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# Evolutionary landscapes: adaptation, selection, and mutation in 19th century literary ecologies

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# EVOLUTIONARY LANDSCAPES: ADAPTATION, SELECTION, AND MUTATION IN 19TH CENTURY LITERARY ECOLOGIES

by

Chad Allen Hines

An Abstract

Of a thesis submitted in partial fulfillment
of the requirements for the Doctor of
Philosophy degree in English
in the Graduate College of
The University of Iowa

May 2010

Thesis Supervisor: Associate Professor Laura Rigal

# ABSTRACT

How can a literary theorist account for unselected texts and narratives, and measure the importance of voices no longer audible to readers today? The following dissertation uses 19$^{th}$ century literary texts by Edgar Allan Poe, Herman Melville, Edward Bellamy, W. D. Howells, Mary Wilkins Freeman, and others as points of departure for considering the complex forces affecting the selection and replication of literature over time within a wider field of anonymous and unwritten narratives.

Bridging literary theory and Darwinian science, "Evolutionary Landscapes" argues that concepts of mutation, replication and selection can provide a framework for thinking about emerging narratives and literary genres in the 19$^{th}$ century United States. Current attempts to bring biological insights directly into literary study through evolutionary psychology or cognitive Darwinism ignore the complex systems, including cultural and market forces, affecting a given text's chances for longer-term survival. The figure I choose to represent these economic, unwritten, and cultural influences on literary texts is the "adaptive landscape" developed by the geneticist Sewall Wright, and recently expanded upon by the evolutionary theorist Michael Ruse.

The relationships between texts and ecologies fore-grounded in the following chapters necessitate reading literature from the point of view of the random mutation and subsequent selection of texts in the face of a collectively determined ecology of formal expectations. My approach to the evolution of literature builds on the work of the literary critic Franco Moretti and the philosopher Daniel Dennett; as a study of U.S. rather than British fiction, however, it casts a different light on literary evolution than that described yet by Moretti, and deals more specifically with questions of literary and cultural history

than either Dennett's philosophy of memetics or Carroll's socio-biologically inflected Literary Darwinism alone would allow.

The 19th century literary ecology to which the fictions of Poe, Melville, Bellamy and Freeman were well or poorly adapted can be imagined as a kind of fitness landscape where literary publications are drawn towards the metaphoric "peaks" established by successful precedents and formulae in the past. A gradualist focus on textual silence and extinction within literary history, through the lens of evolutionary and ecological theory, can, I argue, reveal the complex ecology of oral, cultural, written, printed and reprinted information that constitutes the "soft tissues" always missing from the archival past.

Abstract Approved: ______________________________
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May 2010

Thesis Supervisor: Associate Professor Laura Rigal

Graduate College
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CERTIFICATE OF APPROVAL

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PH.D. THESIS

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This is to certify that the Ph.D. thesis of

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has been approved by the Examining Committee
for the thesis requirement for the Doctor of Philosophy
degree in English at the May 2010 graduation.

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Russell Valentino

To the whole family.

"Very little literature strays far from science, and much brings us back to science. Very little science strays far from literature, and much brings us back to literature."

Michel Serres
*The Parasite*

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# ABSTRACT

How can a literary theorist account for unselected texts and narratives, and measure the importance of voices no longer audible to readers today? The following dissertation uses various, and variously successful $19^{th}$ century literary texts as a point of departure for considering the complex forces affecting the fragment of texts selected over time from within a wider field of anonymous and unwritten narratives.

Bridging literary theory and Darwinian science, “Evolutionary Landscapes” argues that concepts of mutation, replication and selection can provide a framework for thinking about how narratives and popular genres developed in the $19^{th}$ century U.S. Current attempts to bring biological insights directly into literary study through evolutionary psychology or cognitive Darwinism ignore the complex systems, including cultural and market forces, that might have been used to predict a given text’s chances for longer-term survival. The figure I choose to represent these economic, unwritten, and cultural influences on literary texts is the “adaptive landscape” developed by the geneticist Sewall Wright, and recently adapted by the evolutionary theorist Michael Ruse.

The following chapters, even when dealing with individual authors, foreground the complex relationships between texts and their surrounding ecologies, looking at literature from the point of view of the random mutation and subsequent selection of texts in the face of a collectively determined ecology of formal expectations. My approach to the evolution of literature builds on the work of the literary critic Franco Moretti and the philosopher Daniel Dennett, although a turn to U.S. rather than British fiction, casts a different light on literary evolution than that described yet by Moretti, and deals more

specifically with questions of literary and cultural history than either Dennet's philosophy of memetics or Carroll's sociobiological Literary Darwinism alone would allow.

The 19th century literary ecology to which the fictions of Edgar Allan Poe, Herman Melville, Edward Bellamy and Mary Wilkins Freeman were well or poorly adapted can be imagined as a kind of "adaptive landscape" where literary publications are drawn towards the peaks climbed by previous writers, representing conventions or formula that proved to be successful in the past. A gradualist focus on textual silence and extinction within literary evolution, along with evolutionary and ecological theory, can provide abstract models for the complex ecology of oral, cultural, written, printed and reprinted information that constitutes the "soft tissues" always missing from the archival past.

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# INTRODUCTION: EVOLUTION, CRITICAL ECOLOGIES AND LITERARY SURVIVAL

The following chapters are variations on a single theme: that 19th and early 20th century literary texts were shaped by a Darwinian environment. "Darwinian," however, refers (in the case of Darwinian literary study) not only to biological evolution, but more broadly to any kind of process where information replicates and survives. According to my central thesis, the selection or extinction of literary texts took place within a particular cultural and historical ecology, where selection was at play in determining the language, plots, and genre conventions that were replicated by authors, and in shaping the course of literary evolution. More importantly, selective replication also affected what texts survived over time within an extensive environment of publishers and readers.

Recent critics and philosophers such as Franco Moretti, Joseph Carroll, and Daniel Dennett have each presented important models for the application of Darwinism to literary study. Moretti's quantitative analysis of literary archives, Carroll's insistence on the importance of human evolutionary biology in explaining narrative structures, and Dennett's argument for a general theory of selection operating in culture as well as nature, all provide key elements for mapping and explaining the evolutionary landscape of American literature in the 19$^{th}$ century. They provide—in widely divergent and yet compatible ways—reasons to make evolution central to an understanding of both literary history and individual works. The unique intervention of the following project is to take existing debates and theories about evolution and narrative and show how these ideas

play out on the stage of popular U.S. (rather than British) literary genres. The culture of Darwinism changed British literary history, but the following examinations of 19th century American literary texts illustrate how post-structuralist literary theory today often ignores Darwinian aspects of the production of *all* literature, along with other forms of narrative.

Evolutionary science has itself evolved significantly over the past two centuries, with many false starts, detours, and distortions.[1] Theories of evolution were subject to a process of selection within the cultural landscape of the U.S. in the late 19th century, resulting in their adaptation to, among other things, particular notions of universal progress.[2] My focus will be on the role of selection, mutation, and adaptation in 19th century literary markets (and in literary texts) of the primarily urban and Northeastern United States, during a period when the theory of evolution itself was evolving. From Poe's gothic fiction to Herman Melville's repeatedly failed novel *Mardi*, to Bellamy's utopian collaborators and the collaborative novel *The Whole Family*, I will argue, reasoning analogically from the processes of biological evolution, that the popular,

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[1] On general history, see Gertrude Himmelfarb's *Darwin and the Darwinian Revolution* and Richard Hofstadter's book *Social Darwinism in American Thought 1860-1915* (both published in 1959). Carl Degler's *In Search of Human Nature: the Decline and Revival of Darwinism in American Social Thought* (1991) gives a more recent intellectual history. For an overview of the culture of 19th century American Darwinism, see Cynthia Eagle Russet's *Darwin in America: the Intellectual Response, 1865-1912* (1976) and Ronald R. Numbers' *Darwinism Comes to America* (1998).The idea of the "evolution" of science is discussed by Thomas Kuhn in the *Structure of Scientific Revolutions* (1970) and David Hull in *Science and Selection: Essays on Biological Evolution and the Philosophy of Science* (2001).

[2] Michael Ruse argues in *Monad to Man: the Concept of Progress in Evolutionary Biology* (1996) and *Evolutionary Naturalism* (1995) that concepts of Darwinism and progress are inextricably linked in scientific history (and in the figure of Sewall Wright's adaptive landscapes).

literary-historical commercial success of texts depended on an extensive ecology of related works, now largely forgotten. I will rely on three key concepts of ambiguity, orality, and collaboration to illustrate an evolutionary approach to literature informed by the "universal Darwinism" of Daniel Dennett, the "literary Darwinism" of Joseph Carroll, and the theories of "literary evolution" practiced by Franco Moretti.[3] These three categories of discussion will demonstrate the continuity between Darwinian literary theory (as I define its most important insights), and the central concerns of formalist and post-structuralist attention to genre and textuality, as well as historicist and post-colonial approaches to discursive and capitalist market environments. In each case evolutionary literary criticism provides a way to extend a theorization of the ambiguous, oral, and collaborative nature of texts beyond their existence as static artifacts, by restoring them to the a dynamic ecology of discursive narrative and formal replication (both external to and internal to a text) that is extended through deep historical and biological time.

My study of Poe's fiction in Chapter 1 will adapt Moretti's use of Darwinian trees in order to foreground how literary structures of replication within a surrounding cultural ecosystem were mirrored internally within Poe's fiction. This includes playing towards the confirmation biases of readers (and thematizing the mechanisms of recursive deferral to popular tastes) in ways that rely centrally on the generation of ambiguities that will, ultimately, dictate the survival or extinction of narratives both in the 1830s and 1840s and

[3] The most relevant texts are Dennett's *Darwin's Dangerous Idea: Evolution and the Meanings of Life* (1995), Carroll's *Literary Darwinism: Evolution, Human Nature, and Literature* (2004), and Franco Moretti's *Graphs, Maps and Trees: Abstract Models for a Literary History* (2005) along with his chapter "On Literary Evolution" in *Signs Taken for Wonders* (1983).

in more contemporary canon formation. This chapter will emphasize the formal structures of initial ambiguity which are responsible for Poe's gothic effects and detective solutions. It will also locate differences between the local, contingent environments responsible for texts' initial selection in 1830s and '40s literary markets, and the formal qualities that allow these same texts to become the site of longer-term interpretive "games." In Chapter 2, then, I turn to orality as an index of historicity, specifically the history of the U.S. imperialism among the Pacific Islands. While focusing primarily on the internal dynamics of Melville's *Mardi*, where the text invokes the oral culture of the Pacific Islanders to draw equivalences between storytelling and print, I will argue that it was these equivalences, linking orality and literacy, that contemporaries found "unreadable" from within the dominant paradigm of cultural and technological progress, a paradigm that continues to influence the adaptive landscape surrounding Melville's texts (forecasting their chances for survival) . The enduringly unpopular novel published in 1849, in the wake of the European revolutions of 1848, indicates that complex, allegorical narratives (such as that readers have rejected in *Mardi*) are not solely the purview of literate cultures, and that such narratives can and do exist outside modern and market-place models of professional authorship, surviving and even resisting the mechanistic frameworks that seek to supplant them.[4] By grounding literature in evolutionary biology, the presumed incompatibility between humanistic inquiry and current scientific research can be mitigated by an attention to the philosophy of

[4] Perry Miller's *The Raven and the Whale* (1956) and F. O. Matthiessen's *American Renaissance* (1941) are both detailed studies of the publishing fortunes and misfortunes of Poe and Melville.

"memetics," which considers the differential survival of human beliefs and behaviors as part of an overall ecology of information, also susceptible to Darwinian analysis.[5] Memetics as a general branch of information theory illuminates the importance of extra-textual networks in determining the fitness or adaptability of literary works, be they the informal collaborations of late 19th century utopias, as discussed in Chapter 3, or the collaborative novel I turn to in Chapter 4, *The Whole Family* (1908), to which Mary Wilkins Freeman, Henry James, and ten others contributed.[6] Although Darwinian theory provides, in each case, a functional frame for textual and inter-textual analysis, the applicability of the conjunction of literary and evolutionary/memetic theory is taken as a problematic point of departure.

Perhaps the most important literary scholar to use Darwinism as a way to analyze literary archives is Franco Moretti, whose *Graphs, Maps and Trees* (2005) lays the groundwork for an evolutionary approach to literature. Moretti's "literary evolution" is starkly different from Joseph Carroll's "literary Darwinism," which, rather than seeing biological evolution as an analogy for literary evolution, attempts to ground theories of literature directly in human biology. I disagree with Carroll's insistence on an individual, evolved psychology as the necessary starting point for all literary interpretation, and with his categorical dismissal of all but the most scientifically bounded approaches to the

[5] See Richard Dawkins' *The Selfish Gene* (1989) where the theory was introduced, *The Selfish Meme: a Critical Reassessment* by Kate Distsin (2005), Dennett's "Memes and the Exploitation of the Imagination" (1990), and Susan Blackmore's *The Meme Machine* (1999).

[6] June Howard's *Publishing the Family* (2001) describes the project and the importance of symbolic familial wholeness as a metaphor for the *Harper's* magazine and its subscribers. Susanna Ashton's *Collaborators in Literary America, 1870-1920* (2003) also provide historical background for Chapters 3 and 4.

criticism of literature.[7] By contrast, the more broad and flexible scope of Daniel Dennett's universal Darwinism in *Darwin's Dangerous Idea* renders it an excellent philosophical tool, but a blunt instrument for literary analysis. Dennett compares the idea of natural selection to a "universal acid" because "it eats through just about every traditional concept, and leaves in its wake a revolutionized world-view, with most of the old landscapes still recognizable, but transformed in fundamental ways" (63). Literature is, for Dennett, an illustration of his overall philosophy of replication, because the literary "memes" use human minds as an ecology, and their success or failure is determined by the adaptive interests of these words/texts/generic patterns of repetition, and not those of the host organism. In the case of Dennett's universalism, the theory's universal applicability comes to resemble (in its imprecise intersections of figure and fact) the totalizing Darwinisms advocated by scientists like Dawkins or Darwinian literary critics like Carroll. Much remains to be done before a coherent model of literary evolution can be proposed that is compatible with methods of close-reading and historical interpretation, both of which have proven necessary in understanding the interplay of cultural and multi-textual environments of replication. Dennett's use of evolutionary models to account for cultural phenomena is therefore limited, due to its scale, in perceiving and theorizing the "greed" of Darwinian reductions in literary analysis. [8]

[7] See J. Whitfield's "Literary Darwinism: Textual Selection" (2006) that offers a critical look at Literary Darwinism's leading practitioners, who often ignore another meaning implicit in the term, namely that Darwinian thinking can be applied to literature itself. For a response to broader sociobiological claims, see *Not in Our Genes* (1984) by Richard Lewontin.

[8] See "Adding Rooms to Darwin's House" in *The Electric Meme: A New Theory of How we Think* (2002) by Robert Aunger. On Darwin and literature, see Bert Bernder's *The Descent of Love: Darwin and the Theory of Sexual Selection in American Fiction 1871-1926* (1996) and

Moretti’s work with British novels and short fiction of the 19th century provides a better precedent than Dennett or Carroll for my own analysis of genre and survival in U.S. literary markets. Of the three theorists, Carroll's approach is the closest, on the literary side, to E.O.Wilson’s sociobiology and calls for total consilience between disciplines. Carroll wants to reform not only literary theorists’ attitudes towards science, but to establish an ultimately scientific basis for all literary meaning.[9] This dissertation adopts a pluralistic approach, drawing from all three thinkers, in the spirit of the philosophical “pragmatism” of William James.[10]

Moretti, Carroll, and Dennett each represent how the science—and not just the cultural discourse—of evolution can provide insights into the shape of literary landscapes, and the changes texts and their environments undergo. Like Moretti’s *Graphs, Maps, and Trees*, this project is especially interested in reading all texts against the vast neglected mass of unread narratives that have not been conserved by literary selection – if, that is, we view literary selection as explaining survival within the literary competition of a text’s initial production, and in the period of its reception in the

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Gillian Beer’s *Darwin’s Plot’s: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction* (1983).

[9] His *Evolution and Literary Theory* (1995) is a polemical attack on Lacanian, Foucauldian, and Derridean literary critics. For evolutionary arguments about the arts in general, see Denis Dutton’s *The Art Instinct: Beauty, Pleasure and Human Evolution* (2009) esp. “Landscape and Longing.”

[10] For more on James and Darwinism, see “Darwinism in James’ Psychology and Pragmatism” (1949) by Philip Wiener, and more recently “Pragmatism” in Louis Menand’s *The Metaphysical Club: a Story of Ideas in America* (2001), and Hofstadter’s “The Current of Pragmatism” (1945) where he writes that “The focus of the logical and historical opposition between pragmatism and Spencerian evolutionism was in their approach to the organism-environment relationship” (103).

environments of very recent literary criticism which selects texts for replication, reprinting, and canonicity. One reason for attending to this vast, neglected backdrop of now comparatively unread, even virtually invisible texts, is that if the narrative replication is a Darwinian process, then an exclusive focus on the fragment of archival material that achieves long-term survival is insufficient to gain a sense of the environment of writing, publishing, and reading, out of which the successful textual variants emerged, and on which their initial acceptance depended.[11]

Similarly, when Darwinian theory itself is viewed, in parallel, as an evolved species of replicated information within a discursive and systemic environment, then any study of Darwinian theory between 1832 and 1919 in the United States can restore to visibility the number of variant hypotheses and associations that have been jettisoned over time during the professionalization of evolutionary thought. While there have been recent studies of pre-Darwinian or Spencerian evolutionism in American culture, very little work has been done relating these non-Darwinian evolutionary ideas specifically to literary analysis—and to the literature produced within this environment of non-Darwinian Darwinism before the first World War. An accurate understanding of evolutionary culture in the 19th century depends, in part, on an understanding of subsequent developments in evolutionary science, in order to provide reference points for the parallax of past distortions.

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[11] See esp. "The Publisher's Market" and "The Book Peddler and Literary Dissemination" in Ronald Zboray's *Fictive People: Antebellum Economic Development and the American Reading Public* (1993).

From the point of view of their function within the conjoined formal and historical replication of winners and losers (as regards both theories of evolution, and 19$^{th}$ century literary texts), some neglected literary texts do not deserve their obscurity. In the chapters that follow my interest in the reclamation of certain novels or stories goes beyond their ability to illustrate points of development in what Moretti calls "literary evolution." Rather, placing a story like Edgar Allan Poe's forgotten "Mystification," alongside tales that have out-competed it, such as "The Gold Bug," or "The Purloined Letter," draws attention to the strategies that made for more successful (widely replicated) texts, while also suggesting that within a 21$^{st}$ century literary critical environment (in which the concepts of selection, replication, and mutation have evolved far away from 19$^{th}$ century Spencerian versions of Darwinian science as a narrative of historical progress), the verdict of dismissal could be reversed. In Chapter 2, for example, I will argue that Herman Melville’s *Mardi* was and continues to be undervalued due to the evident influence his work of the genre and discourses of the “philosophical romance,” which was inflected with oral narrative traditions and non-European modes of storytelling inassimilable to professionalized authorship and public profit. Similarly, in Chapter 3, I argue that present-day attention to Edward Bellamy's *Looking Backward* has overshadowed the importance of the enormous number of prequels and sequels in buttressing Bellamy’s popularity and his influence on political debates. The fact that the utopian genre encouraged arguing with preceding source texts by adapting them—borrowing settings, plots and characters—is crucial in understanding how *Looking Backward* remained in the public consciousness of the U.S. for so long. In this case, it is

not a question of whether *Looking Backward* is of higher quality than subsequent utopian novels, such as Richard Michaelis' *Looking Further Forward* (1890), or Ludwig Geissler's *Looking Beyond* (1891). The point, rather, is that its popularity cannot be understood in terms of individual works at all, but only within a symbiotic network of related texts, describable (metaphorically) in terms of ecological or adaptive landscapes that are not progressive, but selective. In Chapter 4, in turn, I argue that the collaboratively produced novel *The Whole Family* (1906) ended up ill-fated for long-term survival because its appeal lay primarily in what it revealed about the interactive, mutually generative relationships between its twelve different authors. Like the emergence of an extended utopian narrative within the distributed field of Bellamy's precursors and imitators, *The Whole Family* emerged out of a neglected context of other anonymous or collaborative publications.[12] In a way similar to but distinct from the past and present invisibility of *Mardi*, or the neglect of Bellamy's echoes, mimics, and predecessors, the collaborative nature of *The Whole Family* precluded it from consideration as serious literature in a publishing culture that replicated (and worked against) romantic notions of the individual author and his or her expressive style.[13]

Long-term survival, rather than a reliable metric for literary quality, should be seen as an unlikely exception to the ephemeral life-span of almost all 19th century texts.

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[12] Among those noted by Ashton are "The No Name Series" in 1876 that published novels anonymously, the utopian *Unveiling A Parallel, A Romance* (1893), *The Gilded Age* (1873) by Mark Twain and Charles Dudley Warner, and *The Kings Men* (1884), by Robert Grant and others.

[13] See Brander Matthews, "*The Art and Mystery of Collaboration* (1892).

The following project is idiosyncratic in that, while borrowing conclusions from quantitative science, I will not replicate Moretti's and others' attempts to transport scientific or statistical methods into the analysis of changes in literary genres. There is still a large amount of theoretical work left to be done before evolution is accepted as a viable framework for mainstream literary criticism. In particular, the forces behind the long and short-term survival of texts, and the complicated interdependence of literary, cultural, and biological ecologies needs to be further elaborated.

The central goal of this dissertation is to assert the relevance of the adaptive landscape to the theory or theories of literary evolution, as a locus where formal replication, internal to texts and genres, meets historical environments (which include pre-Darwinian, non-Darwinian, and Darwinian evolutionary theories). It focuses on the dynamic interplay between the evolutionary emergence of internal, formal properties of replicated texts, and their external historical and discursive environments (past and present). In each chapter, and for every given literary ecology from Poe to *The Whole Family*, I will analyze textual survival in terms of both the contemporary environment of a 19$^{th}$ century literary market, and the formally ambiguous textual "strategies" for longer-term survival, without which texts still read in the present would join the nearly infinite ranks of extinction and obscurity. This dissertation argues that evolution is a concept relevant to literary study in ways that go beyond the co-presence of "evolutionary ideas" in the cultures that produced the texts in question. Evolutionary losers in literature (as well as evolutionary concepts and forms lost to the practice, but not the history of modern science) can help reveal selection pressures exerted by both 19$^{th-}$century literary markets

and the canons of literary-cultural memory of the present and more recent past. When used flexibly and pragmatically, the diverse but closely related theories of literary evolution (such as Dennett's, Carroll's and Moretti's) can be used not only to mitigate forms of literary Darwinism that are crudely patterned on cognitive science and socio-biology, but also to open up conceptual exchange between close reading practices that view forms as replication strategies and the evolutionary science(s) of literary history.

## Drift: Mutation and Continuity

The British evolutionist Herbert Spencer (1820-1903) in his *Illustrations of Universal Progress* of 1888 (the same year as *Looking Backward*), adapts the figure of a seashell used earlier by Ralph Waldo Emerson.[14] Spencer paraphrases the American philosopher as claiming that "what Nature at one time provides for use, she afterwards turns to ornament," and that Emerson "cites in illustration the structure of a sea-shell, in which the parts that have for a while formed the mouth are at the next season of growth left behind, and become decorative nodes and spines" (433). History has cast Spencer as an unsuccessful foil to Charles Darwin's lasting achievement—with Spencer himself as one of the ornamental growths in the widening circles of evolutionary science—who, when he is remembered at all, is remembered foremost for having been wrong. Spencer's *First Principles* (1860), published just a year after Darwin's *Origin,* expounds a "Synthetic Philosophy" in which a universal law of evolutionary progress dictates development from homogeneous simplicity to heterogeneous complexity. In Spencer's

[14] "The Conservative," in which the shell appears, is the second in a series of "Lectures of the Times" given by Emerson between Dec. 1840 and Jan. 1841, later reprinted in "The Dial."

unifying theory, now vilified, this inevitable progress towards higher, more perfect forms holds not only for biological organisms, but for physical matter, culture, and societies. Spencer meant, through one universal law, to account for the distance that complex, heterogeneous industrial life, with pronounced economic and class divisions, was imagined to have come from the "primitive" state of other cultures.

Spencer transforms Emerson's seashell into one of his many "Illustrations of Universal Progress," which, he suggests, preserves the forms of an obsolescent past as picturesque ruins. Human civilization is like the shell, Spencer writes, in that "here, too, the appliances of one era serve as embellishments to the next. Equally in institutions, creeds, customs, and superstitions, we may trace this evolution of beauty out of what was once purely utilitarian" (433). Spencer, using Emerson as a decorative illustration of his own argument, actually misrepresents the American philosopher, who states that innovation and conservatism are opposing forces that, insufficient in themselves, are required to keep one another in balance. Spencer's use of Emerson's "citation" of the closed chambers of a nautilus shell (as progressing from functional use to useless beauty) is therefore self-illustrating: the adaptive misrepresentation of Emerson's text renders it ornamental, like one of the spines of last year's growth.

If Spencer is right that "past habits, manners, and arrangements, serve as ornamental elements in our literature," while appropriating Emerson's metaphor of cumulative and cyclical growth to ornament his own conviction of "Universal Progress," how does a text like Spencer's figure into the horizon of other modern-day theories of Darwinism? Are competing naturalists like Jean Baptiste Lamarck (1744-1829), Alfred

Russell Wallace (1823-1913) and Herbert Spencer merely decorative footnotes to an accurate and more "developed" understanding, or is modern evolutionary science still functionally dependent upon these earlier cultural ideals? Similar to how Franco Moretti believes that a quantitative analysis of the archive can restore to visibility the losers in past struggles for literary survival, a cultural analysis of early evolutionary thought is necessary for a complete picture of the process by which certain versions of Darwinian thinking were selected, and how current versions of evolutionary philosophy have precedents in neglected branches of intellectual history. False and misleading theories of evolution persisted in America long after 1859, as evidenced by the fact that Spencer, not Darwin, was the evolutionist of choice well into the 20th century.

*Martin Eden* (1909) by Jack London testifies to the endurance of Spencer's influence in the United States. London has his young protagonist converted by *First Principles*, where the young Eden finds Spencer "organizing all knowledge for him, reducing everything to unity, elaborating ultimate realities, and presenting to his startled gaze a universe so *concrete* of realization that it was like the model of a ship such as sailors make and put into glass bottles" (149, my emphasis). The ability of Spencer's Synthetic Philosophy to generalize, finding connections and common laws between disparate natural and social phenomena—"from the farthermost star in the wastes of space to the myriads of atoms in the grain of sand under one's foot"—is what London's character Eden finds irresistible, convincing him that "to give up Spencer would be equivalent to a navigator throwing the compass and chronometer overboard" (150-153).

Throwing Spencer overboard, however, along with his supposedly universal bearings on moral and human progress, is precisely what Darwinian science has done.

Spencer, Alfred Russell Wallace, Jean Baptiste Lamarck, Ernst Haeckel, and others infused evolution in the 19th century with an array of theological, teleological, romantic and mystical beliefs that Darwinism, even after passing through more than a century of the crucible of scientific method and empirical verification, has not entirely shaken off. Although the generalizing scope of Spencer's evolutionary thinking has proved anathema to the empirical methods of Darwinian science, philosophers like Daniel Dennett have continued to show enthusiasm for grand, unifying theories based on evolutionary principles. While evolutionary discourse is not a cryptographic key to unlock all other areas of culture and science, I do believe that something of functional value may be found in the picturesque ruins of the abandoned philosophies advanced by early evolutionists.

Nearly all writers on evolutionary science feel the need to cordon illegitimate from legitimate aspects of Darwinism with some sort of terminological barrier. Michael Ruse opposes "popular" to scientific Darwinism; Daniel Dennett sets "greedy reductionism" against his own kind of philosophical speculation; and both David Depew and Stephen Jay Gould use the term "iconic" to designate aspects of Darwinism in a popular culture that are infused with unscientific ideas, representations, and assumptions.[15] Depew defines the "iconic meaning" of Darwinism as "the sort of

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[15] See David Depew's "Darwin's Multiple Ontologies" in *Darwinism and Philosophy* (2005) and Stephen Jay Gould's *Wonderful Life: the Burgess Shale and the Nature of History* (1989).

imagery that crosses from one discipline to another, in part by circulating through the general public" (93).

Theorizing literary and narrative evolution therefore runs a similar risk of collapsing distances (between cultures, historical periods, literary genres and traditions). The reward, however, when done successfully, is that the selection of literature over time can be mapped as a dynamic field of environmental forces that determine what mutations will survive and replicate. Without establishing a basic continuity between scientific concepts and literary analysis, literary criticism alone runs the risk of repeating the kind of epistemic closure that the methods of deconstruction were, in fact, intended to counteract. Post-structuralist theory maintains that signs within a system of representation are mutually constituted and thereby ultimately indeterminate and arbitrary. And yet post-structuralist literary theory itself must be read as a second-order sign/system within a larger meta-language of academic, cultural, and scientific discourse, in relationship to which it is both non-synechdochal and inter-dependent.

Above all, evolutionary philosophy must theorize the inarticulate or voiceless (the "mute" in mutation). Since the1970s, this concern has informed much of the historically-inflected cultural in U.S. literary studies. Common to post-structuralist literary criticism is a call for radical de-centering, especially in terms of who speaks in scholarly discourse, and what narratives are chosen as representative within an infinitesimally small sample set, the contents of which are taken as an index to wider cultural terrain. Only by remembering presumably dead narratives— the alternative and invisible branchings in the course of narrative evolution—can a literary historian begin to

understand the gradualist, collectively determined and constantly changing landscape of textual survival.

"Mutation" is also key in understanding how Darwinian literary analysis differs from other, author-centered approaches to literary signification. Darwinian evolutionary critics view chance rather than necessity as the force behind narrative innovation. Here, the distinction between author-centered analysis and post-structuralist approaches to texts maps surprisingly well onto the distinction—noted by Moretti, Gould, Ruse, and others—of the dynamic point of transition from Lamarckian to Darwinian theories of evolution. "For Lamarck," Moretti writes in "On Literary Evolution," evolution is a monistic, undivided development, where the single principle of adaptation presides over both selection and variations: for Darwin, on the contrary, it is a dualistic process, irreparably split between variations dominated by chance, and selection governed by necessity" (263). For Moretti, variation through chance or mutation, and selection, are the two halves of literary history, which take place in distinct stages. "Chance alone will be active in the first stage, in which rhetorical variations are generated: social necessity will preside over the second stage, in which variations are historically selected," Moretti writes (263). In a footnote, he adds that "a history which is split between chance and necessity reduces to a minimum the role of conscious projects within literary development, and therefore denies to writers' poetics the explanatory function it has so often had for the culture of the Left…In a Darwinian framework poetics follows rhetorics—it is the effect, not the cause of literary variations" (307).

Herein lies the politically conservative, or perhaps merely apolitical logic of

Moretti's theory.  Here, too, is where Moretti's model fails to take into account the multiply determinant environments that Wright's landscape allows us to theorize.  A purely text-based model will not account for the multiple substrates, discourses, and media through which variation and selection can occur, including, for example, communication through oral and unwritten narratives. One of the goals of this dissertation is to open the causality of rhetorics to the voiceless or mute "backgrounds" of literary history as represented by oral communication.  Mutations and selections do not, in my view, occur episodically in distinct historical stages and in particular geographies. On the contrary, narrative material is constantly traveling among cultural matrices that are variously, and at once, oral, biological, written, and printed. This signals the central point at which I diverge from Moretti's overall model.  Moretti favors punctuated equilibrium taking place at a rapid rate of literary change, and so does not give enough attention to the contexts of extinction and silence. My readings of 19th century U.S. literary history suggest a less contrapuntal gradualism, in which evolutionary change accrues slowly across multiple domains.

The continued co-existence of literary and oral forms, like popular and privileged literary environments (which are both internal and external to textual replication strategies) is precisely why Carroll's version of literary Darwinism is unacceptable.[16]

[16] "In opposition to the radical multiculturalism prevalent now," Carroll believes it is possible to maintain "that Western civilization represents quite specific achievements in such areas as civil order, science, philosophy, art, architecture, literature, and the activity of critical intelligence; we can maintain that these achievements can be compared with the achievements of other cultures in the same areas, and that in some important respects, within identifiable scales of value, these Western achievements do in fact represent the highest level yet attained by any culture" (5).

Carroll's claims are ultimately not about literature: they are about the priority of the biology and psychology of evolution. As a project of literary interpretation, the arrow of argumentation in my study of U.S. culture (as expressed and excluded from printed texts) runs from science into literary theory, and not the reverse. I have worked to be as accurate as possible in my representations of the neo-Darwinian synthesis that remains the consensus among evolutionary biology, psychology, and neurology, but unlike Carroll I do not intend to draw inferences about evolved cognition from literature.[17]

In *Evolution and Literary Theory* (1995) especially Carroll ignores the internal, self-propagating split that emerges when biology meets narrative genres, forms, and textual reproduction. His work then is a kind of a theoretical counter-model. Moretti's literary Darwinism, by contrast, is informed by a self-conscious awareness of the figurality of his appropriation of Darwinian science. While using evolutionary biology as a framework for literary study, Moretti deploys Darwinian evolution as a metaphor in close relationship to the evidence of literary archives. Where Carroll deals with evolution *in* literature, Moretti and Dennett's more broad, informatics-based approach can help us account for the evolution *of* literature within the ever-changing environment of cultural selection. Rather than theorizing literary selection primarily as a tree, then, my appropriation of Wright's figure of the adaptive landscape is, in effect, an intervention in

[17] In the chapter "Ecocriticism, Cognitive Ethology, and the Environments of Victorian Fiction" Carroll asserts that "literature is produced by the psyche, not the ecosystem, and the psyche has been produced by natural selection," (87) and that "…deep ecology is not a serious philosophy or a serious basis for a literary theory. It is only another and yet more decadent form of radical posing" (89). In what, however, if not the ecosystem, is the psyche selected? Carroll himself argues that in *Bleak House* Edith was able to create a "coherent sense of personal identity" through her relationship to nature (100).

Moretti's method that insists upon theorizing what is unpublished, illegible, and invisible at the interface of formal replication practices and the cultural-historical (including market) topographies of the literary landscape.

