# A New Historicist Approach to Hawthorne's View of Science in "The Birthmark"

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Abstract: "The Birthmark" is a short science fiction created by Nathaniel Hawthorne in 1843. The story tells of an eighteenth-century scientist who attempts to remove his wife's birthmark yet takes her life in the end. This paper will use Louis Montrose's theory of Historicity of Texts and the Textuality of History to disclose the dialogic relationship between "The Birthmark" and its historical context and Hawthorne's view of science. This paper firstly discusses the historical background of the industrial age reflected in the story and then analyzes Hawthorne's interpretation of the industrial revolution through the alienation of man. It later explores the American Transnationalism's influence on the creation of the text and finally examines the importance of Neo-Humanism shown in Hawthorne's work. This paper aims to prove that "The Birthmark" is the production of its distinctive historical contexts, and it exerts a crucial influence on the historical context. Furthermore, the Neo-Humanism implied by Hawthorne in "The Birthmark", the embodiment of both science and humanity, sheds light on the development of modern society.

**Keywords:** Textuality of History; Historicity of Texts; Science; Neo-Humanism

#### 1. Introduction

Nathaniel Hawthorne is one of the most influential American writers of the nineteenth century. Though Hawthorne is best known for his romances, such as The Scarlet Letter and The House of the Seven Gables, he also created scores of engaging and inspiring short stories, including "The Birthmark". First published in The Pioneer in 1843, and later collected in Mosses from an Old Manse in 1846, "The Birthmark" is a story of a devoted scientist, Aylmer, who feels intolerable with the birthmark on his wife's face, thus resolves to remove the facial blemish, yet kills his wife in the end. Previous studies on the story mainly focus on the religious metaphors and the patriarchal ideology shown in the plot. Moreover, a great many critics also touch on Hawthorne's attitude toward science, yet their critical views vary greatly. Rosenberry argues bluntly that "one of the plainest attitudes in Hawthorne's writings is a contemptuous distrust of science".[1] Franklin states that Hawthorne's science fiction becomes "a kind of anti-science fiction, only exalting the scientist insofar as he transcends both his science and the matter with which it deals". [2] On the contrary, Fairbanks believes that Hawthorne is "not hostile to science as such".[3] Yoshii contends that Hawthorne actually "embraces the same view of life as is proposed by the newly emerging school of science in the nineteenth century".[4] On the question of whether Hawthorne perceives science positively or negatively, this paper demonstrates the view that Hawthorne is not opposed to science, and he advocates a Neo-Humanism incorporating both scientific progress and humanistic values. This paper will analyze Hawthorne's view of science through the lens of New Historicism's perspectives, focusing particularly on the writer's description of the industrial society in the eighteenth century and the creational process of the story.

New Historicism appeared in the 1970s and early 1980s as a theoretical approach to literary analysis. Different from Old Historicism which views literature as a mere reflection of the historical world, New Historicism considers history itself a narrative fact and values the dialogical interplay of literary text and history. [5]237-238 Louis Montrose, the famous New Historicist, coined Textuality of History and Historicity of Texts to explain this reciprocal relation between history and text: Textuality of History refers to the fictionality of history that our understanding of the past can only be found in the "surviving textual traces of the society in question" while Historicity of Texts refers to the rootedness of a text in the "cultural specificity" and "social embedment". [6] In this regard, the approach of New Historicism to a literary text pivots on the cultural history through literature and the understanding of the work through its historical context. This essay, by applying Montrose's idea of Historicity of Texts and the Textuality of History, will investigate Hawthorne's view of science through the representation of the industrial age in the story and historical context of the story. The first chapter examines the

industrial age and Hawthorne's own construction of the industrial revolution, particularly the alienation of man. The second chapter discusses the influence of the historical context on the story as well as the story's influence on the development of society.

