo-Germaniche* 5 (1998): 5–26.
- Harvey, Samantha. *Transatlantic Transcendentalism: Coleridge, Emerson, and Nature*. Edinburgh Studies in Transatlantic Literatures. Edinburgh: Edinburgh University Press, 2013.
- Hawthorne, Nathaniel. “Dr. Heidegger’s Experiment.” In *Twice-Told Tales*, Centenary Edition. Vol. 9: 227–38. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.
- . “Ethan Brand.” In *The Snow-Image and Uncollected Tales*, Centenary Edition. Vol. 11: 83–102. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.
- . “Fire-Worship.” In *Mosses from an Old Manse*, Centenary Edition. Vol. 10: 138–47. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.
- . “Rappaccini’s Daughter.” In *Mosses from an Old Manse*, Centenary Edition. Vol. 10: 91–128. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.
- . *The American Notebooks*. Centenary Edition. Vol. 8. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1972.
- . “The Artist of the Beautiful.” In *Mosses from an Old Manse*, Centenary Edition. Vol. 10: 447–75. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.
- . “The Birthmark.” In *Mosses from an Old Manse*, Centenary Edition. Vol. 10: 36–56. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.
- . “The Hall of Fantasy.” In *Mosses from an Old Manse*, Centenary Edition. Vol. 10: 172–85. The Works of Nathaniel Hawthorne. Columbus: Ohio State University Press, 1974.

- Heidegger, Martin. *Being and Time*. Translated by Joan Stambaugh and Dennis J. Schmidt. Albany: State University of New York Press, 2010.
- Heilman, R. B. "Hawthorne's 'The Birthmark': Science as Religion." *South Atlantic Quarterly* 48 (1949): 575–83.
- Kant, Immanuel. "An Answer to the Question: What Is Enlightenment?" In *What Is Enlightenment? Eighteenth-Century Answers and Twentieth-Century Questions*, edited by James Schmidt, 58–64. Berkeley: University of California Press, 1996.
- . *Critique of the Power of Judgment*. Translated by Paul Guyer and Eric Matthews. The Cambridge Edition of the Works of Immanuel Kant. Cambridge: Cambridge University Press, 2000.
- Knight, David M. *Science in the Romantic Era*. Aldershot: Ashgate, 1998.
- Marshall, Megan. "Sophia's Crimson Hand." *Nathaniel Hawthorne Review* 37, no. 2 (Fall 2011): 36–47.
- Masunaga, Toshikazu. "Nathaniel Hawthorne in the Age of Science and 'The Birth-Mark.'" *Kwansei Gakuin University Humanities Review* 15 (2010): 79–92.
- Matthiessen, F.O. *American Renaissance: Art and Expression in the Age of Emerson and Whitman*. New York: Oxford University Press, 1941.
- McClay, Wilfred M. "The Lessons of Failure: Matter and Spirit in Nathaniel Hawthorne's 'The Artist of the Beautiful.'" In *Modes and Facets of the American Scene: Studies in Honor of Cristina Giorelli*, edited by Dominique Marçais, 79–94. Palermo: Ila Palma, 2014.
- McDermott, John J. "Why Bother: Is Life Worth Living? Experience as Pedagogical." In *The Drama of Possibility: Experience as a Philosophy of Culture*, by John J. McDermott, 223–35. Edited by Douglas R. Anderson. New York: Fordham University Press, 2007.
- Murphey, Murray. "Kant's Children: The Cambridge Pragmatists." *Transactions of the Charles S. Peirce Society* 4, no. 1 (1968): 3–33.
- Newman, Lea Bertani Vozar. *A Reader's Guide to the Short Stories of Nathaniel Hawthorne*. Reference Publication in Literature. Boston: G.K. Hall, 1979.
- Paley, William. *Natural Theology: Or, Evidences of the Existence and Attributes of the Deity, Collected from the Appearances of Nature*. London: R. Faulder, 1802.