<u>Adaptive Landscapes: Pragmatic Pluralism</u>

The geneticist Sewall Wright in a 1932 paper uses a highly abstract landscape to illustrate his "shifting balance" theory of genetic drift among populations. Its topology is arguably determined by mathematical rules of Mendelian genetics, determining the relative fitness of various possible combinations of genes. Importantly, the adaptive fitness of a particular gene combination does not have an absolute or univocal value; rather, fitness is relative, and dependent upon interactions with an environment and other organisms in the population. "From my studies of gene combination," Wright claims in 1932, "I recognized that an organism must never be looked upon as a mere mosaic of 'unit characteristics,' each determined by a single gene, but rather as a vast network of interaction systems. The indirectness of the relations of genes to characters insures that gene substitutions often have very different effects in different combinations and also multiple (pleiotropic) effects in any given combination." (quoted in *Monad to Man*, 368). In his description of the illustration, Wright points out that the topographical map is only representative of two out of many possible thousands of dimensions used to calculate fitness.[18] The same limited scope (of a few out of thousands of dimensions that shape

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[18] In "Are Pictures Really Necessary?: the Case of Sewall Wright's 'Adaptive Landscapes'" Ruse writes that Spencer's idea of "'dynamic equilibrium', a kind of progressive force upwards, from simplicity to complexity, from the valueless to the valued...was adopted in its entirety by [L. J.] Henderson and passed straight on to his pupil [Wright], who obviously translated it directly into populational genetical terms and who visualized it exactly in his

and measure fitness) will characterize my foray into the adaptive landscapes of 19th century American literary environments.

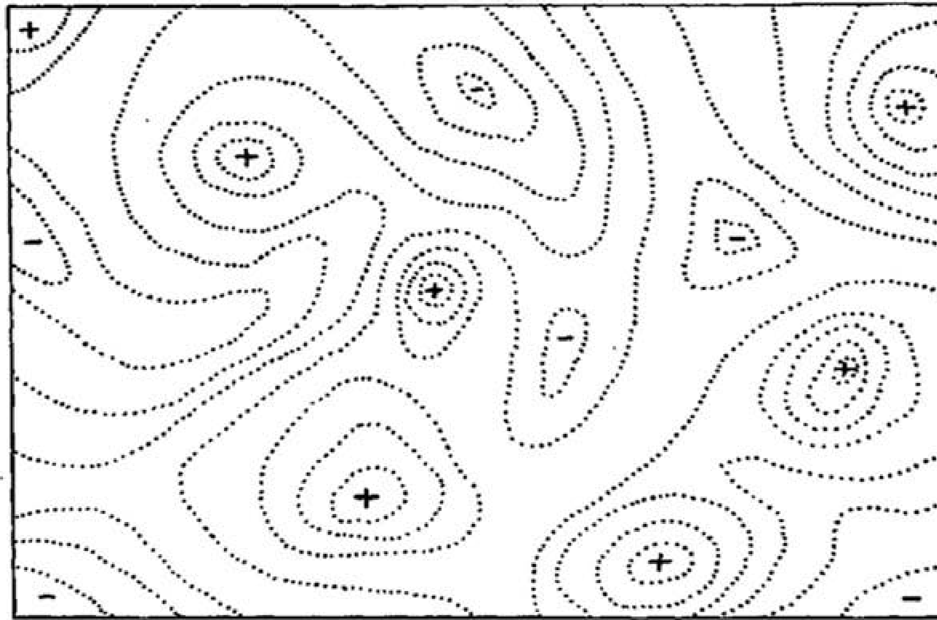


Figure 1. Sewall Wright's Adaptive Landscapes, from "The Roles of Mutation, Inbreeding, Crossbreeding, and Selection in Evolution" (1932).

In the same way that Franco Moretti uses Darwinian trees to illustrate his conception of literary evolution, the title of my dissertation signals a choice of Wright's landscape as an illustrative metaphor for the complex and emergent forces of literary evolution, where survival does not depend upon any single given structural element but rather a "vast network of interaction systems." The kind of evolutionary *philosophy* practiced by Moretti and Wright, as opposed to evolutionary psychology alone (as in

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landscape metaphor'" (61). He concludes that "Wright's adaptive landscapes have played a crucial role in evolutionary thought in this century. In themselves, they offer much of historical and philosophical interest. My feeling is that they point to matters and conclusions of much broader epistemological and ontological significance" (68).

Carroll) continues to provide a framework for thinking about differential selection in the abstract, allowing the reader to see the matrix of necessary ambiguities that constitute the link between biological/organic and literary/textual levels of evolutionary change.

In his work on 19th century English novels, for example, Moretti uses a quantitative analysis to demonstrate similarities between the popularity of certain genres and the success of populations of biological organisms. The waves of popular taste behind the rise and fall of hegemonic forms of the novel in 19th century Britain (such as historical romance, gothic, or epistolary novels) corresponds in his view with what happens in the evolution of species within a complex but finite ecology. Literary innovations are characterized by the same randomness, and subsequent tests for fitness, as morphological variations among species in biological evolution. [19]

Moretti's critics have accused him of reducing literary survival to a question of market forces. They also accuse him of failing to justify the quantitative methods he has developed to analyze literary data according to metaphors of genetics and biology. However, this critique misrepresents Moretti’s project. Simply because print markets behave in a way analogous to biological evolution (a claim based on patterns reflected in quantitative research) does not mean that the market is the sole determining cause of literary selection. Moretti's work does not rule out the possibility of other (ecological) influences on literary outcomes: the wider formal and cultural environments I am calling the adaptive landscapes of 19th century literary survival. Echoing Wright’s definition of

[19] For the best replication of Moretti’s methods for U.S. literature see John Austin’s “United States, 1780-1850” (2006).

“landscapes,” Moretti says, “I no longer believe that a single explanatory framework may account for the many levels of literary production and their multiple links with the larger social system: whence a certain conceptual eclecticism of these pages, and the tentative nature of many of the examples” (92). Moretti’s own tentative uncertainty is also consistent with the metaphorical “framework” of evolutionary population dynamics itself, since biological Darwinism has expanded its models of natural selection to include "multiple links" with larger systems. Moretti’s "On Literary Evolution" in *Signs Taken for Wonders* (1983) and the "Trees" chapter from *Graphs, Maps, and Trees* develop the metaphor of the market as an environment in which literary forms survive or go extinct. Formal techniques such as free indirect discourse, or possible structures in detective fiction, evolve for Moretti within cultural, social, and market systems through principles of divergence and selection. The advantage of envisioning literary development in terms of Darwinian trees is, as Moretti points out, restoring to visibility the "lost 99% of the archive" that is ignored when scholars give exclusive focus to the “winners” in the struggle for critical and popular attention (77).

My project will partially adopt Moretti's argument that the popularity and differential survival of literary genres can be usefully understood in the more capacious terms of population dynamics. I do not believe that the quantitative methods Moretti advocates are in conflict with a belief that evolutionary science (in the 19th century and today) derives from multiple forces of determination. The ambiguity of evolutionary metaphors, rather than a sign of a poor analogy, is a reminder that this ambiguity reflects a corresponding complexity in literary and textual selection. In modern Darwinian theory,

individuals are constrained, and their behavior is determined, by myriad scales of micro and macro evolution, from genes to groups, societies, and species. It follows from an evolutionary view of literature, that every "discovery" is predicated on a vast Darwinian engine of trial and error: machinery of selection and mutation that is inevitably ignored by a triumphalist or memorializing attitude towards past literary achievements. In the conclusion of his *Nature of Selection: Evolutionary Theory in Philosophical Focus* (1984), Eliot Sober points out that Darwin's view of natural selection remained tied to competition at the level of the individual, which may in part have been due to Darwin's attachment to conservative economic models, where independent agents striving against one another worked invisibly for the good of the nation's wealth. For whatever reason, Darwin's "idea of group selection remained wedded to an organismic paradigm," and the idea of higher (or lower) levels of selection was for a time unfashionable. Modern-day evolutionists, as Sober observes, are beginning to redefine survival in terms of groups and ecosystems.[20]

Wright's adaptive landscapes ultimately mandate an ecological approach to understanding evolution, and ecological versions of Darwinism replicate, in my view, many of the well-adapted aspects of William James' pragmatic philosophy. James describes pragmatism as a state of ongoing inquiry between the closed systems of reason and the indeterminate openness of experiential reality. According to James, pragmatic

[20] Hull et al. explain how genes can code for behavior or characteristics at levels of organization other than individual organisms, because "In addition to replicating, genes also code for phenotypes, and these phenotypes can be exhibited at various levels in the organizational hierarchy from genes, cells, and organisms to colonies, populations, and possibly entire species" (517).

philosophy draws much of its strength from its deployment as a method rather than any set of absolute principles or fixed concepts. Even once a result had been deduced or discovered, the terms of its conclusion remain in a state of openness. For James, this stands in direct contrast to the constructed and immutable world of rationalist philosophers, which "is far less an account of this actual world than a clear addition built upon it, a classic sanctuary in which the rationalist fancy may take refuge from the intolerably confused and gothic character which mere facts present. It is no explanation of our concrete universe, it is another thing altogether, a substitute for it, a remedy, a way of escape" (13). Only through repeated encounters with the tangled, gothic interrelationships between narrative, biological, and cultural history can a landscape of the multiple, pleiotropic forces determining literary survival begin to emerge.

# CHAPTER I: REPLICATION GAMES: APING DETECTIVES AND GOTHIC DISEASES

"In naturalism, no persons are natural. In naturalism, personality is always corporate and all fictions, like souls metaphorized in bodies, are corporate fictions."

Walter Benn Michaels
*The Gold Standard and the Logic of Capitalism* (1987)

Among the various ways of imagining the evolutionary landscapes of American authorship, the mathematical model presented by the geneticist Sewall Wright serves as a key figure. Originally meant, by Wright, to express the fitness of various gene combinations in a population of biological organisms, his adaptive landscape is also a useful way to think about generic centers of mass created by waves of popular taste and self-enforcing conventions in publishing. Wright's "shifting balance" theory refers to demands placed on populations for both homogeneity and heterogeneity, enforcement of certain strategies on the one hand, but with a tolerance for the production of variant phenotypes on the other, edging populations toward what Wright characterized as "drift," caused by genetic mutations.[21]

The focus of this chapter is one particular adaptive peak in Poe's publishing landscape, that of ambiguity or indeterminacy. Textualism and indeterminacy are the two features of post-structuralism that Joseph Carroll believes neo-Darwinian literary scholars

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[21] Both scientists and literary theorists remain hesitant to draw analogies between biological selection and other types of Darwinian processes because there is no feasible way to extend these arguments beyond "merely" analogical reasoning—stories do not actually have genes, nor do they reflect genetic frequencies in human populations in any direct or traceable way. As a method for conceptualizing a selective environment in publishing, however, Wright's landscapes can illustrate how narrative conventions such as genre become "fixed" in populations of literary texts.

should feel obligated to reject.[22] Poe's most successful stories, however, speak against this belief, using indeterminacy as an effective means of self-replication, and as a way of creating, over time, an ecology of plausible but conflicting possibilities of interpretation. Textualism, as inseparable from indeterminacy in post-structuralist methodologies, is also relevant to the cultural environments in which literary forms are selected and replicated. This is evident even in considering those "texts" reproduced in the antebellum period on oblong surfaces, problematically subject to counterfeit and imitation: paper bank notes.

In general, using Poe's short fiction as a sample set, it seems possible to make the following generalizations: first, that long-term selection for literary artifacts operates according to different criteria than the short-term selection cycles of initial publication and profit. A critical ecology of reprinting and re-reading differs in pressures and expectations from an immediate literary and financial environment of newspapers and journals. Second, that long-term survival generally favors the ambiguous over the specific, and generalized horror over comic particularity. While literary in-jokes and snubs at contemporaries have lost their appeal over time, terrifying maelstroms or decapitation by Orang-Outans have appreciated in iconic/symbolic value.[23] While much

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[22] "The principles that dominate critical theory at the present time," in Carroll's view (*Literary Darwinism*, 2004) "can be gathered together under the heading of 'poststructuralism,' a term here intended to indicate an essential continuity between the Derridean linguistic 1970s and the Foucauldian political 1980s. The central doctrines of poststructuralism are textualism and indeterminacy. Textualism is the idea that language or culture constitute or construct the world according to their own internal principles, and indeterminacy identifies all meanings as ultimately self-contradictory" (15).

of Poe's humorous and hoaxing fiction relies for its effects on a knowledge of satirical targets within the acrimonious magazine culture of the period, his lasting horror and detective stories depend on emotive effects that have been able to drift relatively free of their context, attracting new meanings and possibilities of signification. Finally, in terms of his narratives of detection, criticism on Poe has favored stories with formal structures that allow subsequent readers to identify with the position of detective, and the dubious claims of discovery and mastery associated with such a figure. Selection along these lines takes place at the expense of stories like "Mystification," that highlight instead the absurdity of "success" in interpretive conflicts.

The T.O. Mabbott collection at the University of Iowa reveals the extent to which the source material for Poe's stories (in many cases preserved in handwritten notes, faded yellow copies, and obscure marginalia) comprised a textual "environment" similar to the ephemeral and untraceable networks of referential meanings in oral culture. The disembodied voices and reanimated textual bodies in Poe's fiction do not emanate from the ghost of a single authorial person, but rather from an orchestrated chorus of borrowed styles and generic formulas. Publication, variously figured as decapitation, "loss of breath," or the bottling of a text, leaves shadow more than substance, as Poe's early parable "The Shadow" (1835) suggests. Poe's texts, like all 19$^{th}$ century print artifacts, are haunted by their content's previous incarnations in oral narratives, or in the pages of

disposable media like newspapers and dime novels that themselves replicated (at the time of their circulation) the effects of spoken as much as written language.[24]

Walter Ong describes literacy as marking a fundamental shift in human interaction with language. For Ong, one of the presumed differences between literature and oral storytelling is the degree to which a narrative, in print, is abstracted from its context as a social utterance. This paradigm, however, especially when coded as a progressive model of development from a limited, formulaic system of oral communication to an unbounded, emergent technology of literacy, fails to account for what Anthony K. Webster calls the "understanding of Literacy as an ideological position" (297). Webster shows how literacy always retains aspects of oral tradition, and how a more nuanced view of orality recognizes that storytelling—with its interplay of relatively fixed and fluid elements—exhibits traits usually presumed unique to print technologies. Both written and spoken culture, as Webster points out, are capable of assigning varying degrees of fixity and longevity to narrative structures.

When studying nineteenth-century literature, it is easy to forget the vast amounts of literary material that had no chance for (or intention of) long-term survival. It is equally easy to underestimate the capacity of oral traditions to preserve large quantities of narrative information over vast stretches of time, without relying on figures of individual authorship. Bakhtin's distinction between the "epic" and the "novel," as Webster notes, inverts the usual categorizations of orality and literature—the novel deals with the

[24] See esp. Ronald Zboray's *Fictive People: Antebellum Economic Development and the American Reading Public* (1993).

cultural ephemera of the here and now, shot through with discursive overflow from a heteroglossic present, while epics, such as existed in the choral traditions of Greek poetry, were abstracted from everyday existence, with significations pared-down for the journey into distant cultural memory.

Stories still in print, such as Poe's, reach us after a long journey through time. The forces of selection slowly brought to bear on Poe's short fiction in the 20th century were markedly different than those it had been subjected to in the antebellum marketplace of journal and newspapers publications in the United States. The literary "shadow" that results, cast by stories that have been selected for various reasons, is markedly different from the corpus of his work as originally embedded and read within antebellum magazines and newspapers. The texts (and editions of texts) chosen to "speak" for the past, with its vast store of unread and often anonymous content, are sometimes those that most effectively seal themselves off from a contemporary atmosphere or literary ecology. In several tales, Poe comments on the condition of print literacy by using decapitation and voicelessness as an analogy for publication under the constraints of his editors and public taste. As Auerbach puts it:

> Poe saw himself as a storyteller living at a time when the intimate ritual of sharing experience had been dispossessed by a more efficient but remoter form of communication. Seeking to resume the traditional role of the storyteller, Poe continually reminds us (in stories such as "The Black Cat," "Loss of Breath," The Murders on the Rue Morgue," and "Morella") of the power of the speaking voice. Buried, imitated, turned into a mechanical contrivance, the voice still remains the most profound measure of an authentic self, Poe's sign of the storyteller's vanishing authority to move a close circle of listeners." (58)

While I agree that the figuration of the voice is essential in Poe's fiction, Auerbach overestimates the ability of a speaking voice to survive transcription, or the degree to which a singular narrative voice can be the authentic source at all of popular literature, rather than the collectively designed machinery of generic formula. The degree to which Poe's fiction was crafted with an eye towards prevailing tastes and conventions becomes more evident when the early publishing histories of Poe's gothic and detective tales are highlighted. Auerbach claims that "The only story of Poe's to be published in a newspaper" was "The Balloon Hoax" (1844), which appeared in "an extra edition of the New York Sun" (63). As the Edgar Allan Poe Society of Baltimore's web page documents, however, and the T.O. Mabbott collection confirms, at least four of Poe's other stories were initially published in newspapers, in some cases as "prize stories" in contests for money. "MS. Found in a Bottle," one of Poe's first pieces to be published, appeared in the Baltimore *Saturday Visiter* [sic] on October 19, 1833. The cheap weekly newspaper *Flag of Our Union*, which charged two dollars for a year's subscription, was responsible for the first printings of a surprising number of Poe's poems and tales, including "Hop Frog" (1849), which Paul Gilmore in *The Genuine Article* (2001) reads as a revenge fantasy against the overbearing forces of the market. In 1843, the *United States Saturday Post* paid Poe twenty dollars for "The Black Cat," and in the same year *The Dollar Newspaper*, (which cost, as indicated by the title, was half the price of *Flag of Our Union* for a year's subscription) awarded "The Gold Bug" $100 in prize money.

Accusations of plagiarism indicate the extent to which this "original" fiction may have appeared less so at the time of publication, when minor works in the same genre

would have been in circulation. On the other hand, as a letter to *The Dollar Newspaper* defending the story points out, the originality of a story often depended on its very ability to adapt popular generic elements in a new and unexpected way. Therefore, while agreeing with Auerbach's appraisal that many of Poe's stories register the loss and recurrence of a voice outside of print, I would argue that at a level of "literary ecologies"—or the "soft-tissues" of cultural systems that the fossilization of print fails to preserve—degradable industries of publishing were allowed to express the same characteristics as collaboratively maintained oral narratives.[25]

As time goes on, however, the adaptive landscape for the survival of fictions becomes critical rather than readerly, tending to select more for gothic ambiguity than comedic or parodic specificity.[26] The stories that continue to be replicated are frequently those that can survive the effects of ambiguation and decontextualization, where focus narrows (unconsciously) to texts compatible with narratives of individual, professionalized authorship, rather than the extinct or obscure literature described by Michael Reynolds as lurking "beneath the American Renaissance".[27]

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[25] In "International Copyright and the Political Economy of Print" (2003) Merideth McGill discusses how in the "Culture of Reprinting" of this period "the traffic in essays, tales, and poems copied from British and American periodicals and reassembled into literary weeklies and monthlies served as a constant reminder of the disjointed nature of American literary culture, its suspension between and among distant publishing centers that competed with each other for cultural authority" (108).

[26] My use of "gothic" will be restricted in this section primarily to stories, or elements of stories, with the terror of involuntary monomania or replication as a basis. The wider context of British and early American gothic fiction figures into ante-bellum tales, such as Poe's, as the often unnamed or unspeakable source of the gothic curse.

[27] Literature often needs a name (a famous one) to attach itself to, as well as a narrative of its own importance, in order to survive the selective filter of cultural amnesia.

Literary Darwinism that refuses to think analogically about evolution overestimates the importance of one particular kind of evolutionary selection: that taking place in gene-based replication. An interpretive paradigm that sees literary texts in terms of the cognitive adaptations of individual authors may work with texts like *Pride and Prejudice* (which Joseph Carroll in *The Literary Animal* interprets in terms of innate gender difference and mating strategies) but is likely to be mystified by Edgar Alan Poe's perverse tales of satire, disfigurement, emotional necrophilia, and sterile investigation. Selection at the level of individual consciousness for adaptive themes (like Darwin's happy endings and “someone whom I can thoroughly love”) seems to be countered in Poe’s stories by a different kind of selection at the level of the culture and the marketplace, an environment where “The Angel of the Odd” and “The Imp of the Perverse” were, in fact, allowed to flourish. As “memetic” theory would predict, literary conventions behave more like communicable, self-propagating viruses than like anything evolved for human benefit and control.

Carroll’s approach is consistent with Jonathan Auerbach’s claim in *The Romance of Failure* that “...the majority of Anglo-American critics writing on Poe tend to reduce the tales to single-minded allegories that succeed, in one way or another, in firmly establishing the author at the center of his work" (24). By contrast, Auerbach is more interested in exploring how Poe's first person narrators dramatize the tension between “experience” and “narration.” In the end, however, Auerbach’s readings never stray far from the orbital center of an author, no matter how “used up,” encrypted, or maimed by the act of public narration.

By selecting Poe as a case study, the ambiguity and perversity of whose texts make him resistant to a straightforward "Darwinian" reading of Carroll's type, I also hope to render more visible the ambiguities and anxieties of biological determinism that existed prior to the publication and circulation of *On the Origin of Species* (1859), and explore how the loss of agency represented by animals (parroting or "aping" human speech and behavior) figured into coded representations of another kind of determinism: that of the market. Literary Darwinism, in this case, is not enough, and needs to be augmented by a broader evolutionary philosophy that can account for types of selection other than that of gene-based, biological evolution.[28]

For Auerbach, "narration" is simply the telling of a story in the medium of print, where "once the published word becomes a commodity to be proliferated endlessly, the journalist loses control over his creations and finds the identity he has invested in the writing dispersed and dislocated among the masses" (56). This assumes that the identity of the narrator belonged at one time to the author/journalist, and that stories are created by individuals, rather than, as both Poe's fiction and philosophy of literary influence suggest, by the "formulaic" drawing together and unburying of forms already present. Auerbach hints at this by citing "one of Poe's earliest reviews," in which the ante-bellum

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[28] See Baudrillard's *Simulacra and Simulation* (1994), esp. "Clone Story," in which he relates the genetics of cloning to Walter Benjamin's (frequently replicated) essay "The Work of Art in the Age of Mechanical Reproduction" (1955). For Baudrillard, the DNA cloning (from a "mechanistic point of view") is "what happens to the body when it ceases to be conceived as anything but a message, as a stockpile of information and of messages, as fodder for data processing. Thus nothing is opposed to the body being serially reproduced in the same way Benjamin describes the reproduction of industrial objects and the images of the mass media. There is a precession of reproduction over all production, a precession of the genetic model over all possible bodies" (100).

author claims that “to originate is carefully, patiently, and understandingly to combine.” In Auerbach's words, this statement “sums up the writer's lifelong attitude toward his work, which is built by secular acts of bricolage, the deliberate tinkering of a mechanic/engineer who can never hope to achieve transcendence" (62). However, even here Auerbach's frame of analysis, the “I” in Poe's fiction and its alienation from a spoken (yet literary) voice, returns to an ambiguous maelstrom of meaning proliferating around the missing center of originality and individual authorship.

Detective and gothic genres, in the following analysis, are viewed as opening moves in what Ronald E. Foust has termed “literary games” in which critics and readers are impelled or incited to respond to given formal structures. In an article using game theory to outline a para-theoretical approach to literary analysis, Foust figures the reader and writer "as performative roles rather than historical personalities," engaged in a competitive linguistic encounter where "what is inherent is the demand for competence in the processing of information" (7). Foust outlines several structural games initiated by the author, one of which is the "logos game" which functions as a subliminal clue directing the reader's attention to the homologies between reality and imagination. Readings of or theories about texts are generated, in Foust’s “para-theory,” because they are able to compete with the story itself in generating meaning, while simultaneously playing by and reinforcing the “rules” established by the text. "Thus knowledge and pleasure," he writes,

> the twin goals of literary experience, derive from the anagogic game of cooperative competition that encompasses both the writer's act of creation and the reader's act of augmentative re-creation. Literary meaning in these two creative

> transactions is determined by praxis, by the skill with which the players follow the rules of the game (10).

This game-centered theory of literary survival seems especially relevant for Poe's fiction. In “The Philosophy of Composition,” (1846) he lists the rules within which his literary interpretive game is to be played. By clearly locating the goal of literary composition in its "effect", and detailing the exact steps through which he believes this effect is most effectively produced, Poe openly challenges the reader to find a more effective configuration. The other game, in all fiction, but especially in Poe, is originality, extending also to critical moves that must match the novelty of their subject with an equally original leap between the manifest (or original) interpretation and the one which, for the sake of winning the game, critics must pretend to believe. Since an author's survival often depends more on what readers find themselves able to say about his or her texts, rather than what these texts say in themselves, a successful literary game must perform its own praxis of ingenuity while foreclosing as few (future) interpretative moves as possible.

Naturally, one of the most instrumentally rewarding (or commercially reproducible) tropes is monomaniacal madness, which has infinite specificity while being devoid of actual content. Like the purloined letter, or the vortex of a maelstrom, it can become an empty signifier that represents only the interpretive desire for mastery. By flaunting its lack of reason in the significations of the story, is achieves maximal signification in the anagogic game that is distributed over historical time, and which consists of repeated attempts to reappropriate this infinitely provocative lack, which, by

its indefinite nature, can always be stolen by the next player in the game. "I have often thought," Poe writes, "how interesting a magazine paper might be written by any author who would, that is to say, who could--detail, step by step, the process by which any of his composition attained its ultimate point of completion"(*Great Short Works*, 529). This disingenuous claim masks what Poe knows full well, that successful literary works rely on their ambiguity, since the "ecstatic intuition" imagined by readers and projected backwards onto the compositional process will be more effective in assuring their interpretive complicity than a straightforward account. Any divulgence made by the author has to suggest more than it reveals, so as not to dampen whatever fortuitous spin later readers may wish to impart.[29] It is not necessary that, out of the "innumerable" feelings and thoughts it is possible for a fiction to elicit, it actually produces the best or ideal effect, but merely that it *can* produce such an effect at some future point, and that the believability of the connection is not undermined by undue specificity. As long as the optimal reading exists within a field of possible interpretations or responses, then a Darwinian literary market will insure that this reading is both produced and selectively replicated. Poe's “Philosophy of Composition” is striking because it rejects any "meaning" or communicative intent as an originary principle, and because it relies on

[29] Thousands of readers, by the sheer weight of probability, will always be more effective at creating meaning than a solitary scribbler, just as the proverbial monkeys with typewriters, given enough evolutionary space, will hit upon the "ultimate point of completion," provided there are sufficient selective mechanisms, such as a market for critical theory, to sort, filter, and combine these responses into a serviceable mythology. The internet is beginning to offer concrete examples of how Darwinian selection in collaborative narratives plays out: the website One Million Monkeys Typing (www.1000000monkeys.com) allows stories to grow according to the number of contributors, where various “branches” survive due to higher ratings.

exactly the Darwinian principles I have been suggesting. Poe prefers, he tells us, to commence

> with the consideration of an effect. Keeping originality always in view--for he is false to himself who ventures to dispense with so obvious and so easily attainable a source of interest--I say to myself, in the first place 'of the innumerable effects, or impressions, of which the heart, the intellect, or (more generally) the soul is susceptible, what one shall I, on the present occasion, select?' (ibid.).

The number of Poe's stories ensure that a critical posterity, too, can "select" among those most effective or impressive. "MS. Found in a Bottle," "The Murders on the Rue Morgue," "The Fall of the House of Usher," and other successful stories by Poe discussed in this chapter have survived due to their capacity to become embedded in an environment of "literary games" similar to those outlined by Foust. In "Generic Maelstroms: Bottled Ambiguity" I will look at Poe's maelstroms as a figure for literary survival, suggesting that the generic core of his strategy in the marketplace was negotiating demands for narrative uniqueness with popular recognizability and appeal. The generic ambiguities in Poe's publications resulted not only from a desire to encrypt a private, first-person subject into a text that must circulate in a popular marketplace, but from the need for self-enclosed literary artifacts to outlive past networks of reference and association that become illegible with time, and become integrated into new interpretive contexts that are continually evolving. The second section, "Comic Mystification: How to Lose at Literary Replication" uses Foust's idea of literary games to consider Poe's relatively unsuccessful stories between 1837 and 1838, including "Mystification," and "The Psyche Zenobia" (later "How to Write a Blackwood's Article" (1838)). In "Mystification," the satirical and cynical humor makes the text less adapted for long-term

survival than the famous detective story, also featuring an ape, "the Murders on the Rue Morgue" (1841). This detective story is the key text in my third section, "Mad Descent: Decapitation of Reason" where I discuss a selection of stories published between 1839 and 1841. The idea pursued through these discussions, that of a line of descent running not only through Poe's stories, but leading into them via a para-textual, symbolic structure (drawing from and perpetuating a critical environment of "literary games") is especially illustrated by "The Fall of the House of Usher" (1839) where the texts *in* the story (Roderick's letter, and the reading of "Mad Trist") suggest a gothic response *to* the story on the part of the reader, responsible for its continual resurfacing and survival.

The relative popularity of the Dupin stories and their selection as the "origin" of the detective story in the U.S. reveals their adaptedness to the kind of critical landscape outlined by Roland E. Foust, where narrative structures invite a meta-textual cycle of replication or response. The fourth and final section of this chapter, "Rational Forgeries: Chain Letters," uses "The Gold Bug" (1843) as an example of how the short-term [30]survival strategies of a text are, over time, encrypted or obscured by an evolving environment of critical production and selection.[31] "The Purloined Letter," (1844) for example, has notoriously created a literary critical environment that invites replication and conflicting, agonistic readings. The encrypted desire to escape the determining

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[30] See *The Purloined Poe: Lacan, Derrida, and Psychoanalytic Reading* (1988) edited by John Muller and William Richardson.

[31] The newspaper origins of this and other Poe stories (as well as certain under-emphasized interpretive possibilities) are neglected simply because they imply contexts and readings incompatible with idealized versions of detective mastery.

effects of a publishing environment is again represented in "Hop-Frog" (1849) the last story published before his death. Appearing in a tawdry newspaper *Flag of Our Union*, the story shows how, throughout his career, Poe was unable to escape the determining pull of popular tastes and generic formula (the ambiguous terror present in "MS. Found in a Bottle,") from which only abstracted, headless, and mechanical versions would survive.

The misshapen Dwarf's escape upward through the skylight at the end of "Hop-Frog" is the symbolic counterpart of the breathless descent into the maelstrom of publishing at the start of Poe's career. The animality of "the Raven" and the unthinking, determined nature of its pronouncements of "nevermore" provides a key to those other animals running lose in the pages of Poe's fiction: apes and Orang-Outans. Poe's discussion of "The Raven" and its supposedly formulaic composition ("Philosophy of Composition" (1846)) makes clear that he equates the formal requirements of popular literary success with the mechanical "parroting" of generic content in order to elicit the maximum effect, and, therefore, the greatest chance of textual selection and survival.

Despite his death before Darwin's *Origin* was published, Poe's literary anxieties foreshadow the philosophical uneasiness about human agency stirred by Darwin's theory of natural selection. The chronology followed in the sections below is meant to suggest that Poe's cynical and mystifying attitude towards literary survival, typified by his final works, is a result of the Darwinian development of his compositional techniques, along the lines of what today might be called a "memetic" theory of their relative success. The initial ambiguities discussed in the first section (1832-1835), the unsuccessful jokes of

the second (1837-1838), the literary games of gothic structure in the stories of the third (1839-1845), and the models of mastery and detection in the fourth (1843-1845) represent stages of evolution in the practical theory of textual survival fully expressed in "The Raven," but implicit as far back as "MS. Found in a Bottle." This evolution, however, was only the first stage in a much larger process of Darwinian replication, variation, and selection occurring in a critical ecology of interpretation after Poe's death, and continuing to the present. This secondary evolution (shaped by critical rather than popular markets) has resulted in the differential survival not only of certain texts at the expense of others, but also of certain interpretations of now-canonical texts over other interpretations less compatible the accepted rules of "literary games."

## Generic Maelstroms: Bottled Ambiguity (1832-1835)

The vortex in "MS. Found in a Bottle" (1833) stands at the beginning of Poe's career (and arguably the origin of his experiments in fiction), reminding us that Poe's own manuscripts, in order to survive the downward pull of historical oblivion, had to be sealed in their own relative vacuum from shifting waves of popular taste.[32] The ambiguous terror of the story causes it to float up to the notice of posterity from the sea of forgotten newspapers and journals that drench the 19th century in products of anonymous or professional authorship. The whirlpool in this story, and later in "The Descent into the Maelstrom" (1841) are physical embodiments of the monomania that besets so many of

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[32] The only stories published prior to "MS. Found in a Bottle" were "A Decided Loss" (later republished as "Loss of Breath" and "Metzengerstein," both published in Philidelpia's *Saturday Courier* in 1832.

Poe's narrators: a perverse attentiveness that, by metonymic extension, presents itself as the key to interpreting the story, or at least replicating its gothic effects.

The writer of the manuscript in Poe's story is caught in the inexorable pull of a maelstrom, that exerts a tragic attraction, fascinated attention, and mechanical rigidity of consequence upon surrounding objects.[33] The storm also represents the same kind of irrational, inhuman determinism later stories like "Mystification," "Hop-Frog," and "Murders on the Rue Morgue," embody in the form of primates. The fact that fears about deterministic anxieties surrounding publishing are figured as the evolutionary ancestors of humans speaks to the presence of anxieties surrounding animality and its mechanistic or constrained behavior, before these fears became formulated as reactions specifically to Darwinism.

Fears of "natural" forces of determination double Poe's frustrated sense of the overriding need to satisfy public taste and write within recognized genres. The figure of authorship, the authentic "voice" imagined by Auerbach, is swallowed up as a precondition for the manuscript's survival. From the beginning of the text, the narrator describes himself as alienated from his family and country, driven to travel by a "nervous restlessness that haunted me as a fiend." The violent Simoom in which the ship will be caught is preceded by "a more entire calm [than] it is impossible to conceive." When the storm strikes, he is, along with a Swede who perishes days later, the only person not

[33] If, as Poe claims in his "Philosophy of Composition" (1846), he composed "The Raven" (1845) by working backwards from a desired effect (the elements of the poem, thematic and formal, falling into place because of a gravitational logic) then "MS. Found in a Bottle" also seems to start with an effect, or mood of sublime terror, and work its way outward to the inception of the story. From the title, readers are alerted to the narrator's inevitable destruction.

swept overboard. Both the events and language of the tale are precipitated from this point on towards a crescendo of sublime and helpless terror. The wreck of the original ship is smashed by a much larger vessel, and the narrator again is saved by being thrown "with irresistible violence, upon the rigging of the stranger."