## 2. Textuality of History in "The Birthmark"

According to New Historicism, history is itself a narrative text and can never be seen as a reference to any truth or fact. New Historicists reject the grand narrative of history and acknowledge the historians' personal biases in interpreting the past. Hawthorne is a historian, yet he records his time with imaginative tales rather than specific historical events. As Person notes in *The Cambridge Introduction to Nathaniel Hawthorne*, the brilliant writer paid special attention to the historical settings for his literary works, but he "routinely changed facts to suit his imaginative purpose". Hawthorne deliberately posits "The Birthmark" in the context of the end of the eighteenth century when the industrial revolution gained momentum, yet he provides a different story that is contrary to the positive impression of the industrial revolution. Thus, Hawthorne's use of early historical contexts corresponds to New Historicism's strategy of describing history. Regardless of the clearly stated historical context in the short story, readers can still feel a tension between historical moments. After all, what readers perceive through the story is not the history itself but rather Hawthorne's construction of the history at that time. In "The Birthmark", Hawthorne's perception of science manifests itself in his representation of the industrial age in the story, specifically the alienation of man.

## 2.1. The Industrial Revolution

Hawthorne intentionally sets the "The Birthmark" at the end of the eighteenth century, a time when the industrial revolution accelerated. At the very beginning of the story, he straightforwardly relates people's exhilaration of the scientific wonders which seems to "open paths into the region of miracle". This corresponds to the general impression of the industrial age at that time. The eighteenth century witnessed the flourishing of technological inventions. James Watt introduced a separate condenser to the operation of steam engine, which radically enhanced the efficiency of the steam machine. Watt's improved steam machine was soon used in the factories, which made the transition from hand production to machine production possible. People were able to purchase commodities at a much cheaper price due to the transformation of the production method. At the same time, Edward Jenner invented smallpox vaccine, and health care increased. People were able to shake off shadow of the contagious diseases. Now the industrial age seemed completely promising since people had access to cheaper goods and improved medical care. In short, people's standard of living greatly developed thanks to scientific inventions.

Nevertheless, while the general public was rejoicing about the benefits the scientific development promises, Hawthorne, as well as other thinkers at the time, identified the latent social illness underneath the prosperity, and thus provided a different narrative of the industrial society. The large-scale industrial production and the accumulation of material wealth robbed people of their dignity and compassion, making them alienated from themselves and other individuals. In "The Birthmark", Hawthorne indicates the negative effect of scientific development through the alienation of man.

## 2.2. The Alienation of Man

The alienation of man is a term to describe man's condition of being a mechanistic part of a social class and thus estranged from his humanity. It illustrates man's dilemma in the industrial age when they ultimately lost the ability to determine their life and destiny and was controlled completely by their external environment. The alienation is problematic in the sense that it contributes little to people's self-realization and makes people pure slaves of their work and other social principles. In "The Birthmark", Hawthorne vividly describes how Aylmer and Aminadab are alienated, an allegory of man's condition at his time.

Aylmer, the scientist and husband in the story, is gradually controlled by his scientific ambition and finally takes his wife's life in order to further his exploration in the scientific field. At the very beginning of the story, Aylmer is portrayed by Hawthorne as extremely intelligent: he is "a man of science, an eminent proficient in every branch of natural philosophy". [8]30 His devotion to scientific studies is too strong to be weaned by any other things and his confidence in his scientific genius renders him unaware of his reckless endeavor in scientific research. When Aylmer acknowledges Georgiana's facial blemish as "the visible mark of earthly imperfection," he cannot help but think of

removing the birthmark, from which he can prove his undoubted talent in science. [8]31 Even when he subconsciously realizes that the scientific experiment might lead to the death of Georgiana, he is still obsessed with the idea of removing the flaw on her face. Now Aylmer's mind is occupied with the craze for science and he becomes the slave of his own scientific ambition. At the end of the story, the scientific experiment fails to provide him any joy and contributes nothing to his self-realization since the experiment only leads to the death of his wife and his liability for the murder. In this sense, Aylmer is not only alienated from himself, becoming a bare serf of science, but also alienated from his wife, becoming the inhuman killer who might go on trial concerning his deadly scientific experiment. He blindly worships the power of science and technology and treats his beloved wife as a mere object for scientific research. He is, therefore, alienated from himself as well as his wife.

