

# Virtual Mentor

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### Birthmarks

by Faith L. Lagay, PhD

“In the latter part of the last century, there lived a man of science—an eminent proficient in every branch of natural philosophy” [1]. These opening words to Nathaniel Hawthorne’s short story “The Birthmark” are packed with clues about what readers are in for. Hawthorne’s “last century” has a specific referent, the 1700s, but on their own the words evoke the indefinite once-upon-a-time past of fairy tales, and the next two words—“there lived”—reinforce the expectation that a tale is about to begin, one that may take place on the border between the natural and the supernatural, perhaps one with a moral or lesson, probably one that is not about the everyday affairs of actual people.

Readers with knowledge of the history of philosophy know something more about a key figure in the tale. Natural philosophy and metaphysics were the two branches of ancient Greek philosophy. The former—of which Hawthorne’s protagonist is an “eminent”—was the ancestor to modern science and hence to medicine. We soon learn that this eminent’s name is Aylmer, which suggests the alchemy and sorcery that characterized natural philosophy in the centuries before it became modern science, long before the 1700s. Aylmer is just that sort of natural scientist. He believes that members of his craft ascend step by step until finally the best practitioners lay hands upon the very secrets of creation.

### The tale

The plot of “The Birthmark” is simple and heavy with symbolic meaning. Its climax is foreseen by Aylmer’s wife, Georgiana, and grasped by first-time readers in the early pages of the tale. Here is the summary. Though devoted to his science, Aylmer “washed the stains of acid from his fingers and persuaded a beautiful woman to become his wife” [1]. No sooner had he married Georgiana, however, than he became preoccupied and then obsessed with a small birthmark on her cheek. It was the shape and size of a tiny hand—a pygmy hand. Before long, Aylmer shuddered at the sight of the mark and decided to apply the knowledge and skills of natural philosophy to ridding Georgiana of the “visible mark of earthly imperfection” [2]; he would correct “what Nature left imperfect in her fairest work” [3].

Georgiana was taken aback by Aylmer’s loathing of the mark, about which few before him had voiced dislike. Some had seen it as the print of a tiny fairy hand pressed there at Georgiana’s birth “to give her sway over all hearts” [4].

Nevertheless, Georgiana agreed to the plan, telling Aylmer that she could not be happy unless her husband removed the mark that distressed him so. But she knew from the first mention of the idea that “the stain goes as deep as life itself” [5]. “Spare me not,” Georgiana said, “though...the birthmark take refuge in my heart...” [3]. And she was correct. The fatal hand was in fact “the bond by which an angelic spirit kept itself in union with a mortal frame” [6]. Even Aylmer’s “brute” laboratory assistant Aminadab knew this. Said Aminadab, “If she were my wife, I’d never part with that birthmark” [7]. And with Aylmer’s successful removal of the mark, “the parting breath of the now perfect woman passed into the atmosphere...” [6].

### **The romantic tradition**

Hawthorne is—along with “Moby Dick” author Herman Melville—the best known of America’s mid-19th-century romantic writers. Like the British romantics, the most famous of whom are the poets Byron, Shelley, Wordsworth and Keats, the American romantics wrote of a nature that reflected the handiwork of its creator. Nature in romantic literature is moral; it bears symbolic meaning, and humans who challenge it with inadequate respect for the immanent power of the divine generally learn painful lessons in humility. At some level, Aylmer appears to have sensed this. As heir to the long line of alchemists who sought the universal solvent by which gold might be “elicited from all things vile and base,” Aylmer believed that it was within human power to discover the long-sought medium. But he also believed that “a philosopher who should go deep enough to acquire the power would attain too lofty a wisdom to stoop to the exercise of it” [8].

### **And after**

It would be disingenuous to suggest that the moral of Hawthorne’s cautionary tale should apply to the present-day pursuit of bioscience. Hawthorne placed his story in the latter part of the century preceding his own to cast a penumbra of more ancient abracadabra over Aylmer’s deeds. Medicine has challenged natural forces and processes directly and successfully since Aylmer’s time. Hawthorne himself probably witnessed the final attempts of physicians to cure patients by restoring nature’s healthy balance of the four humors—yellow bile, black bile, blood and phlegm—through bleeding, purging and administration of herbal potions. With the rise of experimental medicine in the mid-1800s the benefits of outsmarting nature began to outweigh the harms. Discoveries and advances over the next century and a half would produce immunizations, transfusions, antibiotics, organ transplants, and the promises of molecular, genetic and bionic medicine.