It is on this haunted ship that the narrator finds the writing implements needed to create the manuscript, recording that "the rays of my destiny are, I think, gathering to a focus." The journal enclosed in the bottle (the MS of the story itself) is matched, or preceded, by another document, possessed by the deranged captain of the doomed ship.[34] Venturing into the cabin, the narrator observes the Captain's "head was bowed down upon his hands, and he pored, with a fiery unquiet eye, over a paper which [he] took to be a commission, and which, at all events, bore the signature of a monarch." Poe's gothic horror, here and elsewhere, figures the past as a virus, transmittable through paper, or through texts that seem to multiply independently, and at the expense of, those who carry or create them. The fatefulness of an inherited past (or, for that matter, inherited literary genres) is hinted at by the one thing the narrator divulges about his life before the voyage, that he was "a dealer in antiquities," and that he "imbibed the shadows of fallen columns at Balbec, and Tadmore, and Persepolis, unitl [his] very soul has become a ruin."[35]

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[34] As with Melville, Poe often uses ships as a miniature representations of society. The phenomenally successful *Moby Dick* (1850) ends with the same deterministic, tragic, conclusion at the bottom of a whirlpool, due to Ahab's monomania. *Mardi* (1849), like the narrator in the novel who jumps ship and spends the novel sailing aimlessly in philosophical speculation, refuses to follow a single course or formula, and remains virtually unknown.

[35] Gothic fiction in the United States was inherited from and infected with its sense of hereditary doom by the novels of Britain, surviving in America as (often unauthorized) reprints. Poe, like his narrator, is caught by the deterministic formula of ambiguous horror established by earlier writers, from which there is no escape. "The circles rapidly grow small," the manuscript

As the narrator of “MS. Found in Bottle” suggests, the gothic germ is a disease of the consciousness that can be contracted from the shadows of other gothic texts. For example (to look ahead to the argument of my third section, “Mad Descent”) the replicating virus in “The Fall of the House of Usher,” (1839) is passed from Roderick to the narrator by means of a letter inviting Roderick to visit the “house.” The genre that embraces, encompasses, and precedes the gothic in mass popularity was the British epistolary novel, and in Poe's gothic fiction the communicability of madness through letters (including the MS. Found in a bottle) is essential for drawing the reader into the effect of the scene.

Gothic, in the sense used here, indicates a branch of a wider body of epistolary forms, where writing itself becomes a source of terror, and the vehicle for the terror’s replication. In “MS. Found in a Bottle,” (as well as later stories such as “Mystification,” the Gold Bug,” and “the Purloined Letter,”) a manuscript, letter, or parchment in the story can be read as a figure for the text as a whole, inviting recursive analyses that to some degree replicate the fascinated horror expressed towards the proxy document in the story. In the case of a Darwinian analysis of the survival of literary texts in the face of the wholesale extinction of forgotten variants and sources, Poe’s “MS. Found in a Bottle” is a fittingly hollow model for the escape of texts from the wreckage of their own economic history and struggles for publication. The trope of a disembodied, decontextualized voice

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concludes, “we are plunging madly within the grasp of the whirlpool—and amid a roaring, and bellowing, and thundering of ocean and of tempest, the ship is quivering, oh God! And—going down.” The narration survives, but its survival is predicated by a generic or formal necessity to start the germinal phase of yet another reproducible gothic tragedy. The worst horror cannot consume itself completely, or entirely annihilate its victims, since they are the vehicle of the repetition of the gothic effect at a larger scale.

representing the fate of a narrative once it is given up to public circulation can be traced through various violent and disturbing metaphors of bodily disintegration in Poe's fiction: the loss of teeth, "premature burial," "loss of breath," and a variety of decapitations.[36]

One of the oddest moments in "MS. Found in a Bottle" occurs when the narrator has "unwittingly daubed with a tar-brush the edges of a neatly-folded studding-sail which lay near me on a barrel." Improbably, when the sail is unfolded, "the thoughtless touches of the brush are spread out into the word DISCOVERY."[37] The ability of chance mutations to generate or "discover" new adaptive peaks is one of the key principles of Darwinian evolution. One of the most important implications for a Darwinian study of literature is how a selective environment, rather than any authorial act of conscious will, guides the course of literary exploration. Literary innovations, Franco Moretti argues, are random

> in the sense in which evolutionary theory uses the term: they show no foreknowledge--no idea, really,--of what may be good for literary survival. In making writers branch out in every direction, then, the market also pushes them into all sorts of crazy blind alleys; and divergence becomes indeed, as Darwin had seen, inseparable from extinction (77).

In other words, the generation of literary mutations that will prove successful is predicated on a proliferation of variants, the majority of which will fail. Once a discovery is made—including even the discovery of how to generate ambiguous terror without

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[36] The theme of a disembodied voice is present in American gothic fiction as early as *Wieland* (1798), by Charles Brockden Brown, in the figure of Carwin the "biloquist."

[37] All Poe quotations are from the T.O. Mabbott collection at the University of Iowa (original or earliest available printing).

committing to a definite cause —it can be imitated and endlessly reiterated with minor variations.[38] The narrator in "MS. Found in a Bottle" states that "a feeling, for which I have no name, has taken possession of my soul—a sensation which will admit of no analysis, to which the lessons of by-gone time are inadequate, and for which I fear futurity itself will offer me no key." If the feeling had a name, or was susceptible to analysis, its origin could be traced, and its derivative nature would be apparent in subsequent repetitions. Like the vague patterns of a Rorschach test, the daubed and random effects of Poe's stories can be unfolded into unlimited numbers of "discoveries."[39]

Poe's focus on ambiguous, monomaniacal horror is replicated again and again in his later work, as eyes, teeth, a heartbeat, and music all become scattered and random sources of unwritable significance. In "Berenice" (1835) he diagnoses the monomania that would infect so many of his characters, from Roderick Usher to, in a different way, the "detectives" LeGrand and Dupin. "This monomania," according to the narrator of "Berenice," "consisted in a morbid irritability of those properties of the mind in metaphysical science termed the *attentive*." It is precisely the qualities of suggestive

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[38] A month after Poe's story was published, for example, a hopeful writer sent a manuscript to the *Baltimore Saturday Visiter* [sic] entitled "MS. Found in a Drawer" (T. O. Mabbott Collection, Box 17).

[39] Poe wryly comments on this phenomena in "Never Bet the Devil Your Head: A Tale With a Moral" (1841) where he claims that "to authors in general much trouble is spared" because critics are bound to "demonstrate a hidden meaning" or "moral," regardless of authorial intent. "When the proper time arrives," he asserts, "all that the [writer] intended, and all that he did not intend, will be brought to light, in the 'Dial,' or the 'Down-Easter,' together with all that he *ought to have intended*, and the rest that he clearly meant to intend:--so that it will all come very straight in the end" (my italics).

indeterminacy, organized around random foci, that caused Poe's gothic stories to proliferate in the "futurity" of new literary markets and critical contexts. What Drout says of oral traditions applies to printed narrative as well, that "successful memes must negotiate a balancing act between specificity and vagueness" (274). The "conceptions are indefinite" in "MS. in a Bottle" because any definite conceptions, shapes other than a self-enclosed cylinder, would not survive the maelstrom of literary selection.

William Empson, in *Seven Types of Ambiguity* (1930) described the tendency of "good" poetry to gravitate towards ambiguity, while other critics, like Frank Kermode, have long noted that adaptability to new critical and cultural contexts is an indispensable feature of a literary "classic". "MS. Found in a Bottle" displays the bare bones of structural ambiguity, with the softer and more specific associations stripped away by the maelstrom of market selection and critical appropriation. At the center of Poe's gothic effects is an ambiguous lack, a referent which cannot be named or translated into print, and is therefore detached from the level of the text, ready to latch onto any submerged terrors the reader may provide. The narrator claims that "it is evident that we are hurrying onwards to some exciting knowledge—some never-to-be-imparted secret, whose attainment is destruction. Perhaps this current leads us to the southern pole itself." Just as the ship in Poe's narrative is pulled towards the exact point on the earth at which compasses cease to function, the generic drift of gothic fiction repeatedly gravitates towards an ambiguous point where referential direction becomes indiscriminate.[40]

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[40] In *Pierre* (1852, the subtitle of which is "The Ambiguities") he muses that there are similar places where reason loses its bearings, and "the example of many minds forever lost, like undiscoverable Arctic explorers, amid those treacherous regions, warns us entirely away from

Tellingly, the only two stories published before “MS. Found in a Bottle” were parodies. “Loss of Breath,” was published in Philidelphia’s *Saturday Courier* in 1832 as “Decided Loss.” It supposedly reproduces the formula for writing a story for Blackwood’s magazine (a formula Poe himself would repeat with “How to Write a Blackwood’s Article” in 1838), while satisfying the morbid tastes of popular audiences by describing in first person the most sensationally horrific “predicaments” possible. “Loss of Breath” prefigures later equations of publishing with decapitation (as in “Never Bet the Devil Your Head” (1841)), or separation of the voice from the (textual) body. In the midst of shouting abuse at his wife, “Mr. Lack o' Breath” suddenly finds himself without the air necessary for speech.[41] Retreating to his “private boudoir” the narrator comes up with an ingenious solution to his breathlessness, by deciding to speak only in memorized fragments of German tragedies. There, “the deep guttural was expected to reign monotonously throughout,” the sounds produced with muscular contractions of the throat, without expelling air from the lungs. This odd strategy only makes sense as a metaphoric figure for an author's replacing (the fiction of) his own voice with quoted fragments of others. The other of the two stories to be published before “MS. Found in a Bottle” was “Metzengerstein” (1832), which, when republished in the *Southern Literary Messenger* had the subtitle: “A Tale in Imitation of the German.” Together, these

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them; and we learn that it is not for man to follow the trail of truth too far, since by so doing he entirely loses the directing compass of his mind; for arrived at the Pole, to whose barrenness only it points, there, the needle indifferently respects all points of the horizon alike" (165)

[41] As opposed to oral traditions, literary texts allow words to be reproduced without a living biological subject (the numerous ghostly voices, premature burials, etc., in Poe's stories can be figured as the submerged quotations of other authors haunting literary narratives, which a monomaniacal insistence on the novelty and originality refuses to acknowledge).

imitations comment on the influence German Romanticism for contemporary writers (as well mocking the guttural, or physically throaty peculiarities of Germanic pronunciation).

Both “MS. Found in a Bottle” and “Loss of Breath,” suggest that lines of literary descent may be considered self-replicating, consuming their hosts completely in a maelstrom of literary formula. “MS. Found in a Bottle” is emblematic of the demands of the higher fixity of print literary forms because the MS. (hermetically sealed, self-sufficient, and without breath) is the only thing capable of escaping the ordeal of fixation as an ambiguous artifact. “Shadow: A Parable” (1835) suggests that Poe had a sense of the longevity of his texts, and how the ambiguating effects of time would alter their perception. “Ye who read are still among the living” the story begins, “but I who write shall have long since gone my way into the region of shadows. For indeed strange things shall happen, and secret things be known, and many centuries shall pass away, ere these memorials be seen of men.” The “memorials,” the long shadow of his ambiguous texts, would be “vague, and formless, and indefinite,” and speak not in the author’s voice but in “the well remembered and familiar accents of many thousand departed friends.” Poe’s manuscripts, like that of his doomed narrator in “MS Found in a Bottle,” are shadows cast in the absence of their original object, speaking through ventriloquizations of antecedent and subsequent texts, models and imitations, the “multitude of beings” that shape the evolution of literary forms.

## Comic Mystification: How to Lose at Literary Replication (1837-1838)

Before moving on to Poe's more famous mystery stories, it is important to ask the question of why an earlier text, "Mystification" (originally published as "Von Jung, the Mystific" in *American Monthly Magazine* in 1837) has never been considered as a possible origin for the detective genre. The answer, I will argue, lies partly in the implications hidden in the act of perspective critics replicating, through their acts of "detection," the structure of Poe's narratives. The likelihood of critical response to a story (over an extended "life span") depends, in part, on the internal logic of these stories, and where this logic positions "detectives" both in and to the text. Just as my definition of the "gothic" in Poe rests upon implicating the reader in a chain of infectious terror (signaled by the presence of proxy documents within the story), I will argue that Poe's fictions of "detection" necessarily allow for an act of ratiocination that is replicable, metaphorically, at the level of readership and criticism.

Following Foust's "para-theory of literary games," the relationship of detectives to texts/papers/letters within the story stands as a metonymic indication of the implicit relationship of readers and critics *to* the story. This model helps to explain why the comic tale "Mystification" has been largely ignored, a striking omission considering the exhaustive, even obsessive, attention paid to the Dupin trilogy.[42] Baron Von Jung's books (and those who depend upon them for models of behavior) do not provide a model that literary professionals would normally care to emulate. Narratives like "The Purloined

[42] The term "comic" will be used in this section to designate stories, like "The Psyche Zenobia," "Never Bet the Devil Your Head," and "Mystification," that, because of the cultural specificity of their parodic targets, or because of their cynical attitude towards textual or literary "discoveries," discourage the intellectual investment necessary for long-term survival in critical ecologies. This is, however, the reverse of Joseph Meeker's use of the term "comic" in *The Comedy of Survival*, discussed in my concluding chapter.

Letter" and "The Gold Bug" are ambiguous enough, in other words, for the literary analysis of these narratives to take itself seriously; but "Mystification" is not. There is, however, a serious point to be made about this comic story, about the conditions precluding it from widespread literary or textual selection, and especially about what these conditions reveal about a particular audience in the print market of antebellum America.

This chapter began with two general propositions: that the initial success of literary texts was determined by different criteria than those eventually responsible for their long-term selection and survival, and that while "comic" texts may meet with initial success, they do not contain the recipe for the ambiguous reduplication of terror, or the repetition of a (performance of) mastery that has proved, in the case of Poe, extremely viable as a strategy for proliferation. This section will take up the second of these propositions, arguing that while the Baron Ritzner Von Jung displays some of the attributes that make Dupin and LeGrand such appealing candidates for critical attention, his sense of humor disqualifies him as a model of detective ratiocination. More specifically, Baron Von Jung is disqualified because he allows the narrator (unlike in the other detective stories) to be in on the joke. The demystified "mystification" of the Baron Von Jung has implications, therefore, for the hidden or encrypted possibilities of "mystification" on the part of Poe in convincing critics that his later detective mysteries are susceptible to definite solutions.

The similarities between "Mystification" and Poe's more successful detective stories are enough to suggest its status as a possible missing link in the evolutionary "line of descent" for the detective genre. Like Dupin, The Baron Von Jung is an idiosyncratic, misanthropic character, who takes into his confidence a Watson-like acolyte who becomes the narrator of a "mystery" and its eventual solution. As in "The Purloined

Letter," the story culminates in the detective or proto-detective gaining ascendency over a less-astute opponent. In "Mystification," however, the entire episode (along with the story itself) is revealed, in the end, as nothing more than a joke. The solution to the mystery is the “character” of the Baron himself. "I truly think," the narrator claims, "that no person at the university, with the exception of myself, ever suspected him to be capable of a joke, verbal or practical." This is in part due to the Baron's physiognomy, which conveys "the idea of unmitigated gravity, solemnity and repose."

The joke begins to unfold at the "pot-house" or Chateau of the Baron Von Jung, where he has stayed up drinking wine "until nearly daybreak" with a group of students, mostly "young men of wealth, of high connection, of great family pride and all alive with an exaggerated sense of honor." "They abounded," the narrator points out "in the most ultra German opinions respecting the *duello*." Not only are the opinions of the students "ultra German," but they are influenced by "recent Parisian publications." The most important of these publications for the story is "a thick octavo, written in barbarous Latin by one Hedelin, with the title "*Duelli Lex scripta, et non; aliterque*," on which the conflict and resolution of the story hinges. The Baron, earlier, had pointed one of the more pretentious students, named Hermann, to the Hedelin treatise, and recommended it for study. Hermann becomes the target of the Baron's practical joke because he is especially proud of his knowledge of dueling etiquette, and "would have died a thousand deaths rather than acknowledge his inability to understand anything and everything in the universe that had ever been written about the *duello*."[43]

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[43] For another parody of the elaborate etiquette surrounding duels and their avoidance (taken from books) see Touchstone's speech in Act V, Sc. IV of Shakespeare’s *As You Like It*: "O sir, we quarrel in print, by the book; as you have books for good manners."

As the drinking party progresses, the Baron von Jung draws the gullible Hermann into an animated discussion on the young man’s favorite subject, goading him into an angry response. "I would say, sir," Hermann retorts, "that your opinions are not the opinions to be expected from a gentleman." The narrator afterward relates that at this point, the Baron "became pale, then excessively red, then, dropping his pocket-handkerchief, stooped to recover it, when I caught a glimpse of his countenance, while it could be seen *by no one else* at the table." This glimpse, similar to the glimpse of the “comic” side of Poe afforded by "Mystification" (largely invisible to literary study) shows that the seriousness of later detectives may be a counterfeit performance, a “confidence-game” of humorous mystification, calculated to produce, like the stories themselves, a predictable (and minimally lucrative), result. As the Baron stands from the table, his face resuming its "earnest" and mortified expression, he returns Herman's speech in kind: "That my opinions," he says,

> are not the opinions to be expected from a gentleman, is an observation so directly offensive as to allow me but one line of conduct...You will forgive me for the moderate tax I shall make upon your imagination, and endeavor to consider, for an instant, the reflection of your person in yonder mirror as the living *Mynheer* Hermann himself. This being done, there will be no difficulty whatever. I shall discharge this decanter of wine at your image in yonder mirror, and thus fulfill all the spirit, if not the exact letter, of resentment for your insult, while the necessity of physical violence to your real person will be obviated.[44]

The "duel," from this point forward, takes place in print, or rather in handwritten notes carried back and forth between the two adversaries by the helpful narrator (acting

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[44] The Baron's insult of throwing the decanter against Hermann's reflection in the mirror is even more equivocal than is immediately apparent, since the "great precision" with which the decanter strikes the reflection "directly opposite" of where Hermann is sitting can only be true from *one* of their perspectives, as they are viewing the mirror from different angles. Thus the "refinedly peculiar character" of the Baron's insult and challenge.

as potential “second” in the duel). The first note, sent by Hermann, demands, in the absence of an adequate explanation for his mystifying conduct, that the Baron begin "the steps preliminary to a meeting." The Baron responds with a letter eloquently flattering Hermann's expertise, in which he writes:

> with perfect certainty…of being comprehended, I beg leave, in lieu of offering any sentiments of my own, to refer you to the opinions of the Sieur Hedelin, as set forth in the ninth paragraph of the chapter of "Injuriae per applicationem, per constuctionem, et per se," in his "Duelli Lex scripta, et non; altiterque." The nicety of your discernment in all the matters here treated, will be sufficient, I am assured, to convince you that the mere circumstance alone of me referring you to this admirable passage, ought to satisfy your request, as a man of honor, for explanation.

Hermann, receiving this letter, makes "reference to the treatise in question, " and having read the passage referenced by the Baron, acts entirely satisfied. He even asks the narrator to “express to the Baron Von Jung his exalted sense of his chivalrous behavior,” and to “assure him that the explanation offered was of the fullest, the most honourable, and the most unequivocally satisfactory nature.” The Baron, later, explains to the narrator that the book

> as it apeared (sic) *prima facie*, was written upon the plan of the nonsense verses of Du Bartas; that is to say, the language was ingeniously framed so as to present to the ear all the outward signs of intelligibility , and even of profundity, while in fact not a shadow of meaning existed. The key to the whole was found in leaving out every second and third word alternately, when there appeared a series of ludicrous quizzes upon a single combat as practised (sic) in modern times.

The passage which Hermann found “unequivocally satisfactory” was, in fact, “a most horribly absurd account of a duel between two baboons.” Due, however, to its having been rendered in pretentious Latin, and especially due to the *confidence* with which the Baron asserted its relevance and unquestionable adequacy as an explanation, Hermann’s egotism forces him to accept the text as genuine. The literary nature of the

Baron von Jung's hoax (based on misunderstood, *foreign* publications/genres/traditions), and the pompous gullibility of its "victim," all point toward an analogy between this conflict and that between Poe and his literary audience. The denouement of the mystery relies for its fulfillment on a critical *misreading*, and equally on delusions of textual understanding in the face of a difficult and mystifying narrative, the importance of which must be taken on faith. Unlike the (ostensible) structures of his later detective fiction, in which the ratiocinative feats of the main character legitimize and encourage subsequent feats of deduction, here the cynical tone and stated tactic of mystification on the part of the Baron proleptically ridicules and forecloses attempts at extracting "serious" meaning.[45]

The final satiric touch, that the duelists in the pivotal passage are actually Baboons, underscores for Poe's contemporary audience, the "comic" and formulaic nature of physical and *literary* duels, especially those conducted according to conventions drawn from foreign texts. It has significant implications for the myriad critical interpretations of Poe's later detective story, "The Murders in the Rue Morgue," in which Dupin matches wits, so to speak, with an Orang-Outan.

Ultimately, "The Murders in the Rue Morgue" would prove a much more appealing choice as the origin of the "detective story" because, while it played on similar

[45] The possibility exists, however, that the mystification of the text was mirrored by another mystification on the part of Herman, who could have pretended not to recognize the absurdity of the Hedelin nonsense passage in order to avoid the necessity of a duel. He is, after all, an expert in the "etiquette of the duello," a large part of which is presumably finding ways of preserving one's honor without the necessity of bloodshed, an endeavor in which knowledge of interpretive loopholes and mystifications would play no small part. Ambiguities of language, the text seems to suggest, are preferable to the certainties of pistols.

themes and symbols, “Mystification” was too comic for any “serious” criticism to adapt, since the Baron Von Jung’s pragmatic mystification is not an ideal model for literary analysis. As in other stories, relationships to texts or documents exfoliated *within* Poe’s narratives (the Captain’s orders, the parchment with coded instructions, the copied letter) determine structural possibilities between the text and its future critics, but a book containing a nonsensical description of battling primates lacks the same romantic call to emulation.

Imitation was a preoccupation of Poe's, just as it was a preoccupation of an American literary establishment seeking distinction from British, French, and German publications.[46] Although in “The Philosophy of Composition” Poe claims that “The Raven” was written out of a calculated need for a certain literary effect, he also mentions that the first bird to occur to him was a parrot, because of its tendency to mimic human speech. The monotonous repetition of a refrain would be unsuitable for a human actor (just as the conventions of gothic literature would be intolerably repetitive if they actually originated with the will of their authors) so Poe hit upon “the idea of a non-reasoning creature capable of speech; and very naturally, a parrot, in the first instance, suggested itself, but was superseded forthwith by a Raven, as equally capable of speech, and infinitely more in keeping with the intended tone.” As Shawn Rosenheim points out in *The Cryptographic Imagination*, Poe’s raven may be an imitation of the parrot in Defoe's *Robinson Crusoe* (51). Other clues, such as “the Raven” speaking from atop a bust (a type of severed head), point to a reading of the poem that sees Poe’s buried references as expressing a dread not only of the absence of a lost “Lenore”, but also of the haunting presence of Poe's predecessors and literary models.

[46] Especially prior to 1891, when foreign texts could be reprinted without permission.

The mechanistic philosophy of composition Poe was to outline at the end of his career was already evident in his early parodic narratives, most notably "The Psyche Zenobia," later titled "How to Write a Blackwood Article" (1838). In this tale, Zenobia, an aspiring writer, receives instruction on how to write according to the accepted formula of the day, suitable for Blackwoods and similar literary magazines. As a result, she produces a story-within-the-story called "The Scythe of Time" or "Predicament" in which, according to the Blackwoods editor's advice, she places herself in a series of shocking "predicaments" in search of literary inspiration, culminating in her auto-decapitation by the descending hands of a clock when her neck becomes stuck in the window of a clock-tower. The Psyche Zenobia loses her head at "twenty-five minutes past five in the afternoon precisely." The beheading is presented as the ultimate "logical" result of her quest to experience sensations sufficient to fulfill the sensational demands of her literary audience. "I was not sorry," she relates, "to see the head which had occasioned me so much embarrassment at length make a final separation from my body."[47]

In order to answer the perplexing question of to whom the "I" in this sentence refers, it is necessary to see this episode as a grisly metaphor for the separation of a "body" of text from its author upon publication. "I will candidly confess," the headless body/bodiless head relates, "that my feelings were now of the most singular—nay of the

[47] In *The Literary Guillotine* (1903), the chapter "The Mummy and the Humming-bird, being the case of The People vs. John Kendrick Bangs and James Brander Matthers" shows Bangs on trial for not having a sense of humor. "..I give you *carte blanche*" L.B. Loomis instructs Bangs, "…take up any volume [of yours], turn to any part of it you choose, read out any portion you choose, and we will then leave it to the jury to decide whether what you have read is funny" (73). Bangs chooses a book at random (much as the editor does in "How to Write a Blackwoods' Article") and reads "a conversation between a young student at college and a ghost of one of the students of a hundred years previously…The author ceased and looked at the jury with an expectant smile. Death-like silence reigned in the room…'Ah, well—I'm afraid—ah—that wasn't a very happy choice,' stammered Bangs; 'it seems to be somewhat over their heads'" (73-74).

most mysterious, the most perplexing and incomprehensible character." Poe's gruesome example of the kind of "original" spectacle demanded by antebellum magazine audiences can be used to illustrate a basic principle of literary memetics: with the descent of the "scythe of time," historical authorship becomes increasingly severed from the author's work, mutilated by the more or less mechanical formulas of replication and selection. Decapitation figures in Poe as a recurrent motif signaling, as in "Never Bet the Devil Your Head" (1841) the nefarious bargain would-be authors must make to achieve success. Like "Mystification," with its proto-detective, and use of primates to stand in for comic and formulaic behavior (dueling, in this case), "Never Bet the Devil Your Head" suggests that Poe's well-known detective fiction, especially "the Murders in the Rue Morgue," contains themes (Orang-Outans and decapitation) that work against its *air* of intellectual seriousness, and point to a lack of continuity between the heady, abstracted interpretations of critics in the 20th century and the *body* of generic, popular texts and formulaic expectations in the 19th, out of which Poe's narratives evolved, and to which they were originally adapted.

## Mad Descent: Decapitation of Reason (1839-1841)

No text from the nineteenth century that is read today is free from the meaning its survival in the marketplace has stamped it with. The significance of any work, in part, is simply that it has been selected for, at various stages both before and after its publication. The first inevitable meaning of any book is that it has been given to the present by a political economy of information distributed over time. The fixity of our literary landmarks often obscures the fact that they were selected from a near-infinite pool of forgotten drafts, submissions, and first printings. In the same way that selection pressures

don't actually "create" species (it is, rather, the billion chance mutations that do or do not get selected for and reproduced in DNA that actually do the "authoring"), it is often accurate to say that editors are more important than authors in determining what we read. When analyzing nineteenth-century texts the question of why they were written pales in significance to the question of why we are reading them, astronomical odds to the contrary. Gothic fiction, then, is especially relevant as a system of thematic structures that create *conditions* for future analysis, thereby increasing a text's chances for survival in a critical ecology.

The literary-memetic idea that stories have a life of their own, using (and sometimes consuming) their human hosts for the sake of self-replication, finds its clearest illustration in Poe's later fiction. The "sentient" agency of stories may be a fiction from a biological point of view, but, in terms of explaining the runaway popularity and reproduction of texts like "The Fall of the House of Usher," (1839) the fiction of the malevolent, viral nature of the story produces the effects that would have resulted if in fact the story *was* a conscious engine of its own survival. This belief is engendered by the formal properties of the text, and the synecdochic suggestion that the fall of the house of Usher and "The Fall of the House of Usher" are born from similar systems of replication.

Roderick's madness, "in its general form," was centered in the idea "of the sentience of all vegetable things." This belief, as the narrator tells us, "was connected…with the grey stones of the home of his forefathers. The conditions of the sentience had been here, he imagined, fulfilled in the method of collocation of these stones—in the order of their arrangement, as well as in that of the many fungi which

overspread them, and of the decayed trees which stood around—above all, in the long undisturbed endurance of this arrangement, and in its reduplication in the still waters of the tarn." Given the world of Poe's literary aesthetics, it is reasonable to assume that his gothic tale, like the house itself, was constructed from the ruins of other narratives, the haunting malevolence of the structure resulting both from the arrangement of these materials and their supposedly cursed or infectious history.

When the House sinks into the tarn (and the story ends), the structure and its "reduplication" are merged. The collapse of original and copy, madness and reason, causes a vacuum that requires the production (duplication) of yet another text, reinstigating the germinal cycle of infectious horror. The effect of the house on Madeline (first in the descending line of madness), of Madeline on Roderick, and of Roderick on the narrator, is extended (according to the circular, spiraling logic of infection) from the narrator's text to the superstitious fears of the reader. The infected audience is meant to echo the narrator's statement that "there can be no doubt that the consciousness of the rapid increase of my superstition—for why should I not so term it?—served mainly to accelerate the increase itself. Such, I have long known, is the paradoxical law of all sentiments having terror as a basis." The infectious horror of "The Fall of the House of Usher" is thus only a replicated variation of the ambiguous monomania that runs through Poe's career, and like the titular entity of "The Man of the Crowd" (1840) "*cannot be read*" but only followed by re-reading.

The jagged, nearly imperceptible crack running down the center of the house, until it is "lost in the sullen waters of the tarn," descends down into the consuming

whirlpool Poe's stories have always been struggling to escape, and that reappears in "A Descent into the Maelstrom" (1841).[48] The grizzled old man in Poe's "reduplicated" Maelstrom story is a literary refugee from the first, the bottled text incarnated as an impossible survivor. The "wild bewildering sense of *the novel* which confounds the beholder" of the whirlpool in the second story (Poe's italics) is matched by an uncanny sense of familiarity and repetition.[49]

I will return to the descending structure of "The Fall of the House of Usher," and to the role of texts in drawing characters through them, into mad maelstroms; but in order to gain a more complete understanding of this structure, it is necessary to place Poe's famous gothic story alongside his equally famous "detective" story, "The Murders in the Rue Morgue," (1841). Like "Mystification," and "Hop-Frog," this story draws on the association of apes with unthinking, mechanical forces that duplicate the effects of consciousness without actually being human. Like "the Psyche Zenobia," the detective story also features a decapitation, underlining the division—subsequent to publishing—between the "psyche" (head) and text (body). Whether the hands of a clock, or of a murderous Ourang-Outan, the symbology of the divorce between analytical reason and

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[48] "A proverb," Benjamin notes in "The Storyteller" (1968) "is a ruin which stands on the site of an old story and in which a moral twines about happening like ivy around a wall" (108).

[49] The figurative whirlpool, like monomaniacal madness (as unhealthy attention to a single point or object) exerts an attractive force that is both fateful and determined, caught in an enmeshed array of physical and psychological/literary laws. "After a little while" the narrator of "A Descent Into the Maelstrom" relates, "I became possessed with the keenest curiosity about the whirl itself. I positively felt a *wish* to explore its depths, even at the sacrifice I was going to make; and my principal grief was that I should never be able to tell my old companions on shore about the mysteries I should see."

literary effect (necessitated by deterministic, inhuman forces of literary replication and survival) remain the same.

Similarly to how anxieties about human origins centered on the figure of primates after the publication of Darwin's theory, Poe, writing before Darwin, used Orang-outans to represent anxieties about *literary* origins, and can be traced in a "single line of descent" to the beginnings of his writing in cheap newspaper fiction. This chain of symbolic association runs through his early satires of formulaic magazine stories and "mystifying" literary jokes, to his fictions of gothic madness centered on involuntary acts of violence (which Poe, involuntarily, had to include in order for his fiction to sell). In Poe's most commercially successful stories, the idea of mechanical replication (both of texts or behavior) is used to establish the rules of a "literary game" in which representations of texts in a work draw readers into the "gothic" effects of conventional formulas, incorporating them into the fiction's own mechanisms of self-propagation.

In "The Murders on the Rue Morgue," Dupin, similar to Roderick Usher, lives in "a time-eaten and grotesque mansion, long deserted through superstitions into which we did not inquire, and tottering to its fall in a retired and desolate portion of the Faubourg St. Germain." He learns about the murders through a newspaper, which includes gruesome details precisely of the sort that popular tastes in magazine and newspaper fiction (mocked in "The Scythe of Time") would require. An old widow, Madame L'Espanaye, has had "her throat so entirely cut that, upon an attempt to raise her, the head fell off." Her daughter, while not decapitated, had been strangled to death and stuffed upside down in the chimney. In terms of human motivation, the solution to the

mystery posed by the Murders in the Rue Morgue is that there *is* no solution. Dupin's insight is that events unfolded without conscious direction or human control.

The strangulation and decapitation of Madame L'Espanaye and her daughter are the consequence of the intersection of the ambiguous success of gothic horror with the need to provide an analytic feat that could be "doubled" by future readers of the story. Poe's solution to satisfying the blood-thirsty tastes of his audience (while at the same time flattering their intellects) is essentially the same as Dupin's solution of the murders in the Rue Morgue: setting aside the question of human will and viewing the problem in terms of a deterministic system of rules, or a causal sequence of unthinking instincts.

Dupin is drawn into the crime, and able to solve it, because of similarities between his own disposition and that of the Orang-outan. The detective claims that "most men, in respect to himself, wore windows in their bosoms," which sets his deductive acumen up as corresponding to the murderous primate's super-human strength, by which he is able to reach the window of the L'Espanaye's apartment. The purposeless, animal nature of the crime allows Dupin's "solution" to reveal the gothic nature of the horror (without reducing its ambiguous potential for later readings and critical interpretations). The decapitation extends the metaphor presented in "The Scythe of Time" to show the division between abstract rationality and the abstracted, formulaic nature of the "body" of textual evidence left behind. By identifying with the unthinking ape, Dupin creates a link between himself and violent natural (or generic) forces of determination, a link that is extended outside of the text when readers, mystified by Dupin's "air of method," attempt

to replicate his analytical deductions. The eventual solution to the murders in the Rue Morgue reflects the sensationalistic, irrational forces determining their narration.

Edgar Allan Poe's gothic horror and detective stories share a terror of determinism, both biological and commercial. For Dupin, the supreme feat of ratiocination is deployed to understand the literal inhumanity of the murderer. Shawn Rosenheim has pointed out the Darwinian elements of the Orang-Outan who mimics human behavior without understanding it, despite the fact that the story predates the release of *On the Origin of Species* (1859). He is right to do so, partly because theories of modification with descent had been present long before Darwin formulated the mechanism of natural selection, but also because of the imitative capacities of animals are key to understanding Poe’s attitudes both towards literary convention and the determining forces of the market. This “evolutionary” reading of Poe’s fiction only becomes possible when the texts are not seen as existing in isolated, unmoving literary time, but rather seen as existing diachronically *through* time, evolving along a historical axis with narrative adaptations enabled, but not defined, by the structure of the text itself. The structures of identification implicit in detective narratives have made them especially adapted to environments of long-term critical survival.

The structures of descent in Poe’s detective stories, again, can be traced to the endlessly provocative absence at the center and origin of Poe’s career. Dupin’s super-human reasoning leads him ever closer to the inhuman forces responsible for the crime, in the same way that the inhuman laws of nature (and publishing) drew the narrator of “MS Found in a Bottle” to the South Pole, where the compass could point

indiscriminately in all directions. "The Fall of the House of Usher," is likewise caused by this downward-tending force, or "single line of descent" running through the body of texts we identify with Poe. Whereas in "the Murders on the Rue Morgue" the center of the attractive force is unreasoning animality (the product of biological and literary forces of evolution), the pull, emanating from the tarn and catacombs beneath the Usher's mansion, is transmissible madness. Where Dupin identifies with the Orang-Outan, Roderick Usher is pulled downward into insanity by a sympathetic connection with his sister, Madeline. Like the narrator of "Berenice," Roderick suffers from "a morbid acuteness of the senses," and like that narrator, Roderick entombs his loved one prematurely.