Aminadab, Aylmer's assistant, on the other hand, is occupied by his work. Throughout the story, Aminadab only appears in Aylmer's laboratory where the working conditions are extremely terrible. The laboratory consists of "smoky, dingy, somber rooms" and is "tainted with gaseous odors". [8]36-41 Aminadab, similar to his master, is occupied by the scientific experiments. Though he knows nothing about scientific principles, he accomplishes all the procedures of his master's experiments, being the "human machine" in Aylmer's eyes. [8]42 We can see through Aminadab Hawthorne's personal experiences. Hawthorne once complained to Sophia about the dehumanizing nature of his job when he worked at the Boston Custom House in 1839. "I am a machine," Hawthorne observed, "and am surrounded by hundreds of similar machines; – or rather, all of the business people are so many wheels of one great machine". [9] Hawthorne projects in Aminadab his dismal feelings about the society that people become mechanized and eventually alienated from themselves. By reading "The Birthmark", one can have a glimpse of the industrial age through Hawthorne's eyes that man is alienated from himself and deprived of humanity. In Hawthorne's opinion, the advances in science are not as promising as the general public believes, and people should be aware of the disastrous power that science obtains.

## 3. Historicity of Texts in "The Birthmark"

As the theory of Historicity of Texts suggests, all texts are created within historically specific contexts. Historical background thus constitutes the cornerstone of the interpretation of the text. In arguing for the historicity of Hawthorne's nineteenth and twentieth reputation, Tompkins claims that "a literary text exists only within a framework of assumptions which are historically produced". [10] Therefore, it is necessary to examine how the social and cultural circumstances shaped Hawthorne's creational process and how the text is endowed with fruitful interpretation in various historical contexts. In this regard, "The Birthmark" can be seen as a product of Hawthorne's response to the historical context, and it can also generate a dialogic relationship with the larger historical context.

## 3.1. The Influence of American Transcendentalism

Hawthorne's understanding of history is clearly tainted by his own historical context, especially American Transcendentalism. American Transcendentalism, also viewed as an inseparable part of American Romanticism, is in fact a direct challenge to the previous achievement of the Enlightenment Movement. While enlightened thinking contributed to the development of technology and the accumulation of material welfare, Romanticism started appearing, "denouncing its so-called dehumanizing tendencies".<sup>[11]</sup> The essence of American Transcendentalism is exactly the praise for spirit and humanity.

"The Birthmark" was initially published in the journal *The Pioneer* in 1843, shortly after Hawthorne moved to Concord in 1842, an intellectual community where Emerson, Thoreau, and other transcendentalists resided. Hawthorne spent about three years in Concord until he could not afford to live there. During his stay at the Concord, Hawthorne formed a close relationship with Henry David Thoreau, whose view on materialism clearly exerts a profound influence on Hawthorne. [12] Hawthorne's "human machine" bears such a resemblance to Thoreau's sorrow that "men have become the tools of their tools" [13]. Both of them notice the drawbacks underneath the progress in modern civilization. Hawthorne's "The Birthmark" can thus be seen as the writer's reaction to the social illness in the industrial society. In the story, Aylmer's overly devotion to his science achievement is overshadowed by his ignorance of compassion and sympathy. He is oversensitive to the tiny flaw on Georgiana's face and treats his beloved wife as a mere object of scientific research. He lacks respect to the dignity and integrity of Georgiana and finally fails to remove the facial blemish on Georgiana. He loses a caring and benevolent companion and might face felony murder charges. His

reckless ambition results in self-destruction. The tragedy of Aylmer suggests the danger of scientific progress which endows people with destructive power.