- Peck, Jason M. "Vertigo Ergo Sum: Kant, His Jewish 'Students' and the Origins of Romanticism." *European Romantic Review* 26, no. 1 (February 2015): 45–57.
- Poggi, Stefano, and Maurizio Bossi, eds. *Romanticism in Science: Science in Europe, 1790-1840*. Vol. 152. Boston Studies in the Philosophy of Science. Dordrecht, Boston: Kluwer Academic, 1994.
- Pribek, Thomas. "Hawthorne's Aminadab: Sources and Significance." *Studies in the American Renaissance*, January 1, 1987, 177–86.
- Rees, John O. "Aminadab in 'The Birth-Mark': The Name Again." *Names: A Journal of Onomastics* 28, no. 3 (September 1980): 171–82.
- Reid, Alfred S. "Hawthorne's Humanism: 'The Birthmark' and Sir Kenelm Digby." *American Literature* 38, no. 3 (November 1966): 337–51.
- Richardson, Robert D. *Emerson: The Mind on Fire*. Berkeley: University of California Press, 1995.
- Rosenberry, Edward H. "Hawthorne's Allegory of Science: 'Rappaccini's Daughter'." *American Literature: A Journal of Literary History, Criticism, and Bibliography* 32, no. 1 (March 1960): 39–46.
- Royce, Josiah. "Individual Experience and Social Experience as Sources of Religious Insight." In *The Basic Writings of Josiah Royce*, edited by John J. McDermott, Vol. 2: Logic, Loyalty, and Community: 1015–37. New York: Fordham University Press, 2005.
- . "The Hope of the Great Community." In *The Basic Writings of Josiah Royce*, edited by John J. McDermott, Vol. 2: Logic, Loyalty, and Community: 1145–63. New York: Fordham University Press, 2005.
- Rucker, Mary E. "Science and Art in Hawthorne's 'The Birth-Mark.'" *Nineteenth-Century Literature* 41, no. 4 (March 1, 1987): 445–61.
- Standen, Anthony. *Science Is a Sacred Cow*. New York: Dutton, 1950.
- Stepan, Nancy. *The Idea of Race in Science: Great Britain, 1800-1960*. Hamden: Archon Books, 1982.
- Stoehr, Taylor. *Hawthorne's Mad Scientists: Pseudoscience and Social Science in Nineteenth-Century Life and Letters*. Hamden: Archon Books, 1978.

- Thompson, W. R. "Aminadab in Hawthorne's 'The Birthmark.'" *Modern Language Notes* 70, no. 6 (June 1, 1955): 413–15.
- Trefil, James. *Science in World History*. Themes in World History. London: Routledge, 2012.
- Van Winkle, Edward S. "Aminadab, the Unwitting 'Bad Anima.'" *American Notes and Queries* 8 (1970): 131–33.
- Walsh, Conor. "Aminadab in Nathaniel Hawthorne's THE BIRTH-MARK." *Explicator* 67, no. 4 (Fall 2009): 258–60.
- Whitehead, Alfred North. *Science and the Modern World*. New York: The Free Press, 1967.

Supplemental Sources Consulted

- Balestrini, Nassim W. "From Aylmer's Experiment to Aesthetic Surgery." *Nathaniel Hawthorne Review* 38, no. 1 (Spring 2012): 58–84.
- Bell, Millicent, ed. *Hawthorne and the Real: Bicentennial Essays*. Columbus: Ohio State University Press, 2005.
- Bell, Millicent, and Emory Elliott, eds. *New Essays on Hawthorne's Major Tales*. Cambridge: Cambridge University Press, 1993.
- Bendixen, Alfred. "Towards History and Beyond: Hawthorne and the American Short Story." In *A Companion to the American Short Story*, edited by Alfred Bendixen and James Nagel, 50–67. Blackwell Companions to Literature and Culture: 69. Chichester: Wiley-Blackwell, 2010.
- Berry, Sarah L., and Anthony Cerulli. "Mad Scientists, Narrative, and Social Power: A Collaborative Learning Activity." *Journal of Medical Humanities* 34, no. 4 (December, 2013): 451–54.
- Cameron, Sharon. *The Corporeal Self: Allegories of the Body in Melville and Hawthorne*. Baltimore: Johns Hopkins University Press, 1981.
- Castronovo, Russ, ed. *The Oxford Handbook of Nineteenth-Century American Literature*. Oxford Handbooks. New York: Oxford University Press, 2012.
- Church, Joseph. "A Problem of Conception and Creation in Hawthorne's 'The Artist of the Beautiful.'" *Nathaniel Hawthorne Review* 32, no. 2 (Fall 2006): 13–22.