Texts, like any other species in natural or economic ecosystems, must not only reproduce themselves, but, also, in the process, reproduce the conditions necessary for their reproduction. Successful texts invariably carry in themselves a more or less explicit configuration of conditions with which the reader is encouraged to identify. Rather than existing in the synchronic field of symbols, meanings, etc., this type of meaning is situated on a diachronic axis, and must operate as a re-generative principle. In this regard, there are two key moments in "Fall of the House of Usher": when the narrator is summoned by a letter to visit his childhood friend, and when the reading of a story, "Mad Trist" causes, or is at least uncannily coincident with, Madeline's emergence from the tomb to drag her brother down with her, along with the physical/textual mansion, into the waters of the tarn.

The structure of “The Fall of the House of Usher,” contains three subject positions, all tending downward, defined by their proximity with gothic madness, and roughly corresponding to the head, neck, and body of the Orang-Outan’s victims. Reading Roderick’s letter causes the narrator to occupy the top position, relatively unaffected by the deterministic gravity of the House and its curse, while Roderick sinks into the middle position, and Madeline is buried in the tomb. The reading of “Mad Trist” causes another ratcheting up of the chain of identification, Roderick (and the House itself) sinking into the tarn, leaving the Narrator half-mad with knowledge of what he has witnessed. Finally, the implications of the metonymic relationship of the narrative are played out as the narrator himself generates yet another text (the narrative of “The Fall of the House of Usher,” drawing the reader into the unoccupied middle position, and determining the role of future texts: to draw yet another actor into vertical line of descent.

## Rational Forgeries: Chain Letters (1843-1845)

Poe's fiction is tied together by a chain of associations, with themes and images distributed as a network throughout his stories: a network that cannot be understood with reference only to a single given text. The downward pull felt in "MS. in a Bottle," (at the bottom of which were the pressures of literary formula and popular taste) is replicated in later stories, where narratives and their characters are drawn into focal points of monomaniacal madness, beheaded by a descending "scythe of time." This chain extends down through Poe's gothic and detective stories written between 1843 and 1845, most obviously in his famous tale, "The Pit and the Pendulum," (1843) where an axe (scythe) descends on a pendulum (time), threatening to sever the narrator's body into upper and

lower halves.[50] As the narrator's eventual rescue implies, these later stories are marked by strategies (or fantasies) of escape. Poe continued to develop literary techniques of encrypting meanings capable defying the "gravity" of the horror that at the heart of his gothic effects.

The structure of "The Pit and the Pendelum," for example, is oddly repeated in Poe's hybrid detective/gothic story written in the same year, "The Gold Bug." The gold hidden in "The Gold Bug" belonged to the pirate Captain Kidd, and was buried, along with the bodies of his two accomplices, underneath a tulip tree. The location of the buried treasure is revealed by dropping the gold bug, attached to a plumb line (reminiscent of the deadly pendulum) through the eye of a skull (decapitated head) nailed to one of the trees higher branches.[51]

In this section I will read "The Gold Bug," and "The Purloined Letter," through Poe's desire to escape the deterministic forces of the literary marketplace by attempting to "kid" or "jest" with his readers through encrypted implications. The figure of LeGrand may be closer to the forgotten and obscure Baron Von Jung that he is to Dupin. One of the misconceptions about modern genetics is that there is an absolute or deterministic correspondence between genotype and phenotype—that the genetic code of an organism, in other words, can be used to "decode" an essential truth about its nature. "Mapping the human genome" is conceived, in the more reductive visions of popular science, as providing a comprehensive manual for understanding and re-engineering the evolution of

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[50] He is saved from this peril at the last moment by enlisting rats to gnaw through his bonds, only to have the walls of the dungeon begin to constrict, like the tightening circles of the maelstrom, forcing him closer and closer to the central pit.

[51] These recurrent images are drawn together in "Hop Frog" (1849) where the misshapen jester escapes his captivity by climbing up a chain, at the bottom of which are suspended the bodies of eight of his tormentors, costumed as Orang-Outans. "This," the dwarf concludes before he disappears through the sky-light from which the chain descends, "is my last jest."

the species. The reality is that genetic information can only be "read" in light of the wider ecology (or biological/social landscape) in which an organism is embedded. In the same way, one of the dangers of employing an evolutionary or Darwinian metaphor in literary study is collapsing the "genotext" (the words on the page) with the "phenotext" of a living narrative.

"The Gold Bug," accordingly, must not only be understood in relation to Poe's larger body of work, but also in relation to the literary markets on which its survival depended. The immediate need for financial success is a key for deciphering or "decrypting" messages in Poe's detective story (apparent to readers of his day) otherwise invisible or buried to modern readers and critics. During the brief interval of a story's initial circulation its cultural, economic, and political environment bring out certain meanings in the text that, with time (like the message on the parchment in "The Gold Bug") become invisible.

With many bogus or suspect bank notes flooding the marketplace at the time of its publication, “The Gold Bug” (with its disappeared and reappearing signatures) rehearses the problematics of “originality” and the detection of forgery. The relative anonymity of printed money, like printed stories, makes the origins of both difficult to determine. Marxist and post-structuralist critics have long noted how the commodification of meaning into an exchangeable abstraction bears on how people consider other kinds of textual signification. The changes in the appearance and verifiability of the United States money supply, then, before and after the Civil War plays a direct role in how paper surfaces, like those in "Mystification," "The Gold Bug," and "The Purloined Letter" should be read.

“The Gold Bug” is somewhat similar to the Dupin tales, featuring a first-person narrator who witnesses and relates the (lucrative) deductive powers of a mysterious (or

mystifying) companion. In this case the powers of analysis are used to decipher a treasure map and uncover buried gold. The insect, like the story itself, is presented as the means by which intellect magically, yet deservedly, generates wealth. The sub-title in the *Dollar Newspaper* where it was first published informs us that it is "a prize story", for which “the First Premium of Our Hundred Dollars was paid." Mr. William Legrand, an entomological hobbyist, is encountered by the narrator in a “fit of enthusiasm” for having “found an unknown bivalve, forming a new genus.” Throughout the story the signification of the bug slips between scientific and commercial value, as a rare specimen but also the means by which Legrand/Poe discovers gold.

Not having the bug specimen with him, LeGrand draws a sketch of the creature for the narrator on what he thinks is a scrap of paper. The narrator, after looking at the drawing, says "this is a strange scarabæus, I must confess: new to me: never saw anything like it before — unless it was a skull, or a death's-head — which it more nearly resembles than anything else that has come under my observation." The death's head, incredibly, was *already* on the paper, drawn in invisible ink that appeared when exposed to the heat of the fire where the narrator was seated.[52] Similarly, Poe's “Gold Bug” was itself “already” written along the outlines of earlier tales of gothic horror and piracy. The illustration (See Figure 3) accompanying the first installment of the story in *The Dollar Magazine* makes clear that the gothic atmosphere is intended, along with ominous hints

[52] The paper turns out to be a piece of parchment with coded instructions to find the hidden gold of Captain Kidd, treasure that requires a set of interpretive or cryptographic feats to uncover. The paper was found by Jupiter, who used it to wrap up the Gold Bug after it had bitten LeGrand in his attempt to capture it. Charles Darwin, in his autobiography (1887) relates that “no pursuit at Cambridge [which he attended between 1828 and 1831] was followed with nearly so much eagerness or gave me so much pleasure as collecting beetles” (53). For this he gives the “proof” that “one day, on tearing off some old bark, I saw two rare beetles and seized one in each hand; then I saw a third and new kind, which I could not bear to lose, so that I popped the one which I held in my right hand into my mouth” (ibid). He is forced to spit it out, however, when it emits “some intensely acrid fluid” and the specimen is lost.

as to the narrative's likely conclusion. As long as LeGrand believes that he was the originator of the drawing, the coincidence of its duplication remains inexplicable, and he insists he is "perfectly certain" of having originated the outline himself

> for I recollected turning up first one side and then the other, in search of the cleanest spot. Had the skull been then there, of course I could not have failed to notice it. Here was indeed a mystery which I felt it impossible to explain; but, even at that early moment, there seemed to glimmer, faintly, within the most remote and secret chambers of my intellect, a glow-worm-like conception of that truth which last night's adventure brought to so magnificent a demonstration. (372).

The solution to the mystery, however, is not provided in the "original" story, containing only the first half. The story breaks of ends with the following (mystifying) sentence: "When, at length, we had concluded our examination, and the intense excitement of the time had, in some measure, subsided, LeGrand, who saw that I was dying with impatience, for a solution of this most extraordinary riddle, entered into a full detail of all the circumstances connected with it."

Figure 3. “The Gold Bug”, *The Dollar Newspaper*, Baltimore, (1843).

It is there that the first installment of the story abruptly ends. The original readers of the story, turning the page of the newspaper would nowhere find the “full detail of all the circumstances,” because the other side of the page contained only unrelated content. Clueless victims of this marketing strategy might have assumed that there were missing sheets, or that the printers had made an error. The “conclusion next week” on the T.O. Mabbott collection’s photocopy of the text, is written in pencil (as the Poe Society website observes), and that while “it is a very reasonable place to interrupt the story, satisfying the reader with the finding of the treasure and teasing him/her to continue next week in solving the mystery of how LeGrand figured out where it was,” it was also true, that

> since the first page does not carry any note about where the text is continued, it is plausible to surmise that it simply rolled over to the next page. The reader, of

course, probably did not realize that he/she had only the first half of the tale until he/she turned over the page.[53]

Readers were invited to display their trust by repeating the act of purchase to obtain the second half, even after having been fooled by the incomplete, original version, which had been only one side of the story, without sufficient clues to hint at a solution. This effect of frustrating the story's original readers—while calling on their further confidence—is absent from subsequent editions where both parts of the story are presented together. The narrator's confidence in LeGrand, despite his apparent insanity, is undoubtedly meant to reflect the reader's profitable investment (based on trust) in Poe, and by extension the newspaper that selected the story. Up until this trust had been established, LeGrand had been anything but forthcoming with his clues, intentionally feigning madness to test the *confidence* of Jupiter, the narrator, and the reader. In Poe's lesser known story "Mystification," the key text or paper was, although taken at face value as a solution to the conflict, in fact a deliberate attempt on the part of Baron Von Jung to confuse the faculties of his antagonist, causing him to mistake a genuine response with a counterfeit. In "The Gold Bug," LeGrand likewise misleads the narrator (and readers of the story) with a bit of "sober mystification," playing, like Hamlet, with the appearance of insanity. In "the Purloined Letter" as well, the Prefect is said to have "been thoroughly mystified."

A letter to the *Dollar Newspaper* where the story was first published features a reader describing a sense of familiarity, of having read the same events before. The correspondent says he was "struck" by two things about Poe's tale: the first is that the

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[53] The website also points out that that "the apparently unique copy of the original" of the June 21, 1843 newspaper was "discovered" in the Maryland Historical Society's collection in 1915, but "sometime in the 1970s [sic], it vanished without a trace." The closest link to the missing document is the photocopy that is part of the T.O. Mabbott collection at the University of Iowa.

“conspicuous and frequent allusion to the modes of secret writing” could identify the story as the author's, “whether his name were appended to it or not,” on account of his previous demonstration of cryptographic ability in *Graham's* magazine. The second thing the reader was struck by was that “nearly all the machinery of the tale, and most of its stirring incidents were similar to our memory—that we had read them before,” in the story “Imogen: or the Pirate's Treasure,” which also features gold buried by Captain Kidd under an oak tree. The irony is that even as LeGrand plunders pirate treasure, Poe's gothic effects were allegedly plundered from “the Pirate's Treasure,” a story by another author. Like the two sides of the parchment, the “exactly corresponding ideas” of “The Gold Bug” and “Imogen: or the Pirate's Treasure” trouble claims of individual authorship and ownership. The money earned or “discovered” by LeGrand and Poe, no matter how far removed, can in the end be traced to piracy.

Stephen Mihm, in *A Nation of Counterfeiters* (2007), describes in detail the prevalence of counterfeit notes at the time when Poe's fiction was being written, when bills were issued by individual state banks and their authentification relied on the discernment of the buyer in every transaction. "Counterfeit Detectors," books published as a guide to the identification of counterfeits, were unreliable and out-of-date, often exploited by law-breakers to detect vulnerabilities in the market. Mihm describes how these guides themselves were subject to illicit alteration and replication, with “shovers” printing their own counterfeit “counterfeit” detectors. False notes were a common-place in the antebellum economy, requiring their recipients often to return into circulation money they knew or suspected to be of dubious origin. Even genuine notes drawn from faulty or disreputable banks were considered of less value than effective counterfeits on stable institutions. Financial transactions involving paper money required the production

not only of the currency itself, but also a performance of legitimacy, and the granting of "confidence" or "trust" to the owner of the bill.

Not only do the words "The Gold Bug" refer to those who wanted paper money backed by "specie" or gold (especially prominent in populist rhetoric later in the century), but they also draw on and replicate unresolved anxieties about the detection of counterfeits versus "original" notes. The circumstances of the story's publication, in a "Dollar Newspaper," as a prize story “worth” a hundred dollars, are important because, in the mentality of value surrounding the ambiguous legitimacies of ante-bellum money (and literature), the simple fact that Poe's story was already being "circulated" confirmed its value. The "oblong scrap of parchment" would be redeemed for the one-hundred dollar note of the newspaper's confidence, despite (or because of) the fact that many of the events had been copied from "The Pirate's Treasure," a story by a different author…The discovery of the fictional treasure via the gold bug (confidence in Legrand), the winning of the prize money (confidence in Poe and "The Gold Bug") and the public circulation of the story (confidence in the dollar value of the "Dollar Newspaper") constitute an interdependent ecology of trust.[54] Conditioned by the wariness demanded by an economy where counterfeits mingled imperceptibly with the (arguably equally counterfeited) guarantees on state banks, Poe's story was accepted as neither entirely original nor entirely copied or stolen. Its *ambiguous* value was dependent upon the relative perspicacity of those upon which the paper was "shoved," and the confidence

[54] In political discourse at the time, a “Gold Bug” was one who wished for U.S. currency to adhere to the gold standard—in other words, those who had no faith in the banking system and paper currency.

embodied in buyers and sellers, authors and readers, forced to inhabit the ambiguous replications where such value was supposedly created.[55]

In the 19th century U.S. magazine business, centered in the urban Northeast, an increasing overabundance of both literary products and producers created the equivalent of a Malthusian bottle-neck for texts trying to make it into print. Poe, meanwhile, was arguing for the determination of literary form according to the rationalized constraints of commercial authorship. In his preface to "The Raven," for example, Poe claims that "the work proceeded step by step, to its completion, with the precision and rigid consequence of a mathematical problem." Following trends in new historical criticism, other Poe scholars have focused on the determining role of emerging print markets and magazine publishing; there is no doubt that, as numerous critics have pointed out, Poe's "prize story" was both for and about money. Devices like the gap between parts one and two, the gothic atmosphere, and the racist asides, were designed to sell newspapers. Similarly, the story registers the pressures of debates about the value of paper money and confidence in the banking system, shaken by recent financial panics, and haunted by the ever-present specter of the unauthorized copy. Poe states in a letter to Phillip Cooke that

55 “Myth,” Barthes writes, “is always a language-robbery. I rob the Negro who is saluting, the white and brown chalet, the seasonal fall in fruit prices, not to make them into examples or symbols, but to naturalize them through the Empire, my taste for Basque things, the Government. Are all primary languages a prey for myth?” Yes, Barthes concludes, because “myth can develop its second-order schema from any meaning and, as we saw, start from the very lack of meaning. But all languages do not resist equally well” (131).

his detective stories are given credit for more “ingenuity” than they possess. The "effect" of a solution may be a result more of "mystification" than a coherent narrative (68).[56]

Poe’s attitude may have had as much to do with the materiality of economic exchange as abstractions of literary technique. Faith in the possibility of redeeming paper money for specie at a bank, dependent on its status as an original note, not counterfeit, resembles the faith in Poe (and his fictional detective) requisite to fulfill the implied promise of the narrative, providing an “original” solution or conclusion. Mihm, discussing the difficulties facing early dealers in dubious bank notes, claims “many who grappled with the question ultimately arrived at a subjective, instrumental theory of value. In their eyes, the value of a note depended not on whether the bank that issued it could make good on its promise, but whether *someone else would accept it as genuine*” (235, my emphasis). Readers were meant to have faith in Poe’s story because the *Dollar Newspaper* had already accepted it as genuine, or genuinely original, whether this was actually the case or not. This frame of monetary uncertainty is a necessary context for economic (and therefore literary) value.

The introduction of the “greenback” and standardization of the nation’s money through national, rather than state banks, affected the way paper bills were handled, and perhaps rendered invisible much of the shades of association that would otherwise be present in the scenes where LeGrand is inspecting, duplicating, and decoding, an “oblong” piece of paper. The same goes for a key scene in “the Purloined Letter” in

[56] Quoted in *The Cryptographic Imagination: Secret Writing from Edgar Poe to the Internet* (1997).

which C. Auguste Dupin trades the “original” letter for 500,000 francs. Mihm, with eerily little irony, concludes that federal control of U.S. currency after the civil war meant “money became almost invisible, the subject of a quick glance, but little more. What had been a country of counterfeits became a genuine nation, enjoying complete control over the money that circulated within its borders. And so it remains today. The little slips of green paper pass from hand to hand, emblems of our faith, trust, and perhaps most important of all, our confidence in both our country and its currency” (374). Confidence in money, for Mihm, translates into a kind of ontological security in the larger national imaginary.

Anxiety about plagiarism haunts many of Poe's narratives, and he was involved publicly in 1845 with a dispute over the originality of Longfellow's poetry. “The Gold Bug” highlights these anxieties, particularly in the symbolism of the parchment where the encoded message appears. LeGrand used the oblong scrap of paper (its form, we are told, suggests something meant to be long remembered and preserved) to wrap up the Gold Bug, but at the time it seemed to be blank. "When I drew the scarabeaus, there was no skull apparent on the parchment.” We suspect, in other words, that both the treasure and the drawing had a history before LeGrand's “discovery,” a history which is suppressed by the need to justify a present claim of originality.

Details of the paper’s description function (as do physical aspects of the paper on which “The Purloined Letter” is written) to suggest hidden deceit or insanity on the part of the overtly rational detective. Easily overlooked is the fact that LeGrand does not use the center of the parchment for his drawing of the beetle, but rather one small, upper

corner. The goat's head, which LeGrand recognizes as the punning signature of Captain Kidd, appears "at the corner of the slip, diagonally opposite to the spot in which the death's head was delineated" (374). The gold bug, as the reverse impression of the death's head, would then be in the upper corner, because the skull has "the air of a stamp, or seal," while the Kidd, as a "hieroglyphical signature" would be at the bottom. LeGrand even claims that "its position on the vellum suggested this idea." The fact that LeGrand would only use a small corner for his drawing, and the same corner as the corresponding image, reinforces the gothic uncanniness of his involuntary replication.

If LeGrand's drawing of the bug duplicates the seal of the original letter, my interest is in LeGrand's hieroglyphic signature, which, in theory, would duplicate that of the "Kidd." For this mystery, it is necessary to, like LeGrand "observe, also, the *form* of the parchment" (373, original emphasis.) "Although one of its corners had been, by some accident, destroyed," LeGrand relates, "it could be seen that the *original* form was oblong. It was just such a slip, indeed, as might have been chosen for a memorandum—for a record of something to be long remembered and carefully preserved" (373, my emphasis). The "original" would have included the missing corner, precisely the corner where, when the letter is turned over, the signature would be located. A complete decryption therefore remains impossible. Legrand's sign/signature (like Poe's) remains a missing piece of evidence.

The point is not to accuse Poe of plagiarizing the story, but to show how a proprietary print culture (channeling narrative forces that, for most of human evolution, were oral and anonymous) means all claims of authorship are, to some extent, made in

bad faith. What Harold Bloom calls "misprision," or an author misreading his or her predecessors, is an inevitable consequence where innumerable authors compete within the limited constraints of conventions and calculations for mass appeal. Narrative elements must, like gold, be buried before they can be discovered, and neither economic nor literary value can be confined to paper surfaces, since these surfaces, inevitably, have already been written on. Finally, while the gold of "The Gold Bug" has been exhaustively analyzed by readers and critics, the annoying "bug" is neglected. The Gold Bug appears within the story as an entomological (versus etymological) specimen, and as a figure for the success and value of a text ultimately resting on its ability to reproduce—more like a computer code than a cryptographic one, and more like a living virus than a dead and fixed idea.[57]

Richard Powers' novel *The Gold Bug Variations* (2001) links Edgar Allan Poe's story, symbolically, with the aspirations of early genetic research in which his characters are involved. In Powers' plot the narrative of "The Gold Bug" appeals to one a scientist, named Dr. Ressler, working on the early breakthroughs of the 1950's. The crypto-analysis and detection in the story strikes Ressler, a leading geneticist, as similar to his

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[57] In Poe's "Some Words With a Mummy" (1845), the embalmed count explains his survival over thousands of years by informing the 19th century onlookers that "as it is my good fortune to be of the blood of the Scarabæus, I was embalmed alive, as you see me at present." The winged beetle is their "insignium." He further explains that those of his tribe frequently have themselves embalmed for "five or six hundred years" after they have written a great work of history. "Resuming existence at the expiration of this term," the mummy tells them, "he would invariably find his great work converted into a *species* of hap-hazard notebook—that is to say, into a kind of literary arena for the conflicting guesses, riddles, and personal squabbles of whole herds of exasperated commentators. These guesses, etc. which passed under the name of annotations or emendations, were found so completely to have *enveloped*, distorted, or overwhelmed the text, that the author had to go about with a *lantern* to discover his own book" (*my emphasis*).

own work because "the treasure in Poe's tale is not the buried gold but the cryptographer's flicker of insight, the trick, the linguistic key to unlocking not just the map at hand but any secret writing" (77).[58] This gene/text metaphor is triangulated with the pun of the title on Bach's "The Goldberg Variations," a series of musical exercises or compositions for the piano.

Judith Roof and others have detailed at length the dangers of equating genetic code with writing, thereby projecting onto the biological world (or literary texts) fantasies of complete decipherability, similar to the plain-text of an encrypted message.[59] For the characters in "The Gold-Bug Variations," the analogy between genetic and cryptographic code breaks down, for the same reasons that straight-forward versions of Literary Darwinism, attempting to "decode" the traces of human biology in literature are equally doomed to failure. There is no "key" to unlocking the genome, just as there is no key to literary meaning, due to the complexity and ambiguity resulting when a genotype (or genotext) is "read" as a phenotype (or interpretation) in a given environment. "Selection deals in the economy of individuals, even individual traits," Powers' characters eventually conclude, "but evolution deals only in populations, demanding not that they struggle but just that they procreate faster than they perish. No upward march, no drive

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[58] In Powers' novel "Ressler loses himself in the adventure. Discovery--a piece of heated parchment reveals secret writing. Pictograph of baby goat identifies author as Captain Kidd, language of cipher as English. Simple letter frequency and word-pattern trick leads scholar to pirate's treasure. But directions to treasure are themselves a coded algorithm for unburying. Two men and blackfella servant, applying human ingenuity, measured paces, and plumb line, crack third-level mystery and uncover wealth beyond wildest dreams." (76)

[59] "If DNA is a complex text to be deciphered," Roof claims in *The Poetics of DNA* (2007), "science becomes art, scientists become paleographers and critics, and the workings of vital chemistry can be authored, copied, rewritten, and copyrighted by anyone who can wield the 'language.'…Rather than provide a key to chemical methodologies, textual metaphors support the right to decipher, decode, rewrite, own, and profit from life's 'textual' key" (89). See also my entry for the term "code" in the University of Chicago's online *Theories of Media Keyword Glossary* (2003).

toward perfection. Evolution's move is lateral, spreading out, diversifying until every spot on the nearest-fit curve, every accidental juggle, has been auditioned against experience" (251).[60]

Shawn Rosenheim locates the publication of “The Gold Bug” within a cultural fascination with Morse code, following the invention of the telegraph in 1834.[61] Poe’s use of cryptography thematically reinforces the conceit of the detective plot that there is only one solution to the mystery, and it is achievable by working backwards through a series of unambiguous clues and encryptions. In Poe’s story, the skull that marks the spot of the treasure is visible only from a certain point, "in the Bishop's hostel in the Devil's seat." Recovery of the treasure requires a certain point of view, which at several stages relies on a cultural subjectivity Poe would have shared with the judges of the story. In addition, part of the work of the text is its flattering the racial prejudices of his audience.[62] LeGrand berates Jupiter for dropping the gold bug, used as the weight for a plumb line, down the wrong eye-hole of the skull because he is unable to tell his left from his right. Racism (and unwavering faith in eccentric and dispossessed Southern

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[60] Richard Rorty in “The Pragmatist’s Progress” (1992) remarks that Umberto Eco in *Foucault’s Pendulum* (1989) “must be satirizing the way in which scientists, scholars, critics and philosophers think of themselves as cracking codes, peeling away accidents to reveal the essence, stripping away veils of appearance to reveal reality. I read the novel as an anti-essentialist polemic, as a spoof of the metaphor of depth—of the notion that there are deep meanings hidden which only those lucky enough to have cracked a very difficult code can know” (89).

[61] In a copy of *Graham's Magazine*, which featured Poe's writing on cryptography, Rosenheim found the key to international Morse code written by hand, along with transcriptions of telegraph transmissions. The recognized value of the story, in part, was tied up with the workable system of decryption, based on letter frequencies, which may have had actual military application.

[62] The stakes of Poe’s anonymity are made clear by several reviews of pro-slavery books, thought to have been written by Poe, which appeared in magazines under his editorship.

aristocrats) functioned as a cultural cipher to the story, one that reinforced the actual cryptographic key (or vice versa). Jupiter, LeGrand's servant, first sees the parchment, captures the bug, climbs the tree, and digs up the treasure. The circumstances of the story, along with the gothic atmosphere, and accompanying illustrations in the “original” printing heavily suggest the possibility that LeGrand will follow Captain Kidd's example and murder the two companions who helped him with his work. Supposedly, LeGrand's “sober mystification” in refusing to communicate with the narrator is out of pique for his lack of faith.

Franco Moretti uses a Darwinian tree to model the "genesis of detective fiction" in Britain, using the stories of Arthur Conan Doyle and his contemporary rivals. At the various branchings are a set of morphological questions: “are clues present?,” “are the clues necessary for the solution?,” “are they ‘visible’ to the reader?” and, finally, “are they ‘decodable?’ Stories that ventured to the left at any of these branchings were unsuccessful, Moretti argues, and as a lineage went extinct. "It is a good illustration of what the literary market is like: ruthless competition—hinging on form. Readers discover that they like a certain device, and if a story doesn't seem to include it, they simply don't read it (and the story becomes extinct)" (72). Just as the origin of species was a fundamental concern for Darwinian science, the origin of genre has been a sticking point for an evolutionary approach to literature. Terence Whalen, in his influential *Edgar Allan Poe and the Masses* (1999), dismisses the argument put forward by Franco Moretti that

literary genres, like the detective story, evolve in the same way as animal species.[63] Researchers, however, continue to explore this alternative; at the Genre Evolution Project at the University of Michigan, for example, Eric Rabkin and Carl Simon are looking at how cultural environments shaped pulp science fiction stories from 1926 to 1999. The Michigan project "seeks to determine what benefits may derive from treating culture and cultural production and consumption as a complex adaptive system." Rabkin and Simon claim to "view culture and its elements as one would the biosphere, that is, as a system in which organisms succeed or fail according to their fitness to their environment and, by their existence and success, modify their environment." While showing that Whalen's dismissal of an evolutionary framework for the origin of genre is premature, my reading of "The Gold Bug," also demonstrates how Moretti's theory of literary evolution can be adapted to the particular context of the antebellum period and balooning print markets of the United States.

According to his own theory of aesthetics Poe's stories were organized around effects intended to be elicited from readers. Not only his gothic terror, but also his tales of "ratiocination" depended on generating initial interest through novelty and shock. Long term survival, on the other hand, selecting for replication on a larger scale, relied on

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[63] Whalen argues that "the emergence of the detective story is…more complicated than the Darwinian model suggests," because "to say that forms emerge by chance and are only selected by context ignores the importance of repetition in establishing a literary form" (235). Exactly why the necessity of "repetition" is incompatible with a Darwinian approach remains unclear in Whalen's argument. Similarly, Moretti's cliam that "Poe's tales of ratiocination confront a signifying environment where knowledge is not only a commodity, but more precisely a commodity whose value is imperiled by overproduction" lays precisely the right kind of groundwork for an evolutionary analysis, in which both writers and markets "repeat" or replicate generic conventions adapted to the political economy in which they must survive.

effects on the public imagination produced long after initial publication, and sometimes after long periods of dormancy, causing the images or language to be revisited, and buried or suspected intuitions to be disinterred and re-examined. In various ways, the stories create a frame or invitation for future critical growth. The near-endless replication of a text, such as that of "The Purloined Letter," also requires the reproduction of meaning: iterations that repeat, with a difference, the original encoded instructions. In this way, Poe's stories are similar to the shell figured into the introduction, with every telling or "mouth" adding to the previous layers of growth, according to similar patterns and principle. To use the imagery of J. Hillis Miller, Poe's stories are not like univocal trees, but rather a parasitical web of texts, criticism, and tertiary growth of interest. The "critical ecology" of Poe studies is a circle around which larger circles can always be drawn, to include associated ideas, cultural contexts, and submerged historical allusion.

One must allow, however, that certain configurations of words and events are more prone to virulence and proliferation, because of how they invite appropriation. In "MS. In a Bottle" and in the division between "The Gold Bug's" first and second halves, I have suggested that a key ingredient for survival has been an unnamed, concentric ambiguity around which terrific effects can be organized, and within which they can be held. The force of this maelstrom of ambiguities can be felt in later tales like "The Fall of the House of Usher," "Berenice," and "A Descent in to the Maelstrom," all of which feature a character who models, in one way or another, a para-textual response. In relation to these maelstrom of gothic effect, "monomania" also frequently figures in Poe's fiction as a cue to the appropriate attitude towards his fiction, as an involuntary

disorder of the "attentive faculties," in which seemingly insignificant objects (like a scrap of parchment or a letter, or someone's eye or teeth) become, through prolonged unhealthy fixation, the kaleidoscopic focus of myriad significations. These meanings do not belong to the text in a straightforward way, but are an indirect result of the challenge or invitation implied by the stories and their replicable structures.[64]

One wonders, of course, if *any* story of Poe's (especially given the critical attention that has been afforded "The Purloined Letter") could not likewise explode into exponential growths of interpretation, yet the reality is only a small fragment of published texts are selected for monomaniacal attention by critics. Poe's detective stories are clearly among them ("Mystification" excluded), because they employ various devices for eliciting identification and cognitive investment, and for making a variety of readings appear "authorized" by the original narrative. Like the "unwitting" and "thoughtless" daubing of the word "discovery" in the sail of "M.S. in a Bottle," or the reiterated figure of the death's head, interpretations of Poe's ambiguous effects seem both made and copied, original and counterfeit, rational and impossible. In this regard, Poe's detective and gothic tales seem inevitably to retain traces of the ambiguous currency and misplaced trust with which they were originally purchased.

"The Purloined Letter," perhaps more than any other Poe story, shows the marks of having passed through the hands of innumerable critics.[65] The letter given to the

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[64] Irene Harvey, in reference to criticism surrounding "The Purloined Letter" calls "Structures of Exemplarity". See Muller, John P., and William J. Richardson's *The Purloined Poe: Lacan, Derrida & Psychoanalytic Reading* (1988).

[65] One of the techniques of counterfeiting shoving money in *A Nation of Counterfeiters* is to stain, crumple, or otherwise artificially age newly copied notes to give them the appearance of already having passed through the hands of others who believed them genuine. Holes were sometimes punched in the bills, Mimh records, to give them the appearance of having been shipped by banks, which sewed the notes into bundles (223).

Prefect towards the middle of the story, however, before Dupin's extensive denouement and explanation, is rarely questioned as genuine. With the context of ante-bellum currency in mind, as well as the inter-textual ecology of Poe's lesser known work like "Mystification," the scene where Dupin exchanges the supposed letter for the Prefect's personal check for fifty thousand francs replicates the kind of scenes described by Mihm where counterfeits are "shoved" on unsuspecting victims.

The events leading up to this exchange are as follows: the Prefect visits Dupin and relates how a letter was stolen from the Queen by the Minister D—. Despite witnessing the theft, the Queen could not call attention to it without alerting the King to the contents of the letter itself.[66] The Minister, at the time of the Prefect G— first consulting with Dupin, has been profitably employing the letter in blackmail, and the Queen has charged the Prefect with its recovery. As in "The Gold Bug," it is only after he is paid, and the mystery is solved, that the detective relates the events leading to the solution. Dupin's story is that, while in the apartments the Police had already so assiduously searched, he noticed a very conspicuously displayed letter, ostensibly bearing little resemblance to the one sought by the Prefect and the Queen. He realizes that the Minister has refolded, readdressed, and resealed the letter, effectively "hiding it in plain sight" from the Parisian Police. Dupin makes a *fac simile*, visits the Minister the following morning and, using a pre-arranged distraction of a gun shot from the street, replaces the genuine letter with his own.

In *A Nation of Counterfeiters*, Mihm notes that "…the success of these fraudulent transactions required a convincing performance of class identity: that the shover was too

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[66] For Lacan, this is the first, or "primal" scene of the story, a designation that is not coincidental, since "the second [scene] may be considered its repetition in the very sense we are considering today" (*The Purloined Poe*, 30). Repetition in Lacan's seminar is that of a symbolic chain of relative positions, centered around possession of the purloined letter.

much of a lady—or too much of a gentleman—to knowingly pass a counterfeit note" (210) The Prefect, thoroughly taken in by the confidence of the detective, is “absolutely thunderstricken” when the Dupin shows him (supposedly) the letter purloined from the queen, later stolen by the detective from the Minister D—’s apartments.

> For some minutes he remained speechless and motionless, looking incredulously at my friend with open mouth, and eyes that seemed starting from their sockets; then, apparently recovering himself in some measure, he seized a pen, and after several pauses and vacant stares, finally filled up and signed a check for fifty thousand francs, and handed it across the table to Dupin. The latter examined it carefully and deposited it in his pocket-book; then, unlocking an escritoire, took thence a letter and gave it to the Prefect. This the functionary grasped in a perfect agony of joy, opened it with a trembling hand, cast a rapid glance at its contents, and then, scrambling and struggling to the door, rushed at length unceremoniously from the room and from the house, without having uttered a syllable since Dupin had requested him to fill up the check (440).