Correspondingly, nature has come to be read far less symbolically in post-romantic literature. Today a white whale might be thought of as a menacing killer because of the species to which it belonged but not because its whiteness represented the unknown or the “heartless voids and immensity of the universe,” “the white, colorless, all-color of atheism from which we shrink” or “the depths of the milky way” [9]. In *post-romantic* literature, a rose is a rose is a rose. (In *post-modern* literature, even *that* is up for grabs.)

### **A lesson for post-romantic times?**

Does the tale of Aylmer's hubris hold any lesson for contemporary readers or physicians—other than “don't treat family members”? I think it does. Hawthorne meant for his readers to disapprove of Aylmer's attempt to master nature. Today's readers disapprove of Aylmer also but probably not for that reason. Had Georgiana been ill, we would have hoped that Aylmer's craft could cure her. No, we dislike Aylmer for being dissatisfied with a woman who pledged her love and entrusted her life to him, a woman whose inner—indeed, whose surface—beauty he could not see. *We dislike Aylmer for destroying the good in pursuit of the perfect.* In Hawthorne's metaphorical language, “the parting breath of the now-perfect woman” came simultaneously with her achievement of that unnatural state [6]. A related lesson for bioscience lies in the truth that our attempts to correct one of nature's flaws may do greater harm to one of nature's successes. The core purpose of medical research, of course, is to see that such harms do not occur as the result of well-intentioned interventions.

Unfortunately for the bearers of birthmarks, medical science has not perfected a one-time treatment for congenital capillary malformations like Georgiana's. Nor have most members of society come to accept visible birthmarks without staring or feeling sorry for their bearers. The vascular malformations that allow blood to pool below the skin's surface and thus produce what is colloquially referred to as a port wine stain are thought to result, in turn, from deficits in the nerves responsible for vasoconstriction [10, 11]. Hence, single laser interventions, which target the capillaries and not the perivascular nerve deficit, do not usually succeed in clearing the birthmark once and for all. Vessels in the affected area with insufficient innervation fill again with blood. This vascular-system explanation of birthmarks and the difficulty in making them disappear lends an aura of prescience to Hawthorne's symbolic use of a hand-shaped birthmark that grasped Georgiana's heart.

As for society's response, the good news is that the fading of symbol-rich romanticism in the 160 years since Hawthorne wrote has deprived nature's imperfections of their magical import. We no longer assume that a port wine stain, cleft lip or clubfoot is nature's superficial clue to a person's supernatural powers or spiritual flaws. We can only hope that acceptance of the marks themselves will eventually follow.

### **Conclusion**

Few people today equate natural beauty with moral worth; few would insist that no natural flaw be tampered with because nature and nature's creator wanted its bearer to be marked just so. But 21st-century medicine has achieved many of its advances by heeding and applying another central lesson of “The Birthmark”—until we understand the deepest connections of surface signs, from birthmarks to behaviors, it is foolish and perhaps arrogant to attempt to change them in our pursuit of perfection.

## References

1. Hawthorne N. The birthmark. In: Hawthorne N. *Selected Tales and Sketches*. 3rd ed. New York, NY: Holt, Rinehart and Winston; 1970:264.
2. Hawthorne, 265.
3. Hawthorne, 269.
4. Hawthorne, 266.
5. Hawthorne, 268.
6. Hawthorne, 281.
7. Hawthorne, 271.
8. Hawthorne, 273.
9. Melville H. *Moby Dick, or The Whale*. New York, NY: Rinehart & Co., Inc.; 1960:192.
10. Waner M. Recent developments in lasers and the treatment of birthmarks. *Arch Dis Child*. 2003;88:372-374.
11. Smoller BR, Rosen S. Port-wine stains: a disease of altered neural modulation of blood vessels. *Arch Dermatol*. 1986;122:177

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