- Crowley, Joseph D. *Nathaniel Hawthorne: A Collection of Criticism*. Contemporary Studies in Literature. New York: McGraw-Hill, 1975.
- Curran, Ronald T. "Irony: Another Thematic Dimension to 'The Artist of the Beautiful.'" *Studies in Romanticism* 6, no. 1 (1966): 34–45.
- Downard, Jeffrey. "Emerson's Experimental Ethics and Kant's Analysis of Beauty." *Transactions of the Charles S. Peirce Society* 39, no. 1 (Winter 2003): 87.
- Gollin, Rita K. "'The Fairest Hope of Heaven': Hawthorne on Immortality." *Nathaniel Hawthorne Review* 31, no. 2 (Fall 2005): 74–89.
- Kirby, R. Kenneth. "'The Limits of Ordinary Experience': A Phenomenological Reading of 'Rappaccini's Daughter.'" In *Destiny, the Inward Quest, Temporality and Life*, edited by A.T. Tymieniecka, 167–79. *Analecta Husserliana* 109. Springer Netherlands, 2011.
- Levin, Harry. *The Power of Blackness*. Athens: Ohio University Press, 1980.
- Marx, Leo. *The Machine in the Garden*. Oxford: Oxford University Press, 2000.
- Mathews, James W. "Hawthorne and the Chain of Being." *Modern Language Quarterly* 18, no. 4 (1957): 282–94.
- Micklus, Robert. "Hawthorne's Jekyll and Hyde: The Aminadab in Aylmer." *Literature and Psychology* 29 (1979): 148–59.
- Pfister, Joel. *The Production of Personal Life: Class, Gender, and the Psychological in Hawthorne's Fiction*. Stanford: Stanford University Press, 1991.
- Reynolds, Larry J., ed. *A Historical Guide to Nathaniel Hawthorne*. Historical Guides to American Authors (HGAA). Oxford: Oxford University Press, 2001.
- Richardson, Alan. *British Romanticism and the Science of the Mind*. Cambridge: Cambridge University Press, 2001.
- Rigotti, Francesca. "Biology and Society in the Age of Enlightenment." *Journal of the History of Ideas* 47, no. 2 (April 1, 1986): 215–33.
- Sayers, William. "Gardens of Horror and Delight: Hawthorne's 'Rappaccini's Daughter' and Boccaccio's 'Decameron.'" *Nathaniel Hawthorne Review* 32, no. 1 (Spring 2006): 30–42.

- Schiffman, Robyn. "Novalis and Hawthorne: A New Look at Hawthorne's German Influences." *Nathaniel Hawthorne Review* 38, no. 1 (Spring 2012): 41–57.
- Stamant, James. "Hawthorne's and Emerson's Differing Perspectives on Political Violence." *South Central Review* 29, no. 1 (2012): 86–105.
- Swisher, Clarice. *Readings on Nathaniel Hawthorne*. Greenhaven Press Literary Companion to American Authors. San Diego: Greenhaven Press, 1996.
- Uroff, M. D. "The Doctors in 'Rappaccini's Daughter.'" *Nineteenth-Century Fiction* 27, no. 1 (June 1, 1972): 61–70.
- van Leeuwen, Evert Jan. "Hawthorne and the 'Old Dutch Wizards': Matter and Spirit in 'The Marble Faun.'" *Nathaniel Hawthorne Review* 39, no. 1 (Spring 2013): 35–56.
- von Frank, Albert J., ed. *Critical Essays on Hawthorne's Short Stories*. Critical Essays on American Literature. Boston: G.K. Hall, 1991.
- Weinauer, Ellen. "Hawthorne and Race." In *A Companion to Herman Melville*, edited by Wyn Kelley, 327–41. Oxford: Blackwell Publishing, 2006.
- Yoder, R.A. "Hawthorne and His Artist." *Studies in Romanticism* 7, no. 4 (1968): 193–206.
- Yu, Joseph. "Alchemy, Imagination, and Hawthorne's 'The Birth-Mark.'" *Tamkang Review* 40, no. 2 (June 2010): 105–21.