The careful examination on the part of Dupin of the Prefect’s check is contrasted with the “rapid glance” and unreflective behavior of the Prefect, who, it should be remembered, had never seen the original letter, and was working entirely from the written description in his “memorandum book,” which contains a “minute account of the internal, and especially of the external appearance of the missing document,” a description which he reads aloud, in its entirety, to Dupin. By giving the detective all of the information he has about the letter, the Prefect is leaving himself open to the imposition of a counterfeit. The Queen, of course, would be able to tell the difference, but the Prefect, caught with the forged document, would be unable to admit Dupin’s involvement, since he “cautioned” the detective from the beginning that “this is an affair demanding the greatest secrecy, and that I should most probably lose the position I now hold, were it known that I confided it to any one” (432). The Minister has confided in Dupin in a double sense, placing confidence in him and the letter’s value, and as Herman Melville’s “The Confidence Man” suggests, confidence was a dangerous thing to have in an uncertain

economy of counterfeit credit.[67] Dupin's machinations, in this reading, do not bring about the downfall of the Minister D—, who, it is suggested, is a kind of double and fellow poet of the detective, but rather that of the Prefect himself, who has repeatedly insulted Dupin, and who, "being unaware that the letter is not in his possession…will proceed with his exactions as if it was. Thus he will inevitably commit himself, at once, to his political destruction. His downfall, too, will not be more precipitate than awkward" (451).

Poe's story, and the evolved critical accumulations, create the framework for an agonistic field of re-interpretation, with each position superseding the last, but rendering itself susceptible to a subsequent displacement. The structure of narrative encourages identification with Dupin, the implication being that previous critics, like the Prefect, "consider only their own ideas of ingenuity; and, in searching for anything hidden, advert only to the modes in which they would have hidden it" (442). My reading of Poe's detective fiction, based in the context of actual monetary currencies, and the "hoaxing" and mystifying nature of his other texts, sees Dupin's elaborate show of intellectual acumen as nothing more than a con-game to pass off a counterfeit document, gaining financial rather than mental ascendancy over the distasteful methods of the Prefect.[68]

Evidence for Dupin's counterfeit lies, not in the symbolic nature of "the letter," exhaustively and famously analyzed by Jaques Lacan in his "Seminar on 'The Purloined

[67] Mihm writes that "by the time he began writing The Confidence Man, Herman Melville had already receded from public view, a victim of his resistance to the demands of the popular literary market. The novel, which arrived in bookstores during the financial panic of 1857—when most of the nation's banks stopped honoring their notes--was a parable of the market economy and the paradoxical forces that kept it alive" (4).

[68] This approach, admittedly, is not entirely original. See especially "Just Fooling: Paper, Money, Poe" (1999) By K. McLaughlin and "The Reader As Poe's Ultimate Dupe in 'The Purloined.Letter" (1989) by Hal Blythe and Charlie Sweet.

Letter,"(1972), Jaques Derrida's "The Purveyor of Truth," (1975) and Barbara Johnson in "The Frame of Reference: Poe, Lacan, Derrida," (1977) but in the material surface of the letter itself. The letter, in the Queen's apartments, had been set face down with the address uppermost. This means that originally, both sides of the paper were written on. Later, Dupin claims that the *edges*, rather than edge, had been refolded, so from this it is possible to gather that the paper was folded into thirds. It seems conceivable that the "inside" of the original letter, on the side opposite the address, would have been empty in the bottom third, in which case room would be left for the new address when refolded by the Minister D—. A seal, however, would require that the top third, when folded down, leaves enough room on the underlying paper for the seal to hold—and if the letter has been inverted in the way described, this underlying paper is the top of the *inside* of the original letter, which would not have been left blank.[69] Further, no matter how the folding is imagined to have taken place, the *back* of the new letter would still bear the writing of the old, which Dupin could not replicate because he had never seen.[70]

It is conceivable that Dupin's counterfeit letter could fool the Prefect, who knew of it only by description, but inconceivable that the Minister would, as in Dupin's fantasized revenge at the end of the story, open the letter, intending to carry out his plan of blackmail, not realizing he had been "duped." Not only would the back of the letter be

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[69] In Lacan's "Seminar on the 'Purloined Letter'" he writes of the Parisian police that "a different seal on a stamp of another color, the mark of a different handwriting in the superscription are here the most inviolable modes of concealment. And if they [the police] stop at the reverse side of the letter, on which, as is known, the recipient's address was written in that period, it is because the letter has for them *no other side but its reverse*" (40, my emphasis).

[70] "Container/Contained; the Everting of the Letter; the Game of Even and Odd; Simple and Odd; Revenge on a Double; One Bad Turn" in John Irwin's *The Mystery to a Solution: Poe, Borges, and the Analytic Detective Story* (1994) provides the model and context for my argument, but the logic leading to the conclusion that *in order for Dupin's account (to the Prefect and the narrator) to be true* the content of the queen's letter could *only fill 1/3 of the page*, is my own.

different from the one he had stolen from the queen, for the reasons outlined above, but it is simply impossible for Dupin's counterfeit to "pass" the inspection of the Minister. The letter, when disguised, was supposedly stained, crumpled, and torn halfway through. While it is possible that the writing on the letter may be replicated with a fair amount of accuracy, the stains and blotches would be arranged in a manner unique to the original. Dupin, seeing the letter from the other side of the apartment through green-shaded glasses, would have had to replicate the chaotic spread of dirt or ink in a manner exact enough to fool the Minister, holding the letter in his hand, before he risked his life breaking the new seal for his intended purpose.

One interesting parallel between the evolution of species and the evolution of narrative is the absence of a definitive act of speciation or creation. Evolution does not work by leaps of genius but by slow experiments of trial and error, in the midst of myriad possibilities, with seeming purpose or design emerging in retrospect, once countless unsuccessful variants have faded from consideration and memory. For textual artifacts, to exist is to be remembered. Poe's narratives, however, did not evolve in an abstract universe of unadulterated literary forms. Poe as a biographical figure is important in understanding the survival of his texts, and the persistent recurrence of certain themes; results both of the conscious "artificial" selection of writing and the unconscious "natural" selection of literary forms. According to memeticists like Richard Dawkins, Daniel Dennett, Susan Blackmore, and Kate Distin, Darwinian selection will inevitably occur wherever there is replication, variation, and selection.[71] It seems clear that Poe replicated and varied elements from previous stories—his own and others'—and that

[71] David Hull noted in 2001 to this that "selection processes require that replication be differential. Not every replicate that is produced can survive to reproduce." He goes on to write that "scarcity of some sort is required. In conceptual evolution, words are cheap" (169).

antebellum literary tastes acted (as Franco Moretti argues was true in Britain) as selective forces directing the literary evolution of genres.

In conclusion, I agree with Terence Whalen's assertion that "the detective tale offers a perfect opportunity to assess the relation between a specific publishing environment and a specific innovation in literary form," and am indebted to his analysis of how "The Gold Bug" and other stories relate to an antebellum crisis in literary overproduction and the emergence of mass markets (232). I strongly disagree, however, with his dismissal of Franco Moretti's model of literary evolution and the role of chance, imitation, and selection in shaping popular genres. Rather than disproving the Darwinian model of genre evolution, Whalen's demonstration of the influence of a publishing environment on Poe's fiction actually provides a plausible causal force for the adaptation of existing conventions in a new "species" of detective narrative. The survival of texts can be understood as a result of ongoing interactions between their formal properties and the historical occasions for their recurrence and reimagining, making Moretti's and Whalen's approaches compleattementary rather than mutually exclusive. In order for theories of literary evolution like that of Moretti to account for the *extended* survival of texts or genres, formal qualities like ambiguity need to be examined as functional narrative elements in an ongoing process where texts not only produce, but metabolize meaning.

# CHAPTER II: MELVILLE'S ANONYMOUS SAVAGERY

"Utopia wants speech against power and against the reality principle which is only the phantasm of the system and its indefinite reproduction. It wants only the spoken word; and it wants to lose itself in it."

Jean Baudrillard
*The Mirror of Production* (1973)

Models of literary history that trace innovation in terms of direct lines of influence and genealogical trees can lead, potentially, to misconceptions about how and where the evolution of narratives actually occurs. While publication does signal the beginning of (and precondition for) the type of literary selection and evolution Franco Moretti describes, it also signals the end of a different kind of tactical evolution, within the transient and distributed networks of living, spoken narratives. The advantage of a fitness landscape (a representation of the likelihood, at a given time and place, for literary replication and survival) is that unlike Moretti's trees, it can map the interplay and interpenetration of printed and spoken stories. Rather than paths of discernable influence (lines connecting the dots of known and visible texts), Wright's fitness landscapes suggest the wave-like contours of tastes, models, and expectations determining textual replication and "success."

Herman Melville began *Mardi* (1848) as a biographical adventure story, extending the themes and style explored in *Typee* and *Omoo*. Once this formula for commercial success had been found within the adaptive landscape of antebellum publishing, the expected strategy for Melville to proceed through minor mutations,

attempting to discover higher altitudes of incremental success within the same localized space. Examples of this patient and expectant climbing can be found in Poe, as shown in the previous chapter, and in the endless, relatively minor variations on *Looking Backward* considered in the next. *Mardi*, however, does something different. It is almost as if Melville's text ignores, or removes itself, from literate expectations entirely. The adaptive landscape (more of a sea-scape) seems to become flat, calm, and prone to illogical drift.[72]

In the second chapter of *Mardi*, the *Arcturion* is beset by a calm. At this point, as some of the novel's critics maintain, both the calm and the narrative become difficult to endure. “To a landsman," Melville writes, "a calm is no joke. It not only revolutionizes his abdomen, but unsettles his mind; tempts him to recant his belief in the eternal fitness of things; in short, almost makes an infidel of him” (9). In the *Arcturion*, as in many of Melville's other ships, men "appear as they are," and social as well as geographical distinctions are revealed as imaginary (14). "You sink your clan," Melville writes, "down goes your nation; you speak a world's language, jovially jabbering in the Lingua-franca of the forecastle" (13). Ungrounded, abstracted, a landsman's mind at sea is stripped down to its own powers of pure induction, "that inner microcosm, wherein we see the charted universe in little, as the whole horizon is mirrored in the iris of a gnat'" (421).

Despite the global scope of *Mardi*, critics have attributed to this chapter and the novel as a whole precisely the kind of "local angularity" that is the province of the

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[72] For Melville’s relationship with evolutionary science and philosophy (as it relates to *Moby Dick*), see Eric Wilson’s “Melville, Darwin, and the Great Chain of Being” (2000).

becalmed landsman. "The Calm" has recently been read in the context of those problems specifically besetting an antebellum American writer of fiction in New York. Both John Evelev and Cindy Weinstein find evidence for opposing modes of professionalized authorship Melville had to choose from, rooted either in gentlemanly indolence or middle-class industriousness. The following passage is used by both to establish *Mardi's* relevance to nineteenth-century professional labor:

> Vain the idea of idling out the calm. He may sleep if he can, or purposely delude himself into a crazy fancy, that he is merely at leisure. All this he may compass; but he may not lounge; for to lounge is to be idle; to be idle implies an absence of any thing to do; whereas there is a calm to be endured: enough to attend to, heaven knows (10).

Evelev sees "The Calm" as signaling a change in Melville's "vision of authorship" from the Irvingesque mode of elite patronage to a new specialized version of labor shared by antebellum doctors, lawyers, and other skilled professionals from the rising middle class. "In this chapter," Evelev writes, "we can see Melville replacing the older model of authorship as generative leisure with a new founding in active mental work, a non-manual labor that is not 'idling,' but confronting the mental tasks that require skilled attention" (58). Cindy Weinstein similarly argues in a section called "The Calm Before the Storm: Laboring through Mardi" that the calm presents an authorial choice between idleness and work. For her the chapter "constitutes the interstitial moment" where the narrator "will choose either the sweetness of leisure or the path of industry" (92). Unlike Evelev, she believes that the romance story with Yillah in the following chapters betrays the narrator's choice of leisure. With the laborious allegorical journey initiated by

Yillah's disappearance in Chapter 64, however, Weinstein asserts that the importance of professional work for the narrative and its characters is again foregrounded.

Both Evelev and Weinstein equate the narrator's position with that of "the landsman." This position, however, is defined in *Mardi* as "*old* impressions upon first witnessing as a landsman this phenomenon of the sea" (9, my italics). The false binary between idleness and industry is exposed by the implicit irony in the observation that "there is a calm to be endured." In my reading of *Mardi*, the calm cannot be endured or understood merely by a new and more encompassing form of work, since the wording of the passage indicates that neither industry nor leisure is possible. The immobility of the *Arcturion* causes the "glorious liberty of volition" to "become as naught," taking leisure, as the antithesis of work, also out of the picture (10). Nothing beyond the preconceptions of the landsman mark any substantive difference between calm and leisure. My argument is that, in the case of *Mardi*, the details of commercial publishing in industrialized America and Britain, as central as they are to Evelev, Charvat, and Weinstein's studies, should be provisionally set aside, in the case of *Mardi*, the most "oral" of Melville's novels.[73]

Rather than addressing the culturally specific details of the novel's publication, which William Charvat and others have admirably attended to, I am interested in the content of the allegory itself. This means a shift in emphasis away from the print culture

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[73] In "The Storyteller," the Frankfurt school critic Walter Benjamin claims that "what differentiates the novel from all other forms of prose literature—the fairy tale, the legend, even the novella—is that it neither comes from oral tradition nor goes into it" (87). If so, then *Mardi* fails as a novel.

of America to a different emphasis on oral performance.[74] The ungrounded sailor-metaphysics can explain how the calm described in the second chapter may have provided the generative force (both allegorically and neurologically) for the rest of the novel. Melville’s narrative, reflecting the evolutionary dynamic of mutation—the counterpart in Wright’s landscape to the centripetal demands of selection—breaks free of the self-contained sufficiency of a literary product to drift outward into allegorical and rhetorical experiment. Jarl, the narrator's illiterate companion who joins him in jumping ship from the *Arcturion*, embodies more the spontaneous, introspective impulse that structures the narrative, taking it outside the realm of literary production.

Literary critics understandably tend to focus on aspects of *Mardi* that can be traced to other literary works and genres. David S. Reynolds, in *Beneath the American Renaissance* extends the scope of this research into popular literature. Reform literature, travel narrative, secular allegory and political pamphleteering all shared with Mardi an argument of universal humanity; like Jarl, many progressive idealists in the 19th century declared all rational beings “brothers in essence” (12).

The calm poses no difficulty to Jarl, since "in repose, his intellects stepped out, and left his body to itself" (36). In other words, the narrative and compositional habits informing *Mardi*’s rambling allegorical nature might not have originated in New York, where Melville was recounting his adventures. The mental habits needed to conceive

[74] See Alessandro Portelli’s reading of *Moby Dick* and *Pierre* in “The Sign of the Voice: Orality and Writing in the United States” (2006) in which he writes that “Melville chases the whale that runs like a *hooded phantom* through legends and oral storytelling and through wild, fabulous and strange *rumors* and *tales.* The elusive immateriality of the whale’s whiteness is duplicated in the ghost and in the voice” (533).

such an episodic yet conceptually integrated allegorical saga was more likely formed in precisely the kind of monotony-induced meditative calm he describes in the first two chapters. The conclusion *Mardi* forces us to draw, if seen on its own terms, is that "The Calm" illustrates precisely those conditions that allowed Melville later to "step out" of the metaphorical body of his texts, thereby abandoning (and not merely taking a vacation from) a voyage contained within the narrow demands of professional labor.[75] The calm, for one accustomed to the sea and its impersonal expansiveness, does not lead to work in *Mardi*, but to narrative development. The claim that it was “that bitter impatience of our monotonous craft, which ultimately led to the adventures herein recounted” does not refer only to the decision to jump ship. Other forms of narrative undoubtedly existed for Melville outside of writing, and it is doubtful he always considered them forms of—or mere preludes to—work.

In the first section I attempt to trace assumptions about *Mardi*'s incoherence and limited referential scope to some of their most influential advocates, and show how these assumptions preclude other possibilities of interpretation, more in keeping with the novel's persistent allusions to pre-industrial modes of cultural memory. In addition to focusing on commonly discussed passages, this chapter will also emphasize some of the neglected sections of Melville's densely complicated (but not laborious) allegory. Reading *Mardi* against the larger fitness landscape of U.S. literary history can help to chart not only the peaks, but also the valleys of adaptive possibility, and illuminate the

[75] Since *Mardi* was originally envisioned as a continuation of *Typee* and *Omoo*, the significance of the ship’s desertion extends to Melville’s abandonment of his earlier publishing agreements and expectations.

relentless forces of variation and drift that are the counterpart to the more evident or visible forces of attraction to prevailing trends of genre and convention. Following the whale (*Moby Dick* is Melville's novel most well-adapted to modern literary tastes) leads to a different view of 19th century literature than drifting (without map or compass) along with Melville's seemingly aimless speculation.

Evelev's reading of *Mardi* is not especially egregious. On the contrary, his perspective (seeing Melville's narrative within the American industrial and print-capitalist context) is consistent with what are the dominant trends in criticism of *Mardi*. I will argue, however, that the conception of authorship prevalent in these critical trends has not adequately accounted for the oral and dramatic traditions of songs, philosophical discourse, improvisations, and demonic "possessions" that form the overt subject matter of the novel. I would like the limits of my critique to be clear. All of the methodologies I criticize as inadequate for *Mardi* have been effective elsewhere, and the attention to orality and experience needed to interpret Melville's allegorical methods in *Mardi* would probably have limited value for most of his generic or professional output. *Mardi* is exceptional because, as Charvat points out, it "was not classifiable with anything that readers were currently consuming" (219).[76] Biographical research, critical reviews, as well as knowledge of publishing histories and contemporary sources all provide analytical tools that are valuable for understanding Melville's other fiction, especially that

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[76] Jonathan Culler, in "Toward a Theory of Non-Genre Literature" from *Theory of the Novel: a Historical Approach* (2000) writes that "some of the most important expectations and requirements for intelligibility are enshrined in the various genres. A genre, one might say, is a set of expectations, a set of instructions about the type of coherence one is to look for and the ways in which sequences are to be read" (51).

explicitly dealing with more conventional forms of authorship or chirographic culture, as in *Pierre* (1852), *A Paradise of Bachelors and a Tartarus of Maids* (1855), and *Bartebly the Scrivener* (1856).[77] Writers are known, of course, to write frequently about writing, but they are capable of writing about other things, as well, such as their experiences as sailors in the South Pacific. In summary, *Mardi* invokes of a broader field of reference than antebellum literary professionalism in the United States.[78]

<u>Incoherent Structure: Songs and Stories</u>

The professional marketplace of antebellum New York demanded unity from the texts it circulated. Evelev's primary assertion is that *Mardi's* stylistic commitment to the modes of antebellum print culture, ironically, assured its commercial failure. "The novel's sprawling, digressive, and fragmentary form that would doom it commercially and critically," he writes, "is derived from Melville's investment in a professional vision of authorship and demonstrates how the idea of professional authorship underwent changes in this period" (52). Presumably, if *Mardi* was not "sprawling, digressive, and fragmentary" it would less suitably illustrate the market that rejected it. While Evelev's theoretical treatment of the incoherency in *Mardi's* structure is new, his underlying conviction of its fragmentary form has a long tradition of scholarship.

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[77] *Moby Dick* (1951), while stylistically digressive, remains trapped by the deterministic commercial forces represented by the coin nailed by Ahab to the *Pequod's* mast. It is, in a sense, Melville's literary return to the whaling ship that he deserted in 1842.

[78] "The stillness of the calm is awful," Melville writes, describing the landsman's reaction, "His voice begins to grow strange and portentous. He feels it in him like something swallowed too big for the esophagus. It keeps up a sort of involuntary interior humming in him, like a live beetle" (10). The place where the calm strikes the Arcturion is "something more than sixty degrees to the west of the Gallipagos [sic]" (11).

In *American Rennaisance*, F.O. Matthiessen asserts that “in *Mardi*,” despite his “enthusiasm,” Melville “was obviously not operating on any coherent theory at all” (388). Perry Miller, in his influential book on the New York publishing world, wrote that Melville “was swept through 1848 by an irresistible rush into composing a hodge-podge which, in his innermost consciousness, he knew would never sell" (223). Merrell R. Davis, who divides *Mardi* into three sections based on stylistic differences, as well as dates of likely composition, claims that “since the Narrator’s quest through Mardi is a literary device to bind together the book’s varied and disparate ingredients…the attempt to find a perfectly consistent allegory in the book is fruitless” (119). More harsh is Wai-chee Dimock’s fairly recent claim that "from our perspective,” Melville’s expectations that his book would be a success “seem insane” and wonders “what enabled Melville to have such insane expectations?" (73). “Actual readers,” she notes, quoting from reviews, “objected to the ‘prosiness,’ ‘puerility,’ and ‘downright nonsense’ in *Mardi*…and wondered at the ‘audacity of the writer which could attempt such an experiment with the long suffering of his readers’” (74). Charvat, too, believes that neither *Mardi*, *Moby Dick*, nor *Pierre* consist of “structurally organic wholes all the parts of which can be schematically related to all the other parts” (267).

Rather than entertaining *Mardi’s success* as a possibility, even recent critical assessments take both the conceptual and popular failure of the allegory as their starting point. Mardi’s long, laborious speculations may hold the interest of the critic or a determined reader, the argument goes, but the very qualities that make it of critical, specialized interest doom it as popular entertainment. These assessments are embedded

within the long tradition arguments about professionalization and authorship. *Mardi's* reputation for incoherency can be traced, at least partially, to willful or disingenuous incomprehension on the part of Melville's offended contemporaries and early critics, whose evaluative judgments have provided a critical momentum against *Mardi* that has continued to the present.

The opposing forces of Wright's fitness landscape, variation and selection, diffusion and destruction, are equally evident in the shape of literary evolution in the 19th century. The previous chapter, "Replication Games," dealt with the centripetal demands for ambiguous texts in long-term selective environments. Melville's career suggests the attraction of another adaptive peak for antebellum American publishing, that of anonymity (see Figure 5). With an avaricious taste for biographical travel narrative, the literary public also showed a fastidiousness as to the identity of authorship, as showed by its reception of *Typee* and *Omoo.* Trends towards homogeneity, however, are only one half of the model, which Wright intended to illustrate how sub-populations could chance upon and aggregate towards new mutational advantages.[79] *Mardi*, in fact, turned out to be phenomenally mal-adapted to the landscape of literary preference from its publication to the present day, so it could be argued that it is a poor example of how new peaks of formal (replicable) innovation evolve, but it is precisely the lack of calculation in the "stepping out" of previous conventions as *Mardi* veers into allegorical romance, that

[79] R. Skipper in "The Heuristic Role of Sewall Wright's 1932 Adaptive Landscape Diagram (2002)" defends the validity of the landscape against William Provine's claim (1986) that Wright's model for genotype expression is "mathematically incoherent" (1179). Various critiques of Wright's model have in turn produced their *own* (adapted) adaptive landscapes, but Skipper (following Ruse), suggests that these rival landscapes only reaffirm the centrality of the adaptive landscape as a philosophical *heuristic* as well as a mathematical model.

makes it a suitable illustration of the ceaseless, profitless experimentation on which the discoveries of successful texts and publications depend. If it weren't for their peripheral attachment to the names of their famous authors, Melville's *Mardi* and Poe's "Mystification" would not have been preserved by a literary archeology concerned with the forms and formula of success.

Much of the critical consensus on *Mardi*'s unsalable and unreadable nature comes from the few allegorical episodes of *Mardi* that portray a recognizable form of authorial labor. One of these is the Lombardo section, which, far from offering an unproblematic model of literary authorship, instead portrays a philosopher who might be possessed by a demon quoting an autobiography (in which a poet describes a work called The "Konstanza" which has many of the same traits as *Mardi* itself). Contextualizing the passage should convey some idea of how tenuous the identification of the "Konstanza" with *Mardi* actually is, and how qualified the statements about internal autocrats and "sceptered instincts" are when placed within larger, more consistent themes of the novel.

The chapter of *Mardi* in which the episode occurs is called "Some Pleasant, Shady Talk in the Groves, Between my Lords Abrazza and Media, Babalanja, Mohi, and Yoomy". The title gives an indication of the mood in the chapter (entirely at odds with Lombardo's crazed theories of authorship, as expressed by Babbalanja's demon). The scene itself is conveyed in dramatic dialogue. Abrazza, one of the island kings, claims that "the unities" are "wholly wanting in the Konztanza (sic)" (526). The "Konztanza" is a poem presumably standing in for Melville's novel. Babbalanja replies that the author, Lombardo, had written in his autobiography that "for some time, I endeavored to keep in

the good graces of those nymphs [the Unities]; but I found them so captious, and exacting; they threw me into such a violent passion with their fault-findings; that, at last, I renounced them" (ibid).

Lombardo, however, a minor character introduced towards the end of a narrative filled with minor characters, expresses through fragmented and unreliable voices a view of literary authorship entirely at odds with that implied by the structure and events of the novel. The other characters in the scene provide the opposite side of the philosophical dialogue to counter Lombardo's professional views. Yoomy, the poet, mentions a "song spell" that "steals over" him (595). Abrazza repeatedly counters Babbalanja's version of laboring authorship with interjections about invoking the muses, or drinking for inspiration. "For all the ravings of your Babbalanja," he says, directly contrary to the usual readings of Lombardo's (and by extension Melville's) authorship "Lombardo took no special pains; and hence, deserves no small commendation. For, genius be somewhat like us kings, —*calm*, content, in consciousness of power. And to Lombardo, the scheme of his Konztanza might have come full-fledged, like an eagle from the sun" (594, my italics). As in "the calm," the question is not between two styles of writing, laborious or idle, structurally unified or whimsically autocratic, but whether or not authors, in the context of the chapter, can be said to write at all.

Evelev's tendency to ignore possibilities outside of literate print culture is evident when he claims that "the narrator invokes *Frithiof's Saga*, for example, in his description of his shipmate, Jarl: 'Ah, how the old sagas run through me!'" (56). Evelev sees this and other references establishing that "Melville's narrative persona is a well-read, casual

name-dropper" (56). Jarl, however, is illiterate, and a Norse saga, said to "run through" the narrator while he is invoking the sea voyages of the Skyeman's Viking ancestors, seems outside the domain of conventional literary reference. The "bard" in the names of both Lombardo and Bardiana (Babbalanja's other indweller) likewise speak against written, attributable authorship. Songs and sagas don't, in fact, conform to print-literary expectations of stable authorship, and neither they nor *Mardi* are entirely amenable to criticism that studies texts only in terms of those expectations.

The narrator himself is far from a stable reference. Like Babbalanja, his speech is not necessarily his own. In the "Dreams" chapter, recalling Mikhail Bakhtin's description of textual heteroglossia as an orchestral score, he claims that "in my tropical calms, when my ship lies tranced on Eternity's main, speaking one at a time, then all with one voice: an orchestra of many French bugles and horns, rising, and falling, and swaying, in golden calls and responses" (367). In the same way as Babbalanja, there are "many, many souls" within him (ibid). Taji, the role assumed by the narrator upon his arrival in Mardi, is demi-god who has descended from the sun, a persona invented by the narrator to interact with the islanders. In the final chapter, the narrator declares that "Taji lives no more. So dead, he has no ghost. I am his spirit's phantom's phantom" (653). As these examples show, *Mardi* is exceptional in the number of narrative devices employed to *separate* views and speculations from any ascribable source.

The division of the narrative voice into so many characters is why Charvat and others see the allegory as lacking in unified structure. Charvat maintains that Melville "involved" the reader of *Mardi* in "the very processes of thought," and "made him

collaborate in exploratory, speculative thinking which is concerned not with commitment but with possibility" (268). In Charvat's opinion, this is the result of an "internal dialectic" where Melville's ideas came from "contradictions within himself" which is "the one kind of thinking that the general reader will not tolerate, and the nineteenth-century critic, when he detected it, declared it subversive" (ibid). Far more subversive, however, is the possibility that Melville's "speculative thinking" resulted from an entirely different conception of narrative that allows for communal, rather than individual, models for dialogic composition. If the words of an author are not his or her own, then contradictions cease to be signs of internal disunity. The narrator is neither writing opinions, nor referencing the same opinions as written by others; he is, instead, merely letting them "flow through" him, in the style of pre-literate cultures whose literary artifacts were not as completely defined by questions of originality and authorship.

Yoomy, Mohi, and Babbalanja offer distinct interpretive positions in their role as poet, historian, and philosopher. Bardiana, a far more significant figure than Lombardo, simply resides as a spirit in Babbalanja's consciousness, greatly facilitating the quotation of the "Konztanza" (King Media, another major character, represents a moderate, or median, opinion, sharing a divine status as demi-god equivalent with that of Taji, the solar diety whose identity the narrator is fraudulently assuming). In the Lombardo passage specifically, Babbalanja's claim about Lombardo's autonomy as a writer can be set against other pronouncements, such as "all ideas are infused" and equally available to a universal inspiration, because since "of ourselves, and in ourselves, we originate nothing" (595). Lombardo, when writing the *Konztanza* "was not his own master" but

rather “a mere amanuensis writing by dictation” (596). Professional authorship, then, cannot be the proper context for the Lombardo section, since the professional vision depends on profit, and profit is impossible without origin and consequent ownership.

A straightforward acceptance of Babbalanja’s claims is further complicated by the fact that he is possessed by the demon Azageddi. Moments after the pronouncements frequently quoted from, he is literally raving: "Thus great Lombardo saith; and thus; and thus:-thus saith he--illustrious Lombardo!--Lombardo, our great countryman!"(601). Abrazza notices his teeth, which have grown "white and sharp" and speculates that his mother was a shark.  Media replies "Ah! that's Azzageddi" explaining that the voice is that of an indwelling demon that frequently surfaces in the philosopher’s discourse (ibid).

Also, the motivation of profit can only partly account for *Mardi’s* existence. Although the “Konstanza” is presumably a written document, it was written only out of “the necessity for bestirring himself to procure his yams” (592). “More conduits than one,” exist to “drain off the soul’s overflowings” and there is nothing in the narrative to indicate that the conduit of print literature is necessarily superior to the immaterial and unfixed forms of narrative that the novel invokes (693). Demonic possession rather than professionalism strikes me as *Mardi*'s model of authorship, with the narrator *channeling*, not imitating, literary modes. When told “the Konstanza lacks cohesion; it is wild, unconnected, all episode” Babbalanja simply answers that “so is Mardi itself:--nothing but episodes; valleys and hills; rivers, digressing from plains; vines, roving all over; boulders and diamonds; flowers and thistles; forests and thickets; and, here and there, fens and moors. And so, the world in the Konstanza” (597).

To summarize, then, the passage concerning the “Konstanza”’s lack of unities occurs within a number of narrative frames that call the universality of its perspective into serious question. A narrator, pretending to be a demi-god, filled with “many souls” writes about a philosopher, who might be a demon, describing the autobiography of a poet who believes that he is inspired by the “infused” essences of universal thought, and that apparent inconsistencies are merely a greater reflection of the unpredictable contours of the external world.

## Unreadable Allegory: Professionalism to a Point

Mardi, I suggest, is neither as incomprehensible nor as laborious as its harshest critics have maintained. Seen in light of Melville's anti-imperialism and fascination with Polynesian cultures evident throughout his early novels, the allegory takes on both more consistent and less superficial meanings. The multi-vocality and narrative fragmentation Mikhail Bakhtin would describe as heteroglossia plays a functional role in distancing Melville as an author from the novel’s radical political content, while allowing the internal logic of this content to maintain a coherence outside of the narrative persona. It also marks the texts emergence from and embeddedness in the diffuse, unpublished potentials of oral speech.

Evelev charts in *Tolerable Entertainment* how new modes of professional authorship are negotiated in Melville’s fiction, and how his figuration of writing, as a specialized form of mental labor, reflects larger trends of professionalization taking place in the urban industrial economy. Considering salability and the demands of a growing

middle-class readership as a determining force and thematic concern for antebellum authorship, Evelev builds on the work of William Charvat and Michael Newbury, who define a new role for authors within and larger figurations of professionalized labor. Newbury points out the “dependence on the reading public and its tastes for one’s livelihood and for a commercially legitimated sense of authorial self” (5). While an autocratic defiance of these tastes (Dimock) or a modeling of them (Evelev) or otherwise figuring or responding to the labor they demanded are possible explanations for *Mardi*’s incoherent nature, these arguments, however, rely on Newbury’s type of professionalism as a determining force, to the exclusion of other, variously unprofessional modes of narrative. Again, I think *Mardi* is a notable *exemption* from the general applicability of Newbury’s model, which is restricted by definition to antebellum forms of authorship.[80]

F.C. Owlett claimed in the early twentieth century that the results of Melville’s transcendentalism were mixed. It was “in transcendental mood” that he wrote Moby Dick, but his transcendentalism was also responsible for Mardi, Pierre, and “and other books equally unreadable” (89).[81] Calling a book unreadable functions effectively to convey a number of possibilities: either the book is too awful to be read, or too incomprehensible to evaluate. At its worst, critical use of the word "unreadable" could mean simply that the critic is writing a review of a book they haven’t read.

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[80] In “The Author as Producer” (1934) Benjamin writes that “only by transcending the specialization in the process of production that, in the bourgeois view, constitutes its order can one make this production politically useful; and the barriers imposed by specialization must be breached jointly by the productive forces that they were set up to divide” (230).

[81] In *Critical Essays on Herman Melville's Pierre, or, The Ambiguities* (1983).

Failed transcendentalism is also at the heart of the evaluation of *Mardi* in F.O. Matthiessen's *American Renaissance.* Matthiessen condemned its philosophical allegory by claiming that it failed to infuse Melville's speculative abstractions with sensory concreteness or central relevance (124). After writing the popular but generic adventure stories that established his reputation, Melville, according to Matthiessen and later critics, gave free reign to his overstocked imagination and literary pretensions, resulting in an experimental and improvisational failure. That *Mardi* is self-referential, concerned almost solely with the details of its production, is assumed from the beginning, so critics fail to select for evidence to the contrary. Cindy Weinstein notes that "Surprisingly few reviewers…criticized *Mardi* for its overt indictment of such contemporary policies as slavery and imperialism" (90). Reviewers, in fact, did criticize these indictments, but only by attacking *Mardi's* ability to make sense in the first place. If the allegory is "unreadable," as Owlett claims, Melville's actual logic can be ignored.

One criteria for unity by which *Mardi* might plausibly be rejected was Coleridge's organic principle. Matthiessen quotes Coleridge's view that "the form is mechanic, when on any given material we impress a pre-determined form, not necessarily arising out of the properties of the material" (133). Since Matthiessen, the flat or mechanical nature of the allegory in *Mardi* has been used to assert its character as a failure. The "principles of the material," namely Polynesian culture, presumably cannot have informed the allegorical meanings, which are civilized and literary.