As a mediator with the historical context, Hawthorne did not accept all the doctrines of American Transcendentalism unconditionally. As Emory Elliott comments in *The Columbia Literary History of the United States*, Hawthorne is "a figure not so much of ambiguity as of paradox and profound contradiction," since he is "a conformist to the literary and social pieties of his day and an ironic underminer of these pieties".<sup>[14]</sup> In fact, Hawthorne reflects on the overly positive individualism in Transcendentalism. One of the weaknesses of the protagonist, Aylmer, is his pride in knowledge. Aylmer's craze for his scientific career occupies his mind and his overwhelming enthusiasm turns to be a destructive power that not only harms Georgiana and also destroys himself. What Aylmer represents is extreme individualism since he values his scientific achievements more than his wife's life. This extreme individualism deprives people's compassion towards others, as Hawthorne observes in the story.

## 3.2. Neo-Humanism

The reciprocal relationship between the text is not only revealed in the historical influence on "The Birthmark" but also evinced in the story's impact on society. Hawthorne, by implying Neo-Humanism in "The Birthmark", attempts to reconcile the conflicts between science and humanity and foresee an idealistic picture of social development.

Humanity has always been the central theme of Nathaniel Hawthorne's science fiction. Melville argues that Hawthorne's literary works possess "such a depth of tenderness, such a boundless sympathy with all forms of being, such an omnipresent love, that we must need say that this Hawthorne is here almost alone in his generation".[15] In "The Birthmark", Hawthorne's exploration of humanity manifests itself in his description of Aylmer, the man of science who is physically sound yet psychologically disturbed, and Aminadab, the human machine who is physically unattractive yet psychologically healthy. Aylmer, together with Roger Chillingworth in *The Scarlet Letter* and Dr. Rappaccini in "Rappaccini's Daughter," constitutes Hawthorne's the man of science whose intellectual ingenuity is overshadowed by their unsympathetic minds. Though the story ends with Aylmer's tragedy, Hawthorne is not entirely frustrated at scientific progress. It is through Aminadab that Hawthorne reveals the beauty of soul. Aminadab occasionally shows his disagreement with Aylmer's inhuman scientific experiment and his care for the health of Georgiana. Noticeably, Hawthorne ascribes two merits to Aylmer and Aminadab respectively: acute mind and compassionate heart. This special characterization reveals Hawthorne's attitude toward science. On the one hand, he perceives that the overstatement of reason and trust in science will cause destruction. On the other hand, he believes compassion and respect for human dignity can compensate for the weakness in scientific development.

What Hawthorne advocates in "The Birthmark", is a Neo-Humanism ideology that not only emphasizes reason and social progress but also persists in human integrity. [16] The Neo-Humanism tries to amend the weakness in scientific development. In the story, Aylmer's indulge in his pursuit of science leads to the death of his wife, proof of the devastating power that science embodies. What's more, Aminadab's frequent concern for Georgiana's safety, in contrast to Aylmer's disregard for Georgiana's welfare, demonstrates the importance and necessity of compassion and respect for human dignity. The Neo-Humanism idea shown in Hawthorne's "The Birthmark" is not merely a response to the historical context since it also sheds light on the development of modern science. The gene coding experiment on babies once stunned people and it is high time to reevaluate the way how science develops. In this sense, "The Birthmark" is an inspiring story that not only responds to the social problems in the industrial age but also exerts its influence on a larger historical context.

#### 4. Conclusion

Hawthorne's science fiction, in which he probes into complex moral problems and expresses his concern with scientific progress, always has the power to puzzle and fascinate readers as well as critics. Based on Louis Montrose's concepts of the Historicity of Texts and the Textuality of History, this paper, by exploring the dialogical interplay of "The Birthmark" and the historical circumstances it reflects, demonstrates that story is historically constructed, and the Neo-Humanism implied in the story can have a positive role on the development of modern society. On the one hand, one can have a glimpse of Hawthorne's interpretation of the industrial age through the alienation of man in the story. On the other hand, the influence of American Transcendentalism on the story and the illuminating

Neo-Humanism that Hawthorne suggests in the story fulfills the story with historical functions.