Speaking of *Mardi* Matthiessen writes that "the voyage he recounted there sprang from the social and religious systems he had thought about, hardly at all from what he

had apprehended through his senses" (285). Matthiessen is saying that the social and religious systems Melville was thinking and writing about bore no significant relationship to what he had experienced, with his senses, on his pacific voyages. The qualitative differences between the subject and content of the allegory are supposedly too great. *Mardi*, however, is not confined to the self-referentiality of many literary texts. It drifts beyond the gravity of antebellum professional literary production.

The persistence of Matthiessen's evaluation of Mardi is evident in William Charvat's comment that although the allegory "may be interesting for its speculative commentary…it is allegory rather than narrative" (221). Nineteenth century allegory was necessarily, for Matthiessen, "tiresome and confusing…deprived as it was of a basis in common belief such as Spenser and Bunyan had been able to build on" (ibid).[82] Working *a priori* from a belief in a novel's lack of structure disallows the possibility of thematic connections that would motivate a search for coherent design, in this case an "organic principle" outside of what Charvat calls the "profession of authorship." If the microcosm of the Pacific islands is meant to explore the literary, social, and religious systems of North America and Europe, then *Mardi* does present an unsatisfactory allegory, undefined by any organic transcendent principle. If, however, the narrative, social, and religious systems of the pacific islands (or the ship's forecastle, for that matter) are allowed to speak, Melville's transcendentalism in *Mardi* is closer to the effective

[82] Nathaniel Hawthorne's "Celestial Railroad" does draw, indirectly, from the "common belief" of Bunyan, as well as from the ideology of labor in America. Hawthorne's version of *The Pilgrim's Progress* criticizes Christians who seek to shorten the labor of their allegorical journey to the Celestial City, by taking a direct railroad voyage conducted by "Mr. Smooth-It-Away," bypassing many of the traditional attractions and obstacles. Later, I will argue that Hawthorne's allegory "The Earth's Holocaust" is a more useful model for *Mardi's* allegorical project.

meditation on sensory experience Matthiessen believes is responsible for *Moby Dick*. In a footnote, Matthiessen points out that Melville "seems also to have made some use in *Mardi* of folk-tales of the islands" (379). Since then, however, the possible sources for *Mardi* have been restricted almost entirely to literary ones. In addition to underplaying the possibility that *Mardi* describes pacific island culture and oral practices—rather than using them as a superficial allegory to represent U.S. culture and literary practices—Matthiessen also ignores the possibility that Melville's habits of literary composition may have been influenced by his own storytelling.

Similarly, assumptions about the nature of allegory, such as Cindy Weinstein's argument "that allegory, as understood, practiced, and received during this period, was the literary mode that foregrounded its relation to labor" preclude human experience outside culturally specific forms of labor and authorship. Both Weinstein's "allegory of labor", where characters represent "the nature or cost of being a laboring being" and her "labor of allegory" in which "authorial signs…[make] visible the author's work of representation" fail to account for those aspects of *Mardi* that refer to other types of cultural memory Melville encountered (5). The argument that part of Melville's invocation of Polynesia included non-chirographic oral forms does not rest on his having accurate knowledge of their culture. One of the differences between *Typee* and *Mardi* is that all pretensions to ethnographic accuracy were abandoned.[83]

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[83] The position that Melville was merely using the Marquesan culture to write about his own may be convincing because orality was still a large part of antebellum American life. Matthiessen describes this period as "an age when the vogue of the modern newspaper had not yet quite begun and libraries were relatively scarce," and notes that "public addresses were still a chief means of popular education" (19).

The conviction that Melville’s allegory was concerned exclusively with industrialized or European culture denied it the transcendental relevance necessary for critical acclaim. An allegory held to the organic principle could not be recommended aesthetically unless you agree with its basic equivalence. If the thing allegorized (European civilization) is fundamentally different from the content of the allegory (oral storytelling and Pacific island culture), then it cannot achieve the power of a symbol. *Mardi* conceives of authorship as something other than work, outside the bounds of useful labor. Taji is chasing a woman, rather than a whale, with a ship full of philosophers, not merchants. The structural looseness and improvisational expansiveness is unjustifiable if Melville is referencing, solely, the process of writing. *Mardi’s* narrative, however, suggests that the effects of writing can be matched by the thinking and speech of lived experience.

In *Mardi*, belief is consistently equated with physical geography. The novel's wide-ranging speculations on philosophy, history, and politics are structured by a series of allegorical islands. In both *Mardi* and *Pierre*, specialized labor is characterized by centripetal rather than centrifugal forces. Rather than an equatorial voyage, the widest measure of the Earth’s circumference, the symbolic quest for truth for a author within a given genre is doomed to a magnetic pole, a singularity that dissolves into meaningless ambiguities. Rather than a prelude to the same claustrophobic and hobbled rationality of *Pierre*, *Mardi* instead creates an alternative geography of movement, dispersion, and dialectical uncertainty.

In *Figuring Authorship in Antebellum America*, Michael Newbury describes the type of authorship *Mardi* represents in Evelev's account, one where "writers could realize themselves precisely as professionals who performed no other sort of work and who were respected, in public terms, primarily for the work they performed" (5). The kind of work *Mardi* performs, however, cannot properly be defined as such. Thematically, it asserts the literary value of travel, speech, and song, rather than the sedentary introversions he depicts bitterly in *Pierre.* Evelev quotes a review by William A. Jones in the *United States Magazine and Democratic Review* as saying, "there are few men whose scope of vision extends over the area of human existence. The view of most is confined to their trade, profession or sect" (326). For Evelev, the new forces of specialized trade work against *Mardi* in two ways: by depriving it of a reading public capable of interest and comprehension in its far-ranging allusions, and also by forcibly narrowing the scope of publishable literature.

It is possible, however, that Melville's view of professionalism did not entirely contain his view of *narrative* possibility. The restriction of experience to one field of specialized labor finds allegorical representation, not in the poet Lombardo, but in the king Donjalolo. In a chapter "The Center of Many Circumferences" Melville describes the plight of Donjalolo, who, due to a family curse, can only reign as king on the condition that he never leaves the small island from which he rules. He is forced to rely on inadequate reports and artifacts brought to him try and understand the realms he has dominion over, which he has never seen. In this figuration, authority precludes experiential knowledge. "And here," Melville writes, "in this impenetrable retreat,

centrally slumbered the universe-rounded, zodiac-belted, horizon-zoned, sea-girt, reef-sashed, mountain-locked, arbor-nested, royalty-girdled, arm-clasped, self-hugged, indivisible Donjalolo, absolute monarch of Juam" (240).

Kingship, like professional authorship, is a widening of influence but a narrowing of scope. *Pierre*, physically and intellectually confined, learns that the point a compass leads to is also the point where it ceases to function, implying the impossibility of non-relativistic absolutes. For Pierre, "it is not for man to follow the trail of truth too far, since by so doing he entirely loses the directing compass of his mind; for arrived at the Pole, to whose barrenness only it points, there, the needle indifferently respects all points of the horizon alike" (165). This is in marked contrast to the less determined and professional attitude of Taji, who in the Dreams chapter claims that "with compass and the lead, we had not found these Mardian Isles" and that "those who boldly launch…with their own breath, fill their own sails" (556). The direction of magnetism in *Mardi* is not North, but West. "West! West!—oh boundless boundary!" the narrator exudes in the chapter "Concentric, Inward, With Mardi's Reef, They leave their Wake Around the World." The West is a "beacon" that is "like the north-star, attracting all needles! Unattainable forever…hive of all sunsets" (551). The North shifts to the West: while *Pierre* implodes, *Mardi* goes in circles. *Mardi* is concerned with the equator, measuring experience at its widest and most inclusive, but Pierre, the "most unwilling states-prisoner of letters," is drawn to the poles and destiny of an unquestioned compass (340). He is locked into both a place and a profession, and, like Donjalolo, his "fate converges to a point" (222).

In Emerson, convergence upon a single point is unproblematic because his idea of totality, or the universality of beauty, allows access from that point to larger truths that stand in metonymic relation to the chosen object. Like the professional laborer toiling in the constricted round of his chosen trade, artistic work allows the miniaturization of the universe. In *Nature*, he writes that "the poet, the painter, the sculptor, the musician, the architect, seek each to concentrate this radiance of the world on one point" (31). Melville, in his depiction of both Pierre and Donjalolo, undermines transcendental confidence that specialization and focus can lead to higher truths. Weinstein writes that "the chapters about Donjalolo suggest that rather than sentimentalizing the idle life, Mardi champions the potential satisfaction that comes from hard work" (93). On the contrary, I would say that as it pertains to the specialized professionalism traced by Charvat, Donjalolo represents the dangers of seeking to understand the world from a single, fixed perspective. Authority confers inaction and limited scope, as in King Yooky, who lives on the Isle of Cripples, and who, like Donjalolo, cannot “quit the isle assigned [him]” (569). King Yooky is the perfect embodiment stationary and uncomprehending authority. He is “deaf and dumb,” and has neither arms nor legs, nor anything “but an indispensable trunk and head. His “all-comprehensive mouth” seems to “swallow up itself” (570).

The equatorial metaphysics of *Mardi,* rather than focusing on a given point, philosophically or cartographically, allows the characters to “sail round an island without landing; and talk round a Subject without getting at it,” as another chapter titles indicates. (491). The calm does focus experience to an “inner microcosm,” but because “all the air is vital with intelligence, which seeks embodiment,” this mental singularity opens up into

the allegorical world of the mind (1298). Babbalanja recognizes the value of motion rather than focus. “All subjects are inexhaustible,” he says, “as the mathematical point, put in motion, is capable of being produced into an infinite line (1068). "Melville uses his South Seas allegory,” Evelev writes “to justify the importance of middle-class perspectives on the urban social scene" (63). While this may be true, it seems equally likely that Melville employed middle-class perspectives to make the implications of his South Seas narrative more palatable to his potential readers. Melville is generally granted the ability to refer to other works of literature, but his own experience as anything but a writer is assumed to be irrelevant. In previous sections I attempted to invalidate certain critical assumptions about *Mardi* by offering different readings of those sections commonly used in studies of Melville’s authorship, especially the discussion of Lombardo’s *Konstanza*. In the final section I will try to sketch the outlines of what an alternate emphasis might look like, using passages rarely accorded critical attention.

## Adaptive Anonymity: Literary Possessions

The idea of using travel narratives, real or imaginary, to deliver a critique of one’s own culture is an established technique of fiction. The “visionary” and “oriental” modes described by David Reynolds in *Beneath the American Renaissance* allowed for “the voicing of progressive ideas through rhetorical accounts of exotic peoples and their religions” (47). These popular accounts form “a dialogue that undermines religious certainty by exposing Christianity as just one among many world religions.” Charvat noted that Melville "needed a form in which his unordered, unfocused, many-sided, often

contradictory speculations could be given free play--in which, indeed, he could *play* with ideas without committing himself to a position" (221).

Recently Lara Langer Cohen has pointed out that “well into the late nineteenth century, most editorials and criticism in American periodicals were unsigned, a convention that preserved both a republican prose of disinterest and a genteel insulation from the market” (659). Charvat, observing that after “neglecting even the psuedonymity with which most American travel writers sheltered themselves” Melville presented *Typee* as a narrative of true events (264). “He was therefore anything but anonymous,” Charvat writes, “and hostile critics reminded him of his scandalous past for years” (207). Melville knew that in order to write the kind of book he wanted, he would have to frame much of the content within a context of anonymity, and the device of oral narratives may have offered a convenient solution. As William Charvat notes, “It was the public’s relentless determination to identify a book with their limited conception of the person who wrote it that impelled Melville to cry, through Babbalanja, when Yoomy sings an immortal but anonymous song ‘This were to be truly immortal; to be perpetuated in our works, and not in our name. Let me, oh Oro! be anonymously known'" (227).

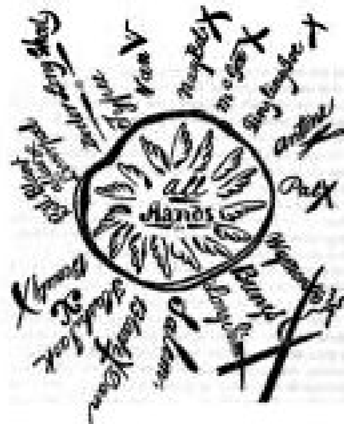


Figure 4. The Round Robin, from Omoo (1847).[84]

Stylistically, *Mardi*'s dialogic diffusiveness would provide it with a narrative device consistent with the oral traditions it was evoking; practically speaking it would free Melville from an uncomfortable transparency as to which of the many expressed beliefs he personally endorsed. Michael Gilmore expresses Melville's belief that "the prohibition against freely speaking the truth requires the artist to withdraw or efface himself from what he writes" (60); for Gilmore, "the dramatic form" (such as that of the Lombardo section) is especially suitable for obscuring authorship, as it is "predicated on the absence of the author from the scenes represented on the stage. For the novelist or essayist, comparable protection would consist in denying authorship altogether and offering one's work anonymously or under a pseudonym" (ibid). Dramatic allegory, more than the generic adventure fiction, could provide enough demonstrable distance between Melville and the radical political views he must have suspected would be incompatible with his public persona.

[84] See "'No Names' and 'Round Robins'" (1935) by Aubrey Starke.

To give an indication of the kind of content Melville was attempting to distance himself from, the anonymous scroll in the Vivenza section, with its references to American social problems and the revolutions of Europe, illustrates *Mardi*'s "unreadable" political views. In the Vivenza chapter, a crowd is gathered around an anonymous scroll fixed to a tree. The scroll addresses the "Sovereign-kings of Vivenza" and chides that "you give ear to little wisdom except of your own; and that as freemen, you are free to hunt down him who dissents from your majesties," adding, "I deem it proper to address you anonymously" (524). The basic impulse of the political speculations of the Vivenza section, and the novel as a whole, is an underlying commonality between all the inhabitants of Mardi. "Poverty is abased before riches, all Mardi over" according to the scroll, and "everywhere, suffering is found" (528). This is consistent with the secularized humanism which is one of the contemporary religious modes Reynolds believes Melville is drawing from (49). The scroll provocatively claims that "republics are as vast reservoirs, draining down all streams to one level; and so, breeding a fullness which cannot remain full, without overflowing" and that the only reason the revolutionary sentiment of "Franko" hasn't overtaken Vivenza (the U.S.) is that "you overflow your redundancies within your own mighty borders; having a wild western waste" (1182).Ominously, the scroll warns that "overrun at last it will be; and then, the recoil must come." Typical of the novel's ambiguities, however, the scroll also warns that "the grand error" of Vivenza is to assume that they are the scene of a unique "catastrophe" that will bring about a "universal and permanent republic," and emphasizes the transience of all societies within a larger time frame (1181).

Melville's desire to place Marquesan and European ideologies on more equal footing can be seen in his rewriting of the Captain Cook apotheosis narrative with the narrator's arrival in Mardi. Marshall Sahlins describes how Cook, upon his arrival, was taken to be the god Lono, who was from "invisible and celestial realms beyond the horizon, the legendary source of great gods, ancient kings, and cultural good things" (74). The narrator, arriving in Mardi, is also taken for a divinity, but, only "a sort of half-and half deity…and ranking among their inferior ex-officio demi-gods" (*Mardi,* 164). He is welcomed by King Media, but is surprised to learn that as a demi-god himself, the king owes Taji no special respect. "Upon the whole" the narrator reports, "so numerous were living and breathing gods in Mardi, that I held my divinity but cheaply" (176). He learns not to insist upon his divine status, since in Mardi it is hardly a mark of special distinction. The best course, he decides, is to behave with a cautious humility, "circulating freely, sociably, and frankly, among the gods, heroes, high-priests, kings, and gentlemen, that made up the principalities of Mardi" (177). By placing aspects of two distinct cultures in an indiscriminate order of allegorical significance , *Mardi* may have developed possibilities of identification problematic for 19$^{th}$ century reviewers.

By privileging orality and experience, Melville undermines the fundamental assertion on which Europeans based their uniqueness—that technological advancement, including technologies of literacy, were the necessary precondition for the kind of thought and culture Mardi's savages so breezily express. Yoomy, Mohi, and Babbalanja are walking arguments that poetry, history, and philosophy need not rely on the kind of professional, specialized labor Charvat and Evelev describe. "My songs," Yoomy says,

"perpetuate many things which you sage scribes entirely overlook" (280). The same could be said about oral narrative, which offers the possibility of a more situational and adaptive form of storing information. "Have you not oftentimes come to me, and my ever dewy ballads for information," the poet asks, "in which you and your musty old chronicles were deficient?" It is unsurprising how few literary artifacts are encountered in Mardi, since the Polynesian people had no written language. In oral cultures, language was neither written nor owned.[85] Narratives, held in common, may have seemed overly allegorical to literate audiences, since they were, among other things, a practical means of storing and shaping information over time. The mnemonic purpose of narrative, of course, could only be served if the stories were entertaining enough to hold their listeners, and interesting enough to remember and repeat.

One of the few times the characters in Mardi actually encounter print artifacts is when "they visit an extraordinary old antiquary" named Oh-Oh in Chapter 122. Oh-Oh is disfigured, and the allegorical equivalent of the bookworm in "Earth's Holocaust" who shouts "Oh, my books, my books, my precious printed books!" as they are cast into the fire (155). Oh-Oh's name comes from the sound he makes when books are added to his museum. When the travelers go down to the vault of manuscripts it is "like going down

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[85] In her study on literary collaborations in the U.S. between 1870 and 1920, Susanna Ashton writes that "the rise of the individual author out of a history of collective anonymity has traditionally been the primary narrative cohering authorship histories. To understand the development of the modern self we need only to look back at the collectively and anonymously authored legends of primitive societies to see how far our modern, fully copyrighted, society has come" (89). Postmodern theories of authorship, she notes, have "brought us in a full circle" back to the decentered, anonymous signification (ibid). My reading of *Mardi*, however, speaks against linear notions of narrative evolution, even if the progressive assumptions of these histories are short-circuited by splicing their end with their beginning.

to posterity" but a posterity that is too extensive and irrelevant to be of use to anyone but an antiquarian such as Oh-Oh (382). The titles are not only anonymous, as Weinstein points out, or only references to popular literature (Reynolds), but they are also largely depicted as worthless. The one exception is the single manuscript in his collection Oh-Oh is willing to part with, calling it "rubbish" (386). Significantly, the scroll is called "A Happy Life," and Babbalanja exults over it because the philosophy of its author, who "will look upon the whole world as my country" is compatible with his own, and, of course, that of *Mardi* (388).

Oh-Oh is structurally paired with another "collector," Ji-Ji, who is "miserly in the manner of teeth, the money of Mardi" (386). While Ji-Ji collects teeth rather than books, the tendency to hoard for the economic value rather than functional qualities of their collection is the same. The fact that the currency of Mardi is human teeth reveals the attitude towards commercialism taken in the narrative. The implication is that the abilities to speak effectively and to acquire wealth are mutually exclusive. Ji-Ji, despite his hoarded capital, has no teeth in his head, having extracted them himself to augment his riches. Ji-Ji and Oh-Oh, in a symmetrical arrangement between chapters, mutually deprecate each other's collections, claiming alternately that the other's old books and pulled teeth are worthless to collect. Both have been removed from their original function in orality.

# CHAPTER III: UTOPIAN LANDSCAPES: LOOKING FORWARD BEYOND *LOOKING BACKWARD*

"…to think attributes you must couple them with some instance, some experience, some person--an image of some sort, if you please; and so you must borrow a substantial base on which to found your beautiful idealization. Your god apart from matter is mere nothingness--dust like the shapeless matter in which no ideal is embodied."

Frank Rosewater
*'96: A Romance of Utopia* (1893)

When evolutionists speak of the work done by differential selection (in which well-adapted organisms, genes, or populations reproduce more quickly, consequently climbing peaks in the fitness landscape through random variation), they mean something very different than the specifically human work that takes place in "productive" capitalist economies. 19th century literary texts are commonly referred to as the work of a given (industrious) author, but the ambiguity of the term is often rendered inert by unproblematic equivalence between the production of literary narratives and other kinds of professionalized labor: an equivalence that effaces the gradual and anonymous "piling on of thin, transparent layers" that Walter Benjamin writes are characteristic of oral storytelling (93). *Mardi*, as argued in the preceding chapter, problematizes its own classification as work within a professional and specialized literary genre, because of its indebtedness (in both form and content) to oral compositions, and because it has been unproductive in terms of generating either income for its author, written imitations of its style and structure, or lasting notoriety. Here, I will continue the project of viewing literary texts as products of evolutionary as well as professional work by looking at the genre of utopian fiction around the turn of the century.

Kenneth Roemer, in *The Obsolete Necessity: American Utopian Writings 1888-1900* (1976) describes a well-known phenomenon that he and subsequent critics have mapped in detail: in the last decades of the 19th century, the literary landscape of the U.S. experienced a groundswell of utopian writing.[86] At the center of these rapidly replicating utopian texts seems to be a loose cluster of inter-connected novels describing a (then) future Boston at the turn of the 21st century. The single, monolithic text toward which lesser utopias are imagined to gravitate, and from which they are supposedly derived, is *Looking Backward* (1888) by Edward Bellamy. Many of their titles make punning reference to Bellamy's utopian novel, their subtitles in many cases referencing the book directly, styling themselves as a response or sequel.[87]

A literary landscape, however, is not identical to the kind of *adaptive* landscapes I have been advocating as a key figure, or abstract model, for mapping literary evolution. An adaptive landscape measures the relative fitness of a text, or how well it is adapted to a given environment of literary and popular taste. A literary landscape looks to the past, while an adaptive landscape looks to the future, from the point of view of a then-

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[86] See also Roemer's *Utopian Audiences: How Readers Locate Nowhere* (2003).

[87]Roemer, in his study of 160 American utopias published between 1888-1900, notes that "[*Looking Backward*]'s popularity inspired numerous utopian and anti-utopian novels; authors even borrowed Bellamy's title, setting and characters as indicated by such titles as *Looking Ahead* [by Alfred Morris, 1892], *Looking Beyond* [Ludwig Geissler, 1891], *Looking Within* [J.W. Roberts, 1893], *Looking Forward* [Arthur Bird, 1899], *Looking Further Forward* [Arthur Dudley Vinton, 1890], *Looking Further Backward, A.D. 2000* [A.M. Fuller, 1890], *One of 'Berrian's'* Novels [C.H. Stone, 1890], and *Young* West [Solomon Schindler, 1894]" (6). The Bellamy super-organism, as understood here, consists loosely of novels published in the U.S. between the years 1880-1900 that share with *Looking Backward* the narrative elements of a (frequently doubled) woman named Edith, her lover Julian West, Dr. Leete, and/or the setting of Boston in the (then future) 21st century.

unpublished text. These two landscapes affect one another, but they are in no way identical. The text of *Looking Backward*, for example, as large as it looms in the literary landscape of the period, only influenced the *adaptive* landscape after its publication.[88] Although Bellamy's narrative represented an adaptive peak, in that copies of his novel had a tremendously high chance of replicating, from the point of view of subsequent authors trying to replicate his success, reproducing the narrative too closely would run the risk of maladaptive plagiarism. The peak of late 19th century utopias in an adaptive landscape (unlike in the literary landscape) is also a maladaptive funnel centered around the exact text of *Looking Backward*. This negative core, however, drives exactly the kind of heterogeneous drift and divergence that Wright's adaptive landscape—and the "shifting balance" theory it illustrates—require.[89]

One of the recurring difficulties of memetic or replicator theory is the "unit of selection" problem. What exactly, in literary texts, corresponds to a gene, individual, or species? Darwinian science after Darwin has largely been concerned with mapping out how all of these different levels contribute to the adaptive landscape of biological (or ecological) fitness. As a model for an inter-textual understanding of literary survival, I

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[88] Bellamy's text was not without precedents, notably *The Great Romance* (1881), *The Diothas* by John Macnie (1883), *The Crystal Button* (which was published in 1891 but written earlier) and *The Republic of the Future* by Anna Bowman Dodd (1887). See "The Precursors of Bellamy" by Vernon Parrington (1964). More generally Hawthorne's *The Blithedale Romance* (1852) and *A Traveler From Altruria* by W.D. Howell's (published by Harper and Brothers in 1894) are notable landmarks on the utopian landscape of the late 19th century U.S. Also see Mark Twain's *A Connecticut Yankee in King Arthur's Court* (1889).

[89] Bellamy himself imitated his imitators by publishing his own sequel to *Looking Backward*, *Equality* (1897), neither as popular nor influential as the original novel. The success of previous works alone (as Melville learned) is not enough to ensure adaptive fitness. See also the unsuccessful utopia *An Experiment in Marriage* (1889) by Edward Bellamy's brother, Charles.

will use one sequence of texts, specifically Edward Bellamy's *Looking Backward*, Richard Michaelis' *Looking Forward*, and Ludwig Geissler's *Looking Beyond*, to illustrate key features of a larger narrative "super-organism" in late 19th Century America.[90] I will also be following the thread of evolution and orthogenesis through several later utopias in the early 20th century: a criteria of selection that looks forward to arguments about ecology, collaboration, and evolutionary emergence in the following chapter.

The use of evolution in utopian novels contains an unresolved contradiction: selection and adaptation are invoked to explain how the ideal society could (and how it must) develop, and yet once this ideal state is achieved, any change from this terminal point can only be regression. Once the billion-year dress rehearsal of life on earth has reached its natural and inevitable culmination in the full flowering of technological humanity (surely in the next hundred years or so, according to these Utopian fictions) evolution must cease. Fictional utopias availed themselves of evolutionary logic while at the same time contradicting this logic by claiming to define—or mark an end point of—social and political development.

Writers like Edward Bellamy (1850-1898) were faced with the task of translating the dynamic forces thought to be inherent in biological, corporate, and national bodies

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[90] This particular triptych of texts is one possible selection out of the novels Roemer identifies participating in the shared universe structured around *Looking Backward*. The somewhat dialectical structure of the example (with Bellamy as thesis, Michaelis as antithesis, and Geissler as synthesis) is a convenience only. This series of three novels together, however, constitute a more coherent and satisfying narrative than any of the novels considered individually. What differentiates this three-part sequence from other such trilogies (*Typee*, *Omoo*, and *Mardi*, for example) is that it is an unstructured (improvised) collaboration between more than one author.

into a static representation of humanity's teleological end-game. Only by positing such a final configuration, a point from which the 19th century imagination could "look backward" at imperial conflicts and class upheavals, could Spencerian illustrations of benevolent progress appear within the ambiguities of human social evolution. In these utopian narratives, evolution as a scientific explanation for species divergence (random variations and subsequent selection of heritable traits), becomes integrated into theological notions of cosmic process tending towards a predetermined goal, which Spencer painstakingly details in *First Principles* (1860) as incoherent homogeneity tending toward coherent heterogeneity, with a concurrent dissipation of motion and energy, and increasing complexity of structure.[91] Utopias like *Looking Backward* construct an imaginary destiny for social (and biological) evolution, toward which the brutal realities of industrial society have evolved naturally, according to a Spencerian formula of cosmic improvement, into the perfectly rational "industrial army" of a seamlessly functioning nation-state.[92]

Needless to say, the illusory nature of these terminal configurations are not lost on contemporary scholars. Critics schooled in post-modern suspicion of determinacy have resisted the implications of the Utopian project of *Looking Backward* (1888) and similar

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[91] Evolution in 19th century America, as expressed in Utopian fiction, does not so much displace earlier conceptions of an immutable and divinely ordained structure in the natural world, as it postpones the attainment of this order to the more or less distant future when the human species fulfills the promise supposedly inherent in creation, when—as Dr. Leete puts it in *Looking Backward* "the divine secret hidden in the germ" of evolution "shall be perfectly unfolded" (187).

[92] See "Writing the New American (Re)Public : Remembering and Forgetting in *Looking Backward*" in *Imaginary Communities*: *Utopia, the Nation, and the Spatial Histories of Modernity* (2002) by Phillip Wegner.

texts. Kenneth M. Roemer puts it succinctly: “stasis is the perpetual whipping boy of critics of utopia” (126). Some critics have defined utopia more as a method than a place, like Jean Pfaelzer who claims that “Utopian space represents the passage of time” (54).[93] These critics, however, turn back at the edges of the text itself, leaving a fundamental problem unsolved: the inability of a static text to embody the evolutionary process described by Darwin's theory of natural and sexual selection. In this chapter I argue that the solution to this problem is restoring the narrative to its inter-textual environment, or a “literary ecology” of derivative works. As represented within utopian texts, influenced as they are by scientific racism, cultural exceptionalism, and static political and social ideologies, evolution in utopian fictions of the late 19th century does not, in fact, represent Darwinian evolution. The evolution *of* these texts, however, shaped by the differential selection of literary forms within a relativistic field of cooperation and antagonism, can be seen as analogous to the evolution of biological species within a physical environment. 19th century Utopias then *perform* evolution, within their literary environment, in ways directly opposed to their descriptions of it.

In order to remain compatible with visions of upward social progress, utopian versions of evolution had to be incompatible with the random variation and natural selection of Darwin’s theory. As opposed to earlier naturalists like Jean Baptiste Lamarck, Darwin’s mechanism for species change was predicated on Malthusian

[93] See Stephen Kern’s chapter on “the Future” in *The Culture of Time and Space, 1880-1918* (1983) where he notes that “In America, Edward Bellamy’s *Looking Backward*, a vision of the future in spite of its misleading title, was an immediate success. It sold 213,000 copies within two years of its publication in 1888 and initiated what one historian has called an ‘outburst of literary utopianism’”(98).

dynamics of overpopulation and starvation, a seemingly bloody and meaningless system of constant struggle more suited to the Social Darwinists who were Bellamy's ideological opponents. Bellamy's theory of social progress looked towards industrial rather than biological processes, systems which in the later part of the 19th century were marked by increasing combination and concentration of monopolies of wealth and influence.[94] Bellamy, anticipating the later department store owner and utopian author Brantford Peck, thought that competition, rather than a necessary component of evolution, produced wasteful inefficiency that would disappear as the world moved closer to the vision of one encompassing "department store" where all human needs were provided for by a single bureaucratic source. "Competition," for Bellamy, "is the instinct of selfishness…another word for dissipation of energy, while combination," on the other hand, "is the secret of efficient production" (158).[95]

Evolution appears in *Looking Backward* not as Darwinian natural selection, but as artificial and sexual selection, the precedents and basis for Darwin's theory. Removing the social constraints on marriage choices, Dr. Leete tells Julian West, "means that for the first time in human history the principle of sexual selection, with its tendency to preserve and transmit the better types of the race, and let the inferior types drop out, has unhindered operation"(172). Like human businesses, the human species in Bellamy's novel was imagined to have improved naturally once freed from unnatural impediments.

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[94] See "Capital and Labor" in David S. Reynolds' *America, Empire of Liberty: A New History of the United States* (2009).

[95] See *The Age of Betrayal: The Triumph of money in America 1865-1900* (2008) by Jack Beatty, which includes a chapter on "The Politics of the Future," and labor theory.

Throughout my dissertation I have been arguing in favor using modern evolutionary models as a way of understanding literary phenomena in the age of industrial print culture (genre formation and ambiguity in Poe's detective and gothic stories, and an existing environment of publishers and readers for Herman Melville's *Mardi*). In this chapter, I will look at how both evolutionary biology, as understood today, and the culture of evolution that emerged in the last decades of the 19th century in America, shaped the survival of Utopian fiction. Utopian writers themselves often dwell on evolutionary themes, but the relevance of evolutionary biology *as* biology is far more problematic, violating the institutional taboo separating the sciences and humanities. Evolution is a metaphor, but a metaphor that shares with the natural systems it models the qualities of emergence and ecological inter-determinacy. The blurring of cultural and biological influences in shaping the fitness landscape of 19$^{th}$ century texts seems threatening, but, in fact, grounding metaphors of literary development in actual biology *decreases* the likelihood that literary history (and its subjects) will ossify into static systems of explanation. Theories, unless empirical evidence from the outside is admitted, afford no traction for later development and change.

As with Herman Melville's *Mardi*, the cultural environment in which utopian narratives evolved was neither fully literary nor fully professional. As argued in Chapter 2, orality in the 19$^{th}$ century should not be underestimated as an ecosystem in which literary forms have their origin, and on which they depended for survival. This is true for Bellamy as well, whose ideas circulated internationally in political and literary "clubs"

dedicated to bringing about the social changes the novel describes as history.[96] Bellamy clubs were instrumental in introducing new readers to the author's work. In one of the reactionary sequels called *Looking Within*, the protagonist notes that "multitudes who never saw the book have received its teachings second-hand and been poisoned by them" (64). This implies that the narrative, parallel to its literary career as a book, was also spreading "second hand" through auditory channels, where it was discussed in public meetings and lecture halls.

Merely by existing as a utopia, which is to say a fictional puppet-theater for conceptual avatars (something like Olympus to the ancient Greeks), *Looking Backward* invites progression as well as progress. The texts Roemer identifies clustered around *Looking Backward*, in addition to utopias published prior to 1888 seem like a super-organism selected together in the particular social environment of late 19th century industrial print culture in the U.S., with its particular faith in the improvability of human beings as both society and species, resulting from progressive political trends and technological development. Just as contemporary U.S. political culture has been forced to revise this optimistic attitude in light of the militaristic and technological atrocities of the 20th century, sequels to Bellamy's narrative of a future socialist utopia revised in subtle ways the positivist confidence of its individual author. Criticism that views U.S. utopias as competing, individual texts has neglected the ways in which the utopian/dystopian

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[96] Sylvia Bowman's *Edward Bellamy Abroad* (1964) gives a detailed bibliography for and analysis of Bellamy's influence, (including through clubs and "societies") in Europe and beyond, going so far as to claim that "his powerful portrayal of an ideal society and trenchant criticism of capitalism contributed to the spreading of socialist concepts and—startling as this may seem—the creation of the Russian Revolution which inaugurated a Marxist-inspired communist state" (66).

time-travel narratives evolved within a larger collectivity of ecological relationships, a collectivity that can be brought into view by attending to the constellated utopian fiction of which Bellamy's famous text was only one instance.

One result of expanding literary historical focus beyond *Looking Backward* to the book's literary environment is that its designation as a "utopian" text excludes at the outset the contributions of the many sequels or responses actually antagonistic to Bellamy's claims, but which nonetheless may have advanced its popularity and survival. Among these are *Looking Forward* /*Looking Further Forward* (1890), by Richard Michaelis, *Looking Within* (1893), by J. W. Roberts and *Reality*, by George Sanders (1898). As a super-textual network of related material, these fictional extrapolations into the future of American society force us to look, retrospectively, outside the boundaries of traditional Utopian formula. Dystopian and Utopian genres were, in other words, more collaborative than competitive in terms of their selective landscape. The literary survival of Bellamy's novel was predicated on both positive and negative poles of reaction and response, and developed symbiotically within a popular, largely oral, political discourse which it helped to constitute. It was the possibility for revision and debate (which purely generic, single text analysis obscures) that kept readers and publishers orbiting around the gravitational center of constellated texts, produced by (now) less or well-known authors.

When speaking of a collaborative story, in which characters and settings are adapted from other texts, I will use the more capacious term "narrative." The text of Bellamy's *Looking Backward* ends with Julian West's return to the future, and marriage

to Edith Leete.[97] The *narrative* of Julian West and the Bostonian Utopia, however, partly due to the "invitation to sequence" implicit in the Utopian formula, continues with over a hundred unofficial sequels and responses, constituting a network of (often antagonistic or competitive) collaboration. These authors quote each other's texts directly in footnotes, ignoring any copyright claims on plot and characters previous writers might have held. Bellamy's socialist utopia remains "socialist," then, in the sense that its characters, setting and plot were freely usable by any and all.

E.O. Wilson and Brett Hölldobler discuss complex behavior and caste structure at a level of social organization in ant colonies above individual organisms. They displace, to some degree, the primacy of tooth-and-claw competition between individuals commonly associated with Darwinian evolution in the 19th century. As suggested by the title, *The Superorganism* (2009), the diversity of roles and morphological features within an ant colony such as the Attine Leafcutters offers an illustration of how evolution, through the selection of genes, not individuals, can produce complex behavior inexplicable in terms of individual fitness.[98] Strategies for survival at a super-organic level emerge from the interaction of behavioral instincts expressed in individuals sharing the gene. Just as ant societies owe their survival to the complex networks of component

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[97] *Looking Backward* in turn draws from previous utopias, notably Ismar Thiusen's *The Diothas* (1883) and the anonymously published New Zealand novel *The Great Romance* (1881). The idea of that Edith loves Julian—despite his status as a social (and biological) throwback—would have been more reassuring to 19th century readers than the similar narrative of *The Great Romance* where John Hope, the equivalent of Julian West, is constantly reminded of the inferiority of his culture because of the distance created by evolution (the utopians are telepathic).

[98] See also "The Anthill of the Brain" in *The Evolving Brain* (2007) by R. Grant Steen. Ant behavior, of course, is nowhere intended as an ideal model for human consciousness or societies.

organisms, the innumerable texts to which Bellamy's Utopian narrative were linked form a super-organic network of symbiotic referentiality, without which *Looking Backward* would have fallen into oblivion.

The closer one looks, the less likely it seems that either the literary meanings or commercial success of *Looking Backward* can be explained by its characteristics as an individualized, professional work, discrete or isolable from a wider cultural matrix, before and after the date of its publication. Sympathetic resonances within the fabric of 19th century America, with its perpetually volatile labor problems, evolutionary theories of social progress, and increasing centralization of wealth and power under monopoly capitalism, undoubtedly helped to propel the text into the national spotlight. Nonetheless, the success of *Looking Backward* is inexplicable without reference to the innumerable sequels that extended and deepened the significance of the original narrative.

The sequels to *Looking Backward* have received some attention in literary criticism, but their existence as a coherent, sequential narrative remains under-theorized. These revisions, critiques, and extensions of the original narrative are treated as incidental to the phenomenon of its success, and have consequently been rendered less visible to the backward looking gaze of critical analysis, that has not seen literary evolution as a biological and cultural landscape of textual life and death. Causality is assumed to run in one direction only, with the later literary organisms standing in a parasitic relationship to their more successful progenitor. Within the cultural moment of *Looking Backwards*' popularity, however, the "narrative" selected for by readers was not confined within the discreet boundaries of a singular text. This extension of symbolic

meaning into a referential network allowed the Bellamy "super-organism" to adapt to changes (through sheer numbers of mutations and variations) in its literary and cultural environment, reproducing itself in subsequent acts of reading and narration.[99]

Looking Backward: Dynamic Memory

The original plot of Edward Bellamy's *Looking Backward* prefigures a device used later by both Michaelis and Geissler: Julian West falling asleep in the year 1887 and waking up in the year 2000 (or vice versa). After escaping from the mesmerism induced by Dr. Pillsbury one hundred years previously, the 1888 novel follows West as he explores a utopian Boston with the pedantic Dr. Leete acting as a tour guide. He falls in love with and marries Edith (Leete's daughter) only to reawaken again in the 19th century. At the end of the novel, in a final twist, he is gratefully returned to the perfectly functioning national bureaucracy of the future, governed by a single "industrial army."

West appears like an uncanny descendent of Poe's descendentless Ushers, claiming "the house in which I lived had been occupied by three generations of the family in which I was the only living representative in a direct line" (14). This straight line is essential in understanding how West represents, for Bellamy, the solution to 19th century skeptics, or "desponding observers," who

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[99] Constructing a narrative for exactly why *Looking Backward* survived, as opposed to any of the other texts, runs the risk of retroactively identifying attributes that supposedly *must* have led to the novel's relative success. On the contrary, consideration of the many alternate possible selections actually underlines the *randomness* of the evolutionary process, and the non-uniqueness of Bellamy's version. *Looking Backward*, however (and any text that could have taken its place) needed to be a self-sufficient, able to replicated relatively free from other narrative context.

> went so far as to predict an impending social cataclysm. Humanity, they argued, having climbed to the top round of the ladder of civilization, was about to take a header into chaos, after which it would doubtless pick itself up, turn around, and begin to climb again. Repeated experiences of this sort in historic and *prehistoric times* possibly accounted for the puzzling bumps on the human cranium. Human history, like all great movements, was cyclical, and returned to the point of beginning. The idea of *indefinite progress in a right line* was a chimera of the imagination, with no analogue in nature. The parabola of a comet was perhaps a yet better illustration of the career of humanity. Tending upward and sunward from the aphelion of barbarism, the race attained the perihelion of civilization only to plunge downward once more to its nether goal in the regions of chaos (11, my emphasis).

This “extreme opinion” is the extreme opposite of what the utopia West wakes to discover in the year 2000 is meant to convey. And yet, if human history is not cyclical, if there is a “right line” of progress that can be projected into a more perfect future, where does it lead? West finds an essential continuity between the utopian reality and his own, in the same way that there is a direct continuity between his love for Edith Bartlett in 1887 and Edith Leete one hundred years later.[100] The cyclical nightmare of barbarism will be left behind, *Looking Backward* implies, because the germ of the future society is incipient in the past; they are linked by the telos of evolution, that “desponding observers” believe is a “chimera of the imagination”. At the same time, the cyclical structure of *Looking Backward* undermines its own certainty about escaping the past.

Two years after the publication of Bellamy’s utopian narrative, William James published *The Principles of Psychology*. In his chapter “The Stream of Thought,” James discusses how the meanings of words have both “static” and “dynamic” qualities. “The static meaning,” James writes, “when the word is concrete, as ‘table,’ ‘Boston,’ [sic] consists of sensory images awakened; when it is abstract, as ‘criminal legislation,’ ‘fallacy,’ the meaning consists of other words aroused, forming the so-called ‘definition’”

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[100] The “straight line of descent” occurs in the predecessor to *Looking Backward*, *The Diothas*, where Thiusen’s lover, Reva, is his own direct descendent.

(265). James's use of "Boston" as an example of a static or concrete word is fitting, because that word became infused with a multitude of meanings—concrete and dynamic—as the setting for dozens of time travel fictions written in the last decade of the 19th century. The success of these novels as a super-organic/super-textual organism rested on their ability to use concrete "sensory images" to organize and manipulate abstract thoughts, and create bridges between the two kinds of meaning—static and dynamic—that James enumerates.

A typical novel caught in the orbit of *Looking Backward* features Julian West—or one of his descendants—interacting with the world of 2000 Boston in a way which illustrates a particular position or ideological view, usually on questions of social destiny and labor. The characters are conceptual game-pieces rearranged by different authors in the landscape of a future Boston. Michel de Certeau in *The Practice of Everyday Life* (1984) shows how the theoretical, birds-eye view of the social planner breaks down when one is actually "Walking in the City," experiencing its topography as an irreducible relation of heterogeneous elements. The permeability of Bellamy's narrative, its "invitation to sequence" resulting from lax copyright standards and transparent idealism, meant that the conceptual environment could be visualized and experienced as a concrete (if fictional) geography, or what I have been calling a "collaborative ecology." Other novels are referred to within this ecology, and continuity of plot and character are maintained in a generally coherent narrative. In the larger network of 160 sequels in Kenneth Roemer's bibliography, the mechanism of travel into the future can be mesmerism (as in Bellamy's narrative), potions, or some other event that serves the function of displacing a 19th century inhabitant into the unfamiliar world of the future. Unlike the larger species of Utopian novels, which locate the ideal society in some

inaccessible cloud-kingdom or far-off island, utopias of this period were set in a geographically and temporally definite future: Boston around the year 2000.

Jonathan Auerbach in his article "'The Nation Organized': Utopian Impotence in Edward Bellamy's *Looking Backward*" summarizes various ways of explaining the novel's enormous popularity. Comparing *Looking Backward* to the only novel of the 19th century that outsold it, *Uncle Tom's Cabin*, he writes that "Bellamy's utopia promised to utterly transform and unify America, closing the growing rift between capital and labor, which by the late 1880s had replaced slavery as the most serious problem perceived to threaten the stability of the nation" (24). Despite *Looking Backward*'s relevance to this problem, Auerbach claims that the two standard critical approaches, either analyzing the novel as "straight social theory" or placing it within a lineage of Utopian fiction, are inadequate as explanations for the novel's success.

He offers a third explanation, employing the analytical categories of labor and consumption, arguing that the category of work informs the narrative at a meta-textual level, in addition to claiming that the novel proleptically anticipates certain trends of "advanced capitalism." One of these trends is the concentration of economic and bureaucratic power within state entities. Catherine Tumber also claims that "with eerie prescience," Bellamy's novel "anticipated the postindustrial ethos that has come to dominate late twentieth-century political and economic life" (610).

At the time *Looking Backward* and its sequels were published, leading to and continuing after the ineffective antitrust act of 1890, the wealth of America was increasingly flowing through vast monopolies at the center of the economies of scale introduced by railroads, modern agriculture, and industrial technology. Auerbach points to a passage in *Looking Backward* where Dr. Leete claims that "The nation…organized as the one great business corporation in which all other corporations were absorbed" (64-

65). This centralization of power was reflected in speculative visions of future or distant landscapes, such as in *Life on a Thousand Worlds* (1905) depicting the monopolization of light and rain on Mars.

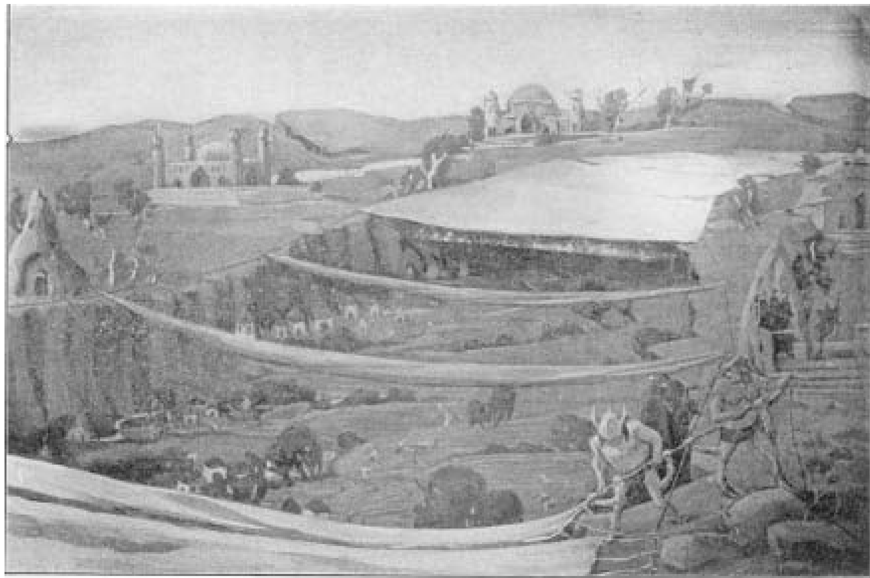

Figure 5. Monopolizing Light and Rain on Mars, W. S. Harris' *Life in a Thousand Worlds* (1905).

While not disputing Auerbach's claim or the New Historicist emphasis on the dynamics of capital and their marked influence on literary representation of the period, I would like to show how these themes were reinforced, explicitly and implicitly, by evolutionary theories of development. Visions of Utopian progress produced by the industrialized and increasingly monopolized America of the 1880s and 90s are framed in terms of what they imply must be left behind—namely, the way of life of the majority of the inhabitants of Earth. Bellamy's relationship with oral or indigenous cultures is a theme of his earlier fiction; many of the tropes of *Looking Backward* are themselves looking backward to earlier texts, glances that are not caught when Bellamy's novel is

studied in isolation. In "To Whom this May Come," one of Edward Bellamy's stories published in the same year as *Looking Backward* (1888), the protagonist encounters an island race of telepaths who have evolved beyond the use of speech. One of the precursors to *Looking Backward,* an anonymously written novel called *The Great Romance* (1881) published in New Zealand, features a far future where humans have likewise evolved the capacity to read one another's thoughts (which causes the time traveler much embarrassment as he adapts to this later, more civilized society). As Dominic Allenso points out in his introduction, *Looking Backward* posited nationalism as the force behind social evolution, while *The Great Romance* relied on telepathic powers as the catalyst for utopia. Nationalism, rather than telepathy, fits more neatly as a supposed consequence of progressive trends in 19$^{th}$ century industrial society. Mind reading, one also suspects, is not sufficiently *literary*.

Bellamy's short fiction, such as "With the Eyes Shut" (1898) questions the assumption that literary narratives are more evolved than collaborative, oral, or "super-organic" narratives. In this story, a train-car traveler is introduced to the latest utopian invention in literary experience: the spoken voice. By a miracle device known as an "indispensible" (in which pre-recorded voices could be transmitted directly to the ear), the traveler is able to listen to, rather than read, printed material. Of course, the narrative voice is not a new invention, and the irony is underscored by the fact that (not surprisingly) the entire episode turns out to be a dream. Like the telepathy of *The Great Romance* and "To Whom This May Come," human dreaming threatens the supremacy of print in constructing narratives. Some modern literary critics, however (similar to

Bellamy) are invested in models of civilized development characterized by writing, and so they are forced into incorrect conclusions about the relationship of orality to literature.[101]

Jack Goody, in "From Oral to Written: An Anthropological Breakthrough in Storytelling" makes the claim that narrative "is not so much a universal feature of the human situation as one that is promoted by literacy and subsequently by printing."[102] Such arguments for the "exceptional" qualities of print, and therefore literate societies, not only distort an evolutionary understanding of the human species, but it also provides a misleading view of how literature (as a cognitive rather than technological phenomena) functions in culture. The prominence of stand-alone texts in our literary canon says less about their importance than it does about a subjective valuation of literary works as "work," expressed as material proof of individualized labor. This valuation of original authorship discounts the importance of popular, orally or collectively maintained narratives, and their importance in the Darwinian process of selection. Ultimately, oral narratives give printed narratives the material to select from. Qualities specific to printed narratives are given undue importance in literary analysis, at the expense of distributed, provisional, and immaterial processes underlying the development of texts, since these processes also occur in oral societies and cannot be used to rationalize the superiority of literate cultures who locate value in ownership, individuality, and material production. In

[101] Melville's storytelling, for example, is thought to have "matured" only at the point when it became literary.

[102] See also Goody's *The Domestication of the Savage Mind* (1977).

both literate and predominantly oral societies, however, the important factor in survival is not the material creation of narratives but rather their selection, and the psychological factors at play in what is remembered and forgotten.

The work of 20th century anthropologists like Franz Boas and Claude Levi-Strauss was predicated on challenging assumptions of racial superiority, but at the cost of maintaining that the “savage mind” operated in fundamentally different ways than one steeped in “culture” (in the exclusive, Arnoldian sense). In Boas in particular, as Richard Hofstadter points out, “the standards of white culture are naively posited as a norm, and every deviation from them considered automatically characteristic of a lower type,” adding “Boas attributed the cultural superiority of Europeans to the circumstances of their historical development rather than to inherent capacities” (167). In *The Open Society and Its Enemies* (1966), Karl Popper objects to what he calls “utopian engineering” because it requires a projection of power outward from a centralized position, both in space (a few biological individuals) and in time (a utopia prophesies or prescribes for the distant future). By examining the intertextuality of some of the books inspired by Bellamy's *Looking Backward*, and considering these mutual revisions as a single collaborative project, I aim to show that utopian thinking can be consistent with Popper's preferred type of engineering, which he calls “piecemeal”.

Constellating *Looking Backward* with other minor texts in the same “sequence” does little to erase the eugenic and racist beliefs symptomatic of a nation ambitious of empire, and eager to rationalize the brutalities necessary to achieve it. Although “major” U.S. texts from the period tell the same basic story, these minor novels should also be

remembered as constitutive of a particular utopian discourse in which *Looking Backward* took part. While Bellamy’s followers were attempting to implement the political views of his utopian society in “clubs” around the world, other authors like the plutocrat J.J. Astor IV (1864-1912), the former American Vice-Consul General to Haiti Arthur Bird, and later the businessman Bradford Peck (1853-1935) were revealing just how far they thought the earth would fall under the sway of technological dominance. Jean Pfaelzer writes about the bureaucratic version of evolutionary progress expressed in conservative utopians equally embedded in classical economic theory. “These tales,” she argues, (writing specifically about utopian novels published before McKinley's inauguration in 1896) “perpetuated the myth of upward mobility, inevitable progress, and sanitized the process of social change. Utopia was predicated on the assumption that the dreams of a single person ought to be realized in society as a whole; utopia exists on the author's terms alone" (24).

Peck's character, called Mr. Browning, explains (to a "deeply interested" Mr. Brantford) how it works in his turn-of-the-century managerial utopia: "...the world to-day is indebted to the system formerly used in the department stores for our present wise condition of life. You can recall how individuals of small ideas, who occupied positions as small dealers in the commercial world, regarded as enemies these great department stores, when in reality they proved the stepping-stones to the present 'Great World's Department Store,' the Cooperative Association of America" (242). Psychologically and artistically, Peck's imagining of evolution along the lines of monopoly capitalism aspires to what Lewis Mumford calls in his *Story of Utopia: Ideal Commonwealths and Social*

*Myths* (1923) "megalopolis" where all objects have become surfaces, or readable tape. Mumford writes: "in order to grasp the quintessential character of Megalopolis we must shut our eyes to the palpable earth, with its mantle of vegetation and its tent of clouds, and conceive what might be made of the human landscape if it could be entirely fabricated out of paper; for the ultimate aim of the Megalopolis is to conduct the whole of human life and intercourse through the medium of paper" (226). The conservative utopian ideal of progress was a rationalized system of cooperation and distribution, rather than an emergent, inefficient and adaptive *eco*-system, and hence more evolutionary culture than Darwinian science.

Looking Forward: "More Witnesses than One"

A list of authors who published a book by the title "Looking Forward" (a natural choice for those intending to reply in print to the highly successful *Looking Backward)*, include Richard Michaelis (1890), the Ex-vice Consul General of America in Haiti Arthur Bird (1899), Franklin D. Roosevelt (1933) and George Bush, Sr. (1987). For various reasons, none of the books are well known. Michaelis' *Looking Forward* (republished as *Looking Further Forward*) shares with the other novels of the same name a set of political convictions (excepting perhaps Roosevelt), most evident in the preface to Bird's *Looking Forward*: *A Dream of the United States of the Americas in 1999* (1899) where "the author respectfully submits it as his firm and immovable conviction, that the United States of America, in years to come, will govern the entire Western Hemisphere" (3). The accompanying map (also reproduced by Roemer in *The Obsolete Necessity)* shows a Washington D.C. centrally located in the southern part of the "state of Mexico,"

exerting control across other North, Central, and South American “states”. “The purpose of this book,” he writes, is to establish “in the mind of every patriotic American” that the “security” and “safety” of all the republics in the hemisphere would best be met by coming under U.S. Control. “Our glorious, starry banner will rule the entire Western Hemisphere. It will be the emblem of Peace, Liberty and Civilization, floating over a united America from Alaska to Patagonia. This is America's Destiny” (4). This vision of hegemonic, bureaucratic control over a combined industrial world was not so much a response to Edward Bellamy's orthogenetic social logic, as it was an extension of it. The United States, when Bird’s tract was published, had just won control of Cuba in the Spanish-American war, and expansionist sentiment was running high.

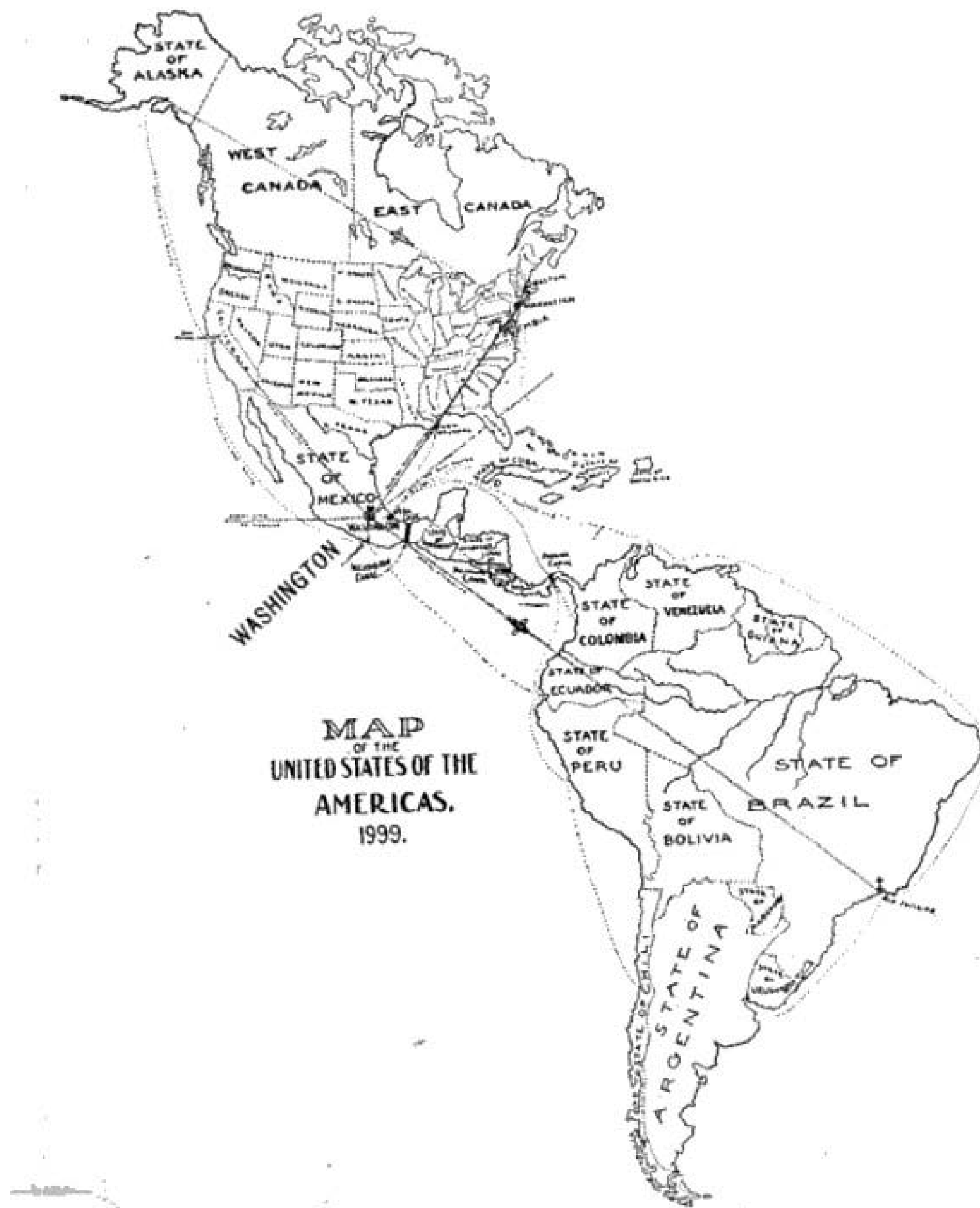


Figure 6. Arthur Bird's Vision of the Future, *Looking Forward* (1889).

In light of perceived technological and cultural progress, the sky was the limit for 19th century utopian writers in the U.S. A key illustration of the degree to which life on Earth was thought be ultimately susceptible to human rationalization and control occurs in J. J. Astor's *A Journey in Other Worlds* (1894), where “the Bondholders and Stockholders of the Terrestrial Axis Straightening Company” plan to tilt the earth out of its irrational ecliptic, thereby producing a more rational balance between the seasons (20). Human desire and convenience become (quite literally) the axis to which the world must be adjusted through technological intervention. Astor's narrative is an interplanetary hunting adventure, in which, as Jean Pfaelzer describes it in *The Utopian Novel in America, 1886-1896 : the Politics of Form* (1984), the group of intrepid explorers eventually visits Saturn, where they are treated to "the other side of history, the spiritual culmination of human evolution, in a transcendent utopian world of silent spirits" (110). In a conflation of evolutionary and utopian logic central to time travel narratives of the period, a Saturnian ghost tells the voyagers that “man is evolved from protoplasm through the vertebrate and the ape,” and that “here we have the epitome of the struggle for life in the ages past, and the analogue of the journey in the years to come,” where an increasing control over natural laws and forces will lead to a higher, spiritual stage of human destiny (385). Despite the astrological window-dressing, Astor’s narrative remains rooted in a cosmological schema that places humanity at the center of the universe, with a course set by the expanding complexity of Spencerian evolution, ending finally in spiritual perfection.

Speculative fiction, like Darwinian evolution, is neither intrinsically moral nor immoral, or to use Emerson's terms, neither innovative nor conservative. Wholesale condemnations of 19th century utopian visions and evolutionary theory on account of

Spencerian orthogenesis (progressive social or cultural evolution) miss the point, and are as damaging to an understanding of the culture that produced them as would be wholesale acceptance. More broadly, U.S. utopian narratives take part in a defamiliarization of society through its speculative displacement. This defamiliarization can result from a dislocation in space, similar to that which occurs in Melville's *Mardi* and other politically charged travel literature, or in time, in the collaborative narratives of a futuristic Boston. Often, speculative fictions confuse the two, as in the hyper-evolved Saturnians in Astor's *Journey in Other Worlds*, or in the Reverend Harris' *Life in a Thousand Worlds* (1905), in which allegorical planets, rather than islands (as in *Mardi*) constitute the spectacular backdrop for social and political arguments.

The variety of astral bodies visited in Harris' 1905 novel make clear that the "germ of evolution" that blooms into a perfect government in Bellamy's utopia is ambiguous in its possibilities and implications. Harris uses evolution not only to rationalize teleologies of progress but also to justify the degradation of those destined to the lower rungs of the social ladder. In the chapter "A World of Low Life," for example, "human civilization was at a low ebb," regressing into a state of savagery. "For convenience," the narrator states, "I will call this world Scum" (213). Despite the existence of small, "intelligent sections," that "were working their way upward on the measureless incline of progress," the nascent possibility for higher civilization is destroyed when the "vast hordes" of ignorant Scumites wipe them off the planet (216). To make the implications of his moralistic parable clear, Harris relates that "when this sad and blighting victory was accomplished, these uncivilized tribes rejoiced more hilariously than at one time our Indians rejoiced when celebrating their victories in the wild scalp dances" (217). Among the sins of the Scumites is the widespread practice of "free love." This causes the narrator's thoughts to return to America, and impels him to

suggest that “the libertine of our world go to the world of Scum where he belongs, or rise to the dignity of man whose image he bears” (218).

As a genre, speculative allegorical fiction proved adaptive to the needs of individual authors (with a near-limitless funds of literary mutations to selectively replicate), in the same way that the site of utopian Boston was adapted by its various tellers to match individually discrete (yet collectively maintained) ideological convictions. This adaptability increases the narrative’s replicatory fitness beyond what would have been possible if a proprietary link had been enforced between the allegorical content (the concrete forms of Boston, Mars, etc.) and their argumentative significance (Bellamy's socialism or the conservatism of Reverend Harris, Arthur Bird, or Richard Michaelis). Darwinian evolution frames the symbolic struggle for authorial control over the hypothetical, futuristic “Boston” in which Bellamy and his antagonists were engaged.

Michaelis in *Looking Further Forward* complains that it is easy, “by 'looking backward,' to find fault with living men as well as with the present state of affairs and to build air castles inhabited by angels only” (vi). Unlike Bellamy, Michaelis contends that he will “look forward” by showing “what would be the logical conclusion of Mr. Bellamy's story, if fairly continued...” This more “fair” continuation involves Julian West's eventual disillusionment when exposed to the hypocrisy of the utopian government that is, he learns, maintaining an unnatural dystopia, contrary to the laws of nature. Specifically, Michaelis suggests, the utopian Boston of *Looking Backward* had in fact abandoned the sacrosanct (Darwinian) principle of “competition,” which Michaelis sees as “the gigantic power that elevated us all and Mr. Bellamy with us to the present state of evolution!” (v).

*Looking Forward* restores competition to Bellamy's utopia by giving the original text another narrative, with a competing point of view, to contend with. When Mr. Forest,

the disgruntled Janitor and ex-professor, tells Julian that “at the fountain of your information in regard to the twentieth century is only one man, Dr. Leete,” Michaelis is also telling the readers of *Looking Backward* that their single source (Bellamy) is unreliable. A more fair continuation of Bellamy's novel must be “based on the testimony of more witnesses than one” (21). While Bellamy uses a type of Spencerian evolution to suggest a natural logic to gradual combination of industrial and economic power into larger and more efficient systems, resulting inevitably in one “industrial army,” Michaelis argues that it is “the tendency of the communistic system to breed favoritism, corruption, servility and suppression of opponents.” (50).

"When, in comparing the civilization of your days with ours, ” Mr. Forest tells Julian, “I came to the conclusion, that communism had proved a failure, I was accused of misleading and corrupting the students and the usual sentence in such cases: ‘confinement in an insane asylum', was passed. Because, it is claimed, that only a madman could find fault with the best organization of society ever introduced" (22). It is such a sentence that precipitates the tragic consequences at the end of the novel, just before Julian wakes, gratefully, back in the 19th century. Edith's ex-lover Dr. Fest escapes being sent to the asylum, and shows up in the final pages of the novel at the Leete's house with a bloodstained butcher's axe and an angry mob. After telling Julian West that he will "drown him like a puppy" in the Boston harbor, Fest comes after Leete.

> Once more Forest tried to safe [sic] the life of the leader of the administration, but in vain. A dirty looking ruffian buried a knife in Forest's true and fearless breast and with the words: ‘We are even, Leete,’ he sank to the floor. Edith struggled with two men who had seized her arms and were trying to lead her away when Fest's axe descended on Dr. Leete's gray head. Without a murmur he fell to the ground, while Edith with a loud cry fainted. Fest seized her around the waist (121-122).

It is difficult to say which version of evolution, that wielded by Bellamy or by his opponents, is less accurate in terms of a societal metaphor. Writers misinterpret science

regardless of their politics, and both socialists and capitalists used evolutionary metaphors to justify their world-view. Whether they advocated Spencerian combination or Darwinian competition, the evolution *of* these narratives, selected and adapted for various purposes within a complex ecology of literary taste, suggests that for texts, competition and cooperation are not always clearly defined categories.

Looking Beyond: Evolution of the Future

Although writers adding to Bellamy's story generally followed rules of continuity, they occasionally negated events from previous novels, when they conflicted too severely with the new contributor's point of view. Ludwig Geissler revises the conclusion of *Looking Further Forward*, by Richard Michaelis (1890) by turning the events into nothing more than a nightmare experienced by Julian West. This rather drastic move was justified by the equally drastic decision by Michaelis to have a jilted lover kill Leete with an axe and abduct his daughter. Accepting Michaelis' twist as reality would have been too strong of a blow to the symbolic structure of Bellamy's original novel and the socialist ideologies informing it. "Thank heaven," Julian says early on, "that brutal conduct of Fest, his murder of Dr. Leete and Forest, his kidnapping of Edith, his gang tying and gagging me—all this was but a dream" (16).

Geissler's revision is more consistent with the earlier novels than it first appears. Even in *Looking Backward* West wakes up again in the 19th century and thinks he "had but dreamed of that enlightened and care-free race of men and their ingeniously simple institutions" (197). Bellamy, however, reverses the conventional Utopian structure by shifting the dream narrative yet again into reality, ending when West is awake in the year

2000. The Utopian future turns out to be real after all, and his momentary return to the 19th century past was, unexpectedly, the illusion (210). This twist ending, however, makes further shifts in the framing reality of the narrative plausible. Geissler, despite his crude reversal of Michaelis's narrative, is acting within the bounds of existing thematics, repeating an element of ambiguity already introduced.

One of the weaknesses of *Looking Backward* is that Julian (and therefore the reader) must take much of the information about the national utopia on faith, since Dr. Leete and Edith are the only sources of information. As Jonathan Auerbach points out, "the only two individuals (besides the Leetes) encountered by West during the entire novel, the waiter and the store clerk, say absolutely nothing but act rather as objects of conversation" (35). The degree to which capital, industrial capacity, and political power are centralized in Bellamy's utopia is reflected in the trust West places in this single source of information. As Dr. Leete himself says (speaking about the history of commodity exchange) "Everything was procurable from one source, and nothing could be procured anywhere else" (56). Subsequent writers, such as Michaelis, exploit this weakness by introducing more characters for West to interact with, representing alternative perspectives on the socialist system. Mr. Forest, for example, a key figure in *Looking Further Forward* and *Looking Within*, is a disgruntled janitor who used to have the teaching position now occupied by Julian West. He was fired, Michaelis explains, for pointing out the advantages of the 19th century competitive system over the new national socialism, where enforced equality is a detriment to progress. Geissler, in response, includes in his book a public debate in which Forest and his statistics are quoted (with

footnotes to where they appear in *Looking Further Forward*), and soundly trounced in public debate by "Professor Yale". The reader is expected to agree with West that "any faint doubts that had lingered yet were extirpated by the iron clad arguments of the clever professor of statistics" (83).

Contemporary critics of utopia and Utopian theory have rightly pointed out the tendency of these narratives to code the future within determinate systems. The possibilities of defamiliarizing the present through speculative fiction are counteracted by the foreclosing of any lines of development that are unexpected. Evolutionary "emergence" is impossible in regimented utopias like Mumford's megalopolis, where there are no objects, only descriptions. Utopia, to again use de Certeau's terminology, can offer strategies, but not tactics. In late 19th century American utopias, evolution is the language in which doctrines of inevitability and progress are frequently expressed, often contrary to the logic of Darwinian selection. The lines between social engineering and natural selection are blurred as principles of artificial selection become naturalized. Dr Leete, consequently, can assert that the labor question, so pressing in Julian West's time, "may be said to have solved itself." Just as Spencer, Bergson, and other early evolutionists detected inherent tendencies towards complexity and integration, Leete believes that "the solution" to labor conflicts "came as the result of a process of industrial evolution which could not have terminated otherwise. All that society had to do was to recognize and cooperate with that evolution, when its tendency had become unmistakable" (32). Once inconceivably large spans of evolutionary time are collapsed into understandable narratives of "technological" progress, anything seems possible.