Through the allegory of a mad scientist in "The Birthmark", Hawthorne warns his contemporaries that the advances in technology and piling up of material achievements may lead to the alienation of men. While people are driven by their lust and isolated in the infinite pursuit of earthly enjoyment, they become pure vassals of their desire and lost the benignity and compassion toward other individuals. This text, echoes with Mary Shelley's 1818 novel Frankenstein, illustrates how the blind pursuit of knowledge and science leads to the tragedy of humanity, and how the unceasing desire accumulates to self-destruction. Through Aylmer's failure in his scientific project, Hawthorne expresses his concern towards the dehumanizing nature of unregulated scientific experiments and sweeping materialism in society. Nevertheless, in spite of the portrayal of the morbid scientist Aylmer in the story, Hawthorne is not entirely hostile to science and progress, yet he indeed points out the moral hazard in scientific development. Hawthorne intends to advocate a Neo-Humanism that emphasizes both scientific progress and humanistic concern. On the one hand, Hawthorne acknowledges the welfare that scientific progress brought to the human. On the other hand, he warns the public to be vigilant at scientists' neglect of human dignity and integrity. The Neo-Humanism shown in the story, the convergence of science and humanity, is truly a guidance to the development of science.

#### References

- [1] Edward H. Rosenberry, "Hawthorne's Allegory of Science: 'Rappaccini's Daughter,'" American Literature, Vol.32, No.4, 1960, p.42.
- [2] Howard Bruce Franklin, Future Perfect: American Science Fiction of the Nineteenth Century: An Anthology, New Jersey: Rutgers University Press, 1995, p. 17.
- [3] Henry G. Fairbanks, "Hawthorne and the Machine Age," American Literature, Vol.28, No.2, 1956, p.163.
- [4] Chiyo Yoshii, "Humanity as Matter: Nathaniel Hawthorne's Vivacious Materialism in 'The Birth-mark' and 'Rappaccini's Daughter'," Literary Imagination, Vol.22, No.3, 2020, p. 226.
- [5] Charles E. Bressler, Literary Criticism: An Introduction to Theory and Practice, New Jersey: Prentice Hall College Div, 1994.
- [6] Louis A. Montrose, "Professing the Renaissance: The Poetics and Politics of Culture," in Harold Aram Veeser (Ed.), The New Historicism, (New York: Routledge, 2013), p. 20.
- [7] Leland S. Person, The Cambridge Introduction to Nathaniel Hawthorne, New York: Cambridge University Press, 2007, p. 16.
- [8] Nathaniel Hawthorne, "The Birthmark," In Huang Pei (Ed.), 101 Classical Short Stories, Tianjin: Tianjin Renmin Print, 2019.
- [9] Nathaniel Hawthorne, The Letter, 1813-1843, Ed. William Charvat et al., Columbus: Ohio State University Press, 1984, p. 330.
- [10] Jane Tompkins, Sensational Designs: The Cultural Work of American Fiction, 1790-1860, Oxford: Oxford University Press, 1986, p. 19.
- [11] Peter Rietbergen, Europe: A Cultural History, London and New York: Routledge, 1998, p. 318.
- [12] Yangjie Liao, The Acception, Suspicion and Transcendence of Hawthorne to Transcendentalism, Xiangtan University, MA thesis, 2006, p. 14.
- [13] Henry David Thoreau, Walden, New York: Cosimo Classics, 2009, p. 36.
- [14] Emory Elliott, The Columbia Literary History of the United States, New York: Columbia University Press, 1988, p. 413.
- [15] Herman Melville, "Hawthorne and His Mosses," in J. Donald Crowley (Ed.), The Critical Heritage: Nathaniel Hawthorne, London and New York: Routledge, 2002. p. 114.
- [16] Shaopin Gan, "The Inspirations form the Neo-Humanism," Philosophical Research, No. 06, 2011, p.68.