If Dr. Leete's claim that the socialist utopia maintains its present course unguided, except through the internal momentum of self-regulating forces of inevitable and natural progression (an equivalent of Adam Smith's "invisible hand" with fingers extending to all elements of society, not just the economy), then his own role as Julian's mentor is incidental. If Leete is, as Michaelis ingeniously suggests, part of a hidden cabal controlling and directing the society against its more natural state of competition, then the truth about Bellamy's socialist doctrine rests more with figures like Mr. Forest, who are systematically marginalized because of their apostate or unconventional beliefs. As an inter-textual narrative, the Bellamy sequence oscillates along the lines of these opposing interpretations, with subsequent authors adding to the chain of symbolic events. Like biological evolution, the inter-textual sequence consists of feed-back loops and corrective adaptation through mutation and selection.

*Looking Beyond* strikes me as especially emblematic of this revisionary potential. In particular, the character of Mr. Brown in Geissler's text signals a willingness on the part of an idealized society to tolerate "inefficient" divergence for the possibility of new discovery. Mr. Brown is mal-adapted to the rationalized system of rewards and encouragement, ignoring the pursuit of "red ribbons" and other artificial incentives. Due to a poor work record, he is stripped of his high position, and the main characters of the novel perceive his engagement with Miss Moore (one of Edith Leete's friends) as a misalliance. He is a social pariah, an idiosyncratic outlier in an overly rationalized society, allowing himself to fall in the standing of the utopian community in order to pursue his own impractical and unconventional research. By including Mr. Brown in his

narrative, as well as other figures such as a hermit who rejects Bellamy's ideal society (and yet is tolerated by it), Geisller affirms the non-coercive nature of his ideal of progress. The Utopian government develops through positive rather than negative reinforcement—incongruous elements are allowed to exist, and should they prove successful (according to criteria outside of the total ideology of existing beliefs), the utopia remains plastic enough to allow for their re-incorporation. In this way Geissler's book, although written in support of Bellamy's original against the attacks by Michaelis and others, offers a more Darwinian version of social evolution than Bellamy, who has Dr. Leete claim that "competition" is the "instinct of selfishness" and that greater and greater "combination" and rationalization are the key to ideal efficiency (158).

Both Mr. Forest and Mr. Brown are outsiders, and Geissler takes pains to show how the future Bostonians give their heretical ideas and pursuits fair trial. In the case of the disgruntled janitor obsessed with a "utopian" version of the 19th century competitive system, his opinions are ultimately rejected. In the case of Mr. Brown, however, his unpopular and asocial pursuits are redeemed towards the end of the novel (in a post-script, actually) by the success of his invention. Geissler turns Michaelis' assertion that competition is a necessary incentive to achievement around by creating a character who is allowed to pursue his research independently precisely because of his freedom from market competition. Whereas in the 19th century brooding inventors like Brown would have ended up as drunks or vagrants, able to pursue their interests only at great personal cost, under the socialist system even when demoted because of his obsession, "he has ample spare time to work out the design which the sparks of genius awaken in his brain,

though it should take the whole period of his life" (32).[103] Geissler uses the case of Mr. Brown to show how competition (in Michaelis' sense) would have actually prevented scientific advancement.

At the end of *Looking Beyond*, the inhabitants of Earth are able to communicate with distant Martians by illustrating the Pythagorean theorem (associated with Masonry) through electrical lights stretched across the deserts of the earth, an act requiring the coordination and collaborative effort of the globe.[104] Geissler carries through Bellamy's close association of social evolution and military pageantry. Mr. Fest (the reformed/revised villain from Michaelis' sequel) describes the lighting of the world in terms suitable for Bellamy's "industrial army." "What are the campaigns of Cyrus and Alexander," his letter reads, "Ceasar, Alaric, Charlemagne, the campaigns of the crusaders, of the first Napoleon, of Grant and Moltke—what are they compared with this brilliant campaign of labour in the cause of science!" (97). Geissler's adaptation, radical as it may be, remains a product of its cultural ecology and the literary thematics of existing narratives.

Everything from texts to technology is said to evolve. Evolutionary science, however, as opposed to evolution in popular understanding, does not create algorithmic

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[103] This improbable technology, which preoccupies Mr. Brown despite society militating against his research and having no faith in its effectiveness, is solar power.

[104] In Bellamy's 1898 story "The Blindman's World" Mars is configured as a utopian setting, as it is in William Simpson's *The Man From Mars: His Morals, Politics and Religion* (191). In the collaboratively written utopia *Unveiling a Parallel: A Romance* (1893) by Alice Jones and Ella Merchant, utopias exist on Mars in which men and women are equal. For a modern use of the Martian landscape to explore social and political development, see Kim Stanley Robinson's *Red Mars* (1993), *Green Mars* (1994), and *Blue Mars* (1996).

scripts for individual species that can be read before they are acted. The idea of species destiny and evolutionary progress is flawed because, as Richard Hofstadter writers in *Social Darwinism in American Thought*, adaptations do not occur solely because of competition within a species, but because of the interaction of a species with an ecology, which is itself constantly changing and evolving. There is no "right answer" to the evolutionary puzzle because differential selection means that parallel counter-strategies will inevitably evolve. The evolutionary histories of biological and literary forms involve shifting dynamics of collaboration and competition, across various scales and substrates. The evolution of literary forms (and of the human species) only takes on shades of inevitability after divergent or possible futures have been selected against—not because of some absolute law of "fitness" but rather because of mal-adaptation to a given environment, both temporally and geographically situated.

Historical vision, or “looking backward” at the past through literary artifacts, does not favor all forms and cultures equally. Even without evidence, (and by definition, the evidence has ceased to exist), one can infer that print selects only a fragment of a living, oral-based literature for transcription. It is just as necessary to move away from a belief in the uniqueness and isolation of the human species (envisioned as ascending towards some utopian culmination of rational enlightenment, as it is to move, in literary criticism, away from ideas of the uniqueness and isolation of individual texts. Contrary to linear narratives of origin and development, it is the literary ecology to which a textual organism is adapted that ultimately determines its chances for survival.

# CHAPTER IV: COLLABORATIVE ECOLOGIES: GREEN HOUSES AND FAMILY TREES

"It is enough to contemplate this structure of the nervous system (even though we cannot know much in detail about the relations of activity that occur from moment to moment) to be convinced that the effect of projecting an image on the retina is not like an incoming telephone line. Rather, it is like a voice (perturbation) added to many voices during a hectic family discussion (relations of activity among all incoming convergent connections) in which the consensus of actions reached will not depend on what any particular member of the family says."

Humberto Maturana and Fransisco J. Varela
*The Tree of Knowledge: the Biological Roots of Human Understanding* (1992)

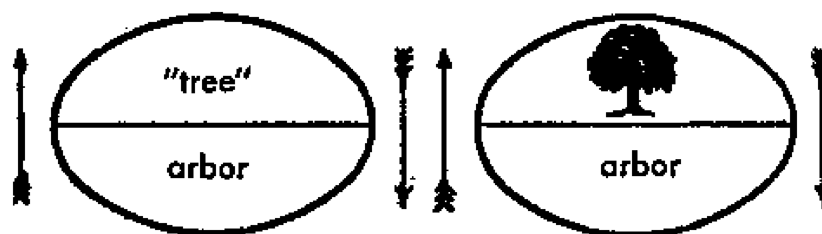


Figure 7. Ferdinand de Saussure's Linguistic Sign, Course in General Linguistics, 1916.

Ferdinand de Saussure, in order to illustrate the "nature of the linguistic sign" in his *Course in General Linguistics* (reconstructed from his oral lectures and published posthumously in 1916) uses the image of a tree. Actually, the image of a tree, across from the Latin word "arbor" is used to represent what he considers a naïve understanding of linguistics, in which words equal things. Famously, Saussure revises this notion of signification to redefine the sign as having a different two-part structure, consisting of the sound pattern of the word "arbor" and the concept "tree," which has been uprooted, so to speak, from its existence in physical reality. The nature of the linguistic sign, according to Saussure's famous and radical redefinition, has in fact no "nature" at all, apart from its

psychological and psycho-somatic components as sound, or “signification,” and an abstract concept, or “signal” (67).

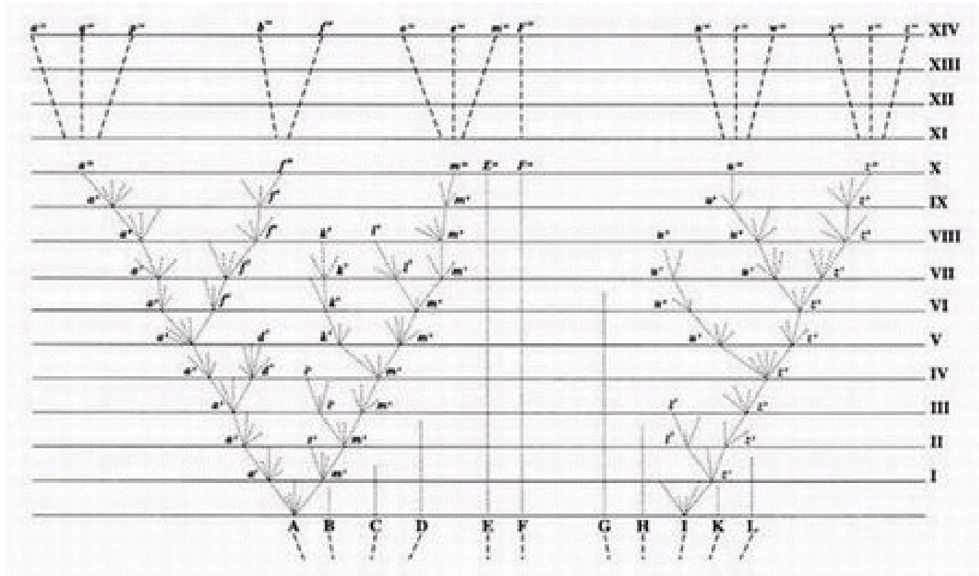


Figure 8. Darwin’s Morphological Tree, *On the Origin of Species*,1859.

For Saussure, and  for much of the post-strucuturalist thought that was to branch from his strucuturalist conception of language, “whether we are seeking the meaning of the Latin word arbor or the word by which Latin designates the concept 'tree', it is clear that only the connexions [sic] institutionalised in the language appear to us as relevant. Any other connections there may be we *set to one side*” (67, my emphasis). Later, in his description of linguistic value, the tree seems to resurface (and how could it not, since concepts remain grounded in the physical existence structuralism sets “to one side”), although here the metaphor has been flattened into two dimensions. “A language,” Saussure says/writes, “might also be compared to a sheet of paper. Thought is one side of the sheet and sound the reverse side” (111).

It would seem that like Dupin's story to the Prefect, Saussure's metaphor for language requires a "sheet of paper" with, impossibly, more than two sides. First Saussure places the extension of language into empirical, pragmatic reality on "one side" (language *addressing* the world) and then attempts to refold the linguistic sign into such a way as sound is on one side and signification on the other, erasing the biology and specificity of trees growing logically prior to Saussure's ornamental appropriation for his linguistic theory. In order to see beyond Saussure's figuration of a linguistic tree, another "tree" can be used to illustrate the random emergence of a different kind of meaning and organization: Charles Darwin's morphological illustration of species divergence (the only figure included in his *Origin*). This link between literary analysis and Darwinian theory is made by Franco Moretti, who uses evolutionary trees to trace morphological changes or adaptations in literary forms, resulting from selective forces of readers and publishers. Recently, as ecological criticism (or "eco-criticism") is beginning to assert, even printed texts are prefigured and made possible by non-metaphoric trees, before their tissues are converted into an industrial or a literary resource.[105] Trees, literally and figuratively, can be used to understand how the author Mary Wilkin's Freemans' texts are positioned at the dynamic intersection of ecological and publishing histories.

The idea for a collaborative novel, written by twelve authors already gathered under the umbrella of Harper and Brothers publishing, began with a letter sent by W.D.

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[105] See "Trees" in *The Culture of Wilderness: Agriculture as Colonialization in the American West* (1996) by Freida Knobloch.

Howells in 1907 to the editor of *Harper's Bazar*, Elizabeth Jordan. [106] Like the other contributors to *The Whole Family* (1908), Mary Wilkins Freeman had a long history with Harpers. *Six Trees*, a volume of short stories published in 1903, followed her earlier collections published by Harper and Brothers, including *A Humble Romance and Other Stories* (1887) *A New England Nun and Other Stories* (1891), *The Love of Parson Lord and Other Stories* (published in 1900, and containing a story titled "The Tree of Knowledge"), and *Understudies* (1901).[107]

Freeman grew up in Randolf, Massachusets, "something less than a score of miles from Boston,"[108] and was known throughout her career for her historical and regionalist fiction set in New England. In Chapter 1 I traced the continuous line of ambiguity running through Poe's successful short stories, and read indeterminacy as a centrifugal force of attraction around which his gothic effects were organized. Chapter 2 looked instead at the drift and outward (centripetal) forces of Melville's literary experiment in pseudo-oral improvisation. Although the late 19th century utopias discussed in Chapter 3 evidence an attraction towards the symbolic center of Boston (consistent with *Looking Backward*'s dream of ultimate combination and homogenous government), the sequels and prequels to Bellamy's novel betray a counter-force of heterogeneous movement in

[106] The spelling changed from "Bazar" to "Bazaar" in 1929.

[107] Harper and Brothers also published several of Freeman's novels, including *Jane Field* (1893), *Pembroke* (1894) and *The Debtor* (1905). She also wrote a historical novel, *The Heart's Highway: A Romance Of Virginia In The Seventeenth Century*, published by Doubleday Page in 1900.

[108] See *Women Authors of Our Day in Their Homes: Personal Descriptions and Interviews* (1903) by Francis Whiting Halsey (212).

geographical, temporal, and conceptual space. Finally, I here read *Six Trees*, “The Old Maid Aunt” story in *The Whole Family*, and other short fiction by Mary Wilkins Freeman to illustrate how her specifically regionalist, ecological fiction pushed against and was adapted to the centralized control of Harpers and the literary formulae of fixed, generic precedent.

Wilkins, along with the other writers commissioned to contribute to the *Harper's Bazar* collaboration, had already been selected by the U.S. market for short fiction, in magazine or book form. In this chapter, then, I focus on another concept from evolutionary biology than can play an important role in understanding literary improvisations, collaborations, and networks of reference in late 19th century fiction: that of emergence.  David Blitz, in *Emergent Evolution* (1992) traces the concept of evolutionary emergence to lectures given by the psychologist Lloyd Morgan (1852-1936) at St. Andrews between 1922 and 1923. Emergence is instrumental in explaining the continuity between physical matter and biological life, and between biological life and individual/social consciousness.[109] In terms of Wright's landscapes, emergence is also key to figure how unpredictable discoveries and changes appear in the contours of adaptive fitness, as the emergent properties of higher-level systems shape and re-organize

[109] Geological or physical evolution gave rise, at some point around three billion years ago, to life. Matter gained the ability to regulate its own interactions through time, increasing its ability to adapt to new environmental needs. Consciousness, in Morgan's theory, subsequently emerged from life, and extended the potential for action farther into the future through psychological predictions (the counter-factual hypotheses essential to narrative fiction). Life, as a pattern, was adaptive because it had a longer temporal scale than mere organizations of matter, and consciousness extended the dimensionality of thought even further into possible futures. It enabled an organism, to rephrase Daniel Dennett, to differentially select from possible actions without actually acting them out (and suffering the consequences).

their component parts. Philosophically, emergence has been used to bridge the physical and meta-physical, the material and the mental, or what James would call the "concrete" and "dynamic." Emergence in Mary Wilkins Freeman's fiction is the theoretical counterpart to the collapsing determinism of Poe's monomaniacal maelstroms: his convoluted inwardness is matched by Freeman's *evoluted* attention to her physical and mental environment. Not to become overly schematic, one could say that if Poe and William James are pragmatic and centered, Melville (in *Mardi* at least) and Freeman are drawn outward by romantic and restless sentiment.

In the previous chapter I argued that the key to unlocking the evolutionary dynamics of 19th century time-travel narratives was to see them not as individual texts but as an informal collaboration extended through time and across usual boundaries of authorship. In this chapter I argue that the collaborative novel *The Whole Family* can be read in light of evolutionary concepts of adaptation, mutation, selection, and emergence. As a marketing stunt for the tremendously popular *Harper's Bazar*, the twelve selected authors of *The Whole Family* enact the cooperative and antagonistic dynamics of commercial publishing in the 19th century. The chapter contributed by Mary Wilkin's Freeman in particular offers problematic resistance to the rationalized structure envisioned by Jordan and Howells.[110] In the same way that Freeman's "The Old Maid Aunt" upsets the equilibrium of the family "tree" of Harpers, her short story collection *Six Trees* can be used to ground literary meanings in ecological history, thereby upsetting

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[110] In "The Editor's Study" (1887 and 1891) W. D. Howell's twice refers to Freeman's writing as "instinctive" (20-21).

the structuralist tradition of the unnatural "nature" of the linguistic sign.[111] In the same way that Saussure demonstrated that linguistic concepts were dependent upon a field of mutual co-definition and determination, post-Saussurean literary theory (insofar as it is rooted in this insight) is likewise dependent upon a pluralistic ecology of surrounding methods and epistemological approaches. The image of a tree, with branches in Darwinian evolution, linguistics, literary study, eco-criticism (and even human neurology, as I will argue in later sections) can be used to ground an understanding of 19th century literary works as collaborative fictions within a larger cultural and biological ecology.[112]

Placing Darwinism within the context of eco-criticism and the history of the instrumentalization of nature (stemming from Enlightenment thought) offers one way to adapt the rapidly accumulating evidence of evolutionary biology to the humanistic concerns of literary theory, not by denying the epistemological validity of scientific methods, but by acknowledging a pluralistic ecology of the sort William James and

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[111] See *Uncommon Ground: Rethinking the Human Place in Nature* (1995), esp. Donna Haraway's "Universal Donors in a Vampire Culture: It's All in the Family: Biological Kinship Categories in the Twentieth-Century United States" where she writes, "biology is also not a culture-free universal discourse, for all that it has considerable cultural, economic, and technical power to establish what will count as nature throughout the planet Earth" (323). With the period 1900-1930s, Haraway associates the "data objects" of "tree genealogies" and "taxonomies," and the "evolutionary paradigm" of "Spencerian versions of Darwinism" (325).

[112] "Generally," André Schiffrin writes of a later period in *The Business of Books: How International Conglomerates Took Over Publishing and Changed the Way We Read* (2000) "it is safe to say that whenever a conglomerate has a wide variety of holdings, there is a very real risk that its media companies will not report news that might diminish the profitability of other branches of the firm" (133).

Barbara Hernstein Smith would advocate.[113] Neither culture nor biology are reducible to one another, but lines of causal determination can be drawn between, for example, natural ecosystems and ecosystems as they appear (and evolve) within narratives. Modern ecology, and ecological criticism, can complicate progressive Darwinian readings that see survival only in terms of competition between individuals, the idea dominating much 19th century discourse on evolution. *The Whole Family*, a project initiated by *Harper's Bazar* employing twelve authors anonymously contribute a chapter to a novel, illustrates a kind of "critical ecology" of inter-relationships between authors, texts, and publishers, in which collaboration and co-determination play a larger role in the evolution of the narrative than inter-author competition. What these instances reveal are similar collaborative networks at play in shaping and selecting printed material around the turn of the century in the U.S., not only collaborations in the literal sense.[114]

Since Darwin, ecological science has provided several models for moving beyond a focus on competition between individuals, while remaining within the Darwinian paradigm of evolution through natural selection. In the same way that modern genetics

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[113] See Barbara Hernstein Smith's *Scandalous Knowledge: Science, Truth, and the Human* (2006). Louis Menand writes in *The Metaphysical Club: A Story of Ideas in America* (2001) that "the year James introduced pragmatism was the year the American economy began to move away from an individualist ideal of unrestrained competition and toward a bureaucratic ideal of management and regulation" and the "entrepreneurial model" gave way, between 1989 and 1917 to "a corporate model, in which a board of directors, dominated usually by bankers, oversaw company policy in the interest of investors—the system of finance capitalism" (371).

[114] See Susanna Ashton's *Collaborators in Literary America, 1870-1920* (2003) esp. "Clubbing, Conversing and Collaborating: Brander Matthews as Professional Man of Letters" and "Veribly a Purple Cow: *The Whole Family* and the Collaborative Search for Coherence" where she writes that "by making writing as active a verb as possible, and by never letting it fall into past tense, *The Whole Family* as a text managed to keep moving. Characters could keep discussion going among themselves. By shamelessly calling attention to itself, this collaborative novel asserted its own reality and made that reality one of motion and productive labor" (166).

has been used to qualify the centrality of organism-level survival, as in Richard Dawkins' *The Selfish Gene*, ecology has shown that species (humans included) depend on environments in complex ways for their survival. Biomes rather than species have emerged as the relevant level of organization at which to consider evolutionary change. It is within this ecological horizon that *The Whole Family* became a model of a literary "organism" yielding to the chaotic ecology of its wider field multiple determinations.[115] In yielding to the contingencies of its creation, this early twentieth-century literary collaboration escapes the rational, predictable evolution imagined by the originators of the project (Jordan and Howells), where roles and functions were meant to be controlled and determined by the central, hierarchical authority of the *Harper's* "family". Mary Wilkin's chapter concerning "The Old Maid Aunt" was especially subversive to the instrumental designs formulated by the magazine. Mary Wilkins Freeman's other ecologically-minded short stories, especially those in *Six Trees*, express the very ungovernable and interconnected qualities of nature, and taken with *The Whole Family* demonstrate the link between the instrumentalization of nature *in* literature and the instrumentalization *of* literature along supposedly "natural" lines of kinship.[116]

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[115] Merchant in *American Environmental History* describes various ecological perspectives or models, including human ecology, where "people are part of nature and work within it," organismic ecology, where "humans are separate from nature and should follow nature as a teacher," economic ecology, where "humans are managers of nature and assume control over it," and finally chaotic ecology, which "implies that humans need to relinquish the hubris implicit in attempts to control the natural world, accept the disorderly order of nature, and work within nature's limits" (180).

[116] See Terrel F. Dixon's "Nature, Gender, and Community: Mary Wilkins Freeman's Ecofiction" (2001) and Karen L. Kilcup's "The Conversation of 'The Whole Faimly': Gender, Politics, and Aesthetics in Literary Tradition" (1999).

Six Trees: Extensive Reference

Carolyn Merchant describes two ecological revolutions in American history, one of which took place as indigenous ecologies and strategies of land management and resource use yielded to “the incorporation of a European ecological complex of animals, plants, pathogens, and people.” William Cronon likewise writes of the environmental changes wrought during colonization that "quite simply, the colonists' economic relations of production were ecologically self-destructive.” This is because “they assumed the limitless availability of more land to exploit, and in the long run that was impossible" (2).The second revolution Merchant describes took place with the transition to agricultural and industrial capitalism. In Mary Wilkins Freeman’s stories like “The Elm Tree” in *Six Trees*, the financial fortunes of the characters are tied up intimately with land and issues of soil quality and timber available for fuel or other uses. The presence of trees, particularly valuable trees, could serve as markers for where in the typical progression of exploitation, decline, and recovery a town was. An understanding of Wilkin’s literary trees, therefore, must be grounded in ecological and economic history.

Does it matter that the tree in Wilkin’s story is an elm, and not some other species? As a thought experiment, the American analytic philosopher Hilary Putnam imagines a Twin Earth where water, rather than consisting of two hydrogen atoms and one of oxygen, is made of a different molecule, XYZ. Putnam asserts that, at a moment in history when neither Earth has developed knowledge of molecular science, the “extension” of water (beyond its existence as sound-pattern or concept) is different on the

two Earths, despite both Earths using the same designation. Speakers from the two otherwise identical planets, even before the molecular structure of either substance was known, would "understand the term 'water' differently in 1750 *although they were in the same psychological state*" and science at the time could not account for the divergence (131). Water, in other words, has referential qualities that exist independently of human knowledge structures. More importantly, Putnam presents the case of two language speakers from the different Earths, neither of which know the difference between a "beech" and an "elm". Supposing that the words were switched on the Twin Earth, the two speakers would mean different things. "It is absurd to think *his* psychological state is one bit different from mine," Putnam writes, "yet he 'means' *beech* when he says 'elm,' and *I* 'mean' *elm* when I say 'elm.' Cut the pie any way you like, 'meanings' just ain't in the head!" (286).

Putnam's conception of what Saussure calls *le langue*, or the abstract system of language that enables *parole*, or speech, stops short of post-structuralist figurations of language (typified by Jacques Derrida, these figurations take a critique of Saussurean linguistics as their starting point) in which meanings *are* in the head, namely in their lateral relationships with other meanings and definitions. When one writes or signifies a tree, for Putnam, the "extensive" meaning of such a signification go beyond the linguistic concepts possessed by the individual writing, even beyond the abstract structures of language within a merely *human* environment. Freeman's Elm in *Six Trees*, therefore, has a genetic and ecological specificity not dependent upon Freeman herself. Language and thought are largely cultural constructions, but as Glen A. Love says in *Practical*

*Ecocriticism,* "...it cannot long be ignored that our constructions occur always within the overarching context of an autonomously existing system that we call nature" (26).[117]

In *Six Trees*, the story of “The Great Pine,” is particularly related to New England ecologies, and reads like a morality tale advocating a conservation ethic. George Perkins Marsh wrote of New England in 1864, almost forty years earlier, that “the great commercial value of the pine and the oak have caused the destruction of all the best specimens of both” (quoted in *Ecological Revolutions*, 226). The returned sailor in Freeman’s story reflects “what a fine mast the tree would make, if only it were not soft pine” (71). The character’s relationship with the tree extends beyond instrumentality, however, and the identification becomes such that “he did not know that he heard the voice of the tree and not his own thought, so did the personality of the great pine mingle with his own” (ibid.). After saving the pine from a fire he himself had started, the sailor “for the first time in his history…rose superior to his own life.” He becomes “tuned to a higher place in the scale of things than he had ever held” (79). The character’s awakening sense of his place in nature, as in other stories, parallels his ability to sublimate personal biological imperatives and to participate usefully in a human community. The man’s wife, in his fifteen year absence, has re-married, and subsequently died, leaving two children. The new husband is bedridden and the family, as the sailor finds them, are close

[117] By the time *Six Trees* was published, much of the New England farmland had already been exhausted, and production centers shifted farther west. Foregrounding non-instrumental relationships between humans and trees, Freeman opposes an ecological identification against what Theodore Steinberg describes as “…a process whereby nature—all things and relations in it—was conceived of, acted upon, and valued primarily for its capacity to be exchanged at market for profit” (13).

to starvation. He provides for the family, ensuring their survival, despite his limited genetic stake in doing so.

The six trees in Freeman's collection reintegrate individuals in larger human or ecological relationships, outside the limited sphere of competitive individualism. Freeman explores the ability to take vicarious comfort in living things, even those irrelevant to immediate survival. In "The White Birch," Joseph Lynn's love for the girl he lost to a rival becomes generalized, and tree-like in its undifferentiated vitalism. The birch is also, significantly, the last of a "family" of birches left standing (although Freeman suggests that the tree, like Lynn, has adapted to its loss. "He sat a long time leaning against the white birch-tree through whose boughs a soft wind came at intervals, and made a gentle, musical rustle of twinkling leaves, and the tree did not fairly know that the wind was not stirring the leaves of her lost sisters, and the man's love and sense of primeval comfort were so great that he was still filled with the peace of possession" (67). The birch tree signifies possibilities of love without actual possession, only the "peace" sought for in merely human possessiveness. Like Darwin's tree, those in Freeman's fiction remind humans of their place in larger natural systems and ecologies. The character has have discovered the environmental insight described by Lawrence Buell in *New England Literary Culture from Revolution Through Renaissance* (1986), that "whatever the conventions of ownership, place is more deeply a matter of belonging than of possession" (78).

In another story in *Six Trees*, Martha Elder in "The Balsam Fir" saves the titular organism from a destructive poacher at Christmas time, and this act allows her to "see all

the joys which she had possessed or longed for in the radius of its radiance" (126). Consistent with the formula of opening into a wider sphere of identification and altruism, Martha, after saving the tree, offers lodging to a deaf houseguest. "The Lombardy Poplar," too, is significant in relation to trees as figures for both evolutionary and psychological divergence (in Wright's model, random variation is the drift that allows sub-groups in populations to discover new successful adaptations) because it is Sarah Dunn's identification with a "Popple" tree that causes her to assert her independence from a near-identical cousin. This cousin (also named Sarah) accuses the tree of not looking like a tree, claiming, "this don't look like anything on Earth besides itself" (147). The newly individuating Sarah claims this is why she likes it, because "I'm sick of trees that are just trees. I like one that ain't" (149). She then scandalizes the community by wearing a red dress to church.[118] The Lombardy Poplar (a species not native to America) would, in fact, stand out in the arboreal landscape of turn-of-the-century New England. Sarah and her poplar tree prefigure the differentiation and divergence of Freeman's character Elizabeth (Lily) Talbert (and the chapter in which Freeman introduces her, upsetting the publishing "family" of Harpers) in the collaborative novel *The Whole Family* written five years later, where Freeman's "old maid aunt," shocks her family by donning a bright pink dress and flirting with younger men.

In the midst of an increasingly rationalized and homogenized New England landscape, tree species that had escaped instrumentalization were a powerful symbol for

[118] Similarly, in the short story "the Copy Cat" a school girl, who had up until then been imitating one of her friends, asserts her independence by wearing a pink ribbon instead of blue.

cognitive difference, as well as holding possibilities for ecological identification and inclusion. As part of a living ecology, they embodied the potential for adaptation and change as much as a lost environmental past. “Because species diversity was created prior to humanity,” E.O. Wilson writes, “and because we evolved within it, we have never fathomed its limits. As a consequence, the living world is the natural domain of the most restless and paradoxical part of the human spirit.” (*Biophilia,* 10).

## Unruly Ecology: Symmetry and Growth

A recent *Trends in Neuroscience* article called “Is Neuronal Development Darwinian?” relates that “students of the brain have long been attracted to the idea that cells in the nervous system behave like organisms struggling to survive in an ecosystem" (460).The article attempts to critique the view, which the authors characterize as already a “canon” of neurobiology, that the physical development of synaptic connections is Darwinian.[119] The authors argue that such Darwinian accounts of the “arborizations” or axonal branchings depend on an initial surplus in infant neurons that later get “selected for,” and reduced to fewer numbers in adulthood. On the contrary, they assert, brain development shows an increase on average of neurons over time. The Darwinian account, they conclude, which relies on an initial surplus, cannot be correct.

[119] “In the emerging discipline of evolutionary neuroscience” Gerald Cory writes in *The Consilient Brain: the Bioneurological Basis of Economics, Society, and Politics* (2004) we go to the physical source—the evolved circuitry of our neural architecture. Here we look at what evolution *has* produced, not what we *think* it should have or could have produced” (133). Cory opposes himself to “the bloody tooth and claw perspective on evolution” he identifies with Dawkins and *The Selfish Gene* (1976).

Olaf Sporn responds in a letter to the *Trends in Neuroscience* editor on behalf of “neural Darwinism” and rightly points out that Purez, White, and Riddle mischaracterize the Darwinian position. The theory of evolutionary change through natural selection requires not only the elimination of unsuccessful variants in phenotype, but also the greater reproductive success of those with a beneficial mutation. Sporn points out that the exact way in which successful variations of structure are preserved in the brain are unknown, but that “the relationship to selectionist brain theories is immediate and consequential"(291).

Purez et al. reply to Sporn that a position allowing for Darwinian selection *along with* growth in the number of neurons over time (which was the neural Darwinian position to begin with) does not conflict with their views as expressed in the article, although they still answer the question “Is Neural Development Darwinian?” with a negative. In this back and forth, if nothing else, it is possible to see evidence for what Barbara Hernstein Smith has characterized as “tribal warfare” among academic disciplines. "Although we do not understand the theories advocated by Sporns et. al. well enough to comment on them,” the authors disingenuously respond, “in so far as they emphasize ongoing dynamic changes in the nervous system and a variable outcome of this process, we can only cheer them on. Ongoing changes in the nervous system and the variability of neuronal circuitry are not theoretical notions, but established fact..." (293).[120]

[120] See, for instance, “Effects of the Social Environment on Brain Structure and Function” in Brain and Culture (2006) by Bruce Wexler.

One is left with a feeling that the question of Darwinism and its relevance is simply a matter of semantics, centered on how figurative or literal the metaphor is thought to be. This ambiguity or gap stands forbiddingly between theories of evolution and literary history. Biological evolution is felt to extend only so far in explaining neuronal growth (or literary genres) before any basis in empirical science breaks down. The ambiguity is real; the nature of metaphors, as well as language, is creative approximation. On the other hand, ecological insights, including those drawn from evolution, can play a functional role in literary analysis, beyond semantics, illustrations and ornament. Metaphors of collaboration, competition, and divergence help make sense of Mary Wilkins Freeman's relationships with other writers in projects like *The Whole Family.* They also help to understand something of the human connections with the disorderly, emergent, and yet symmetrical structure of her *Six Trees*.

While the economic growth and rationalization of nature in the nineteenth century United States converted the nation's resources into commodity forms that could be utilized or exchanged, an ecological reading of nature in literature shows how human culture and survival is inextricably tied to unmanageable biotic systems.[121] In *The Comedy of Survival: Literary Ecology and a Play Ethic* (1997), Joseph Meeker writes that "Major literary works…resemble ecosystems in that they present a large and complex panorama of experience in which the relationships of humans to one another are

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[121] Joseph Carroll writes in *Literary Darwinism* (2004) that "evolutionists are of necessity ecological theorists—they understand biological relationships as complex, systemic interactions within an ecosystem, and biologically oriented humanists often use ecological metaphors to describe psychological and social interactions" (160).

frequently represented in the context of human relationships to nature and its intricate parts. Imagery describing human life is often drawn from biological sources, with people compared to plants and animals and human characteristics defined by reference to natural elements" (7). Without denying the complexity of linguistic reference, the cultural aspects of realism, or the romantic conventions adhering to representations of nature in and beyond the nineteenth century, one can argue that the trees in Freeman's fiction stem from both biological and literary sources, as can the collaborative dynamics of *The Whole Family*. In *Six Trees,* each story reveals a vivid instance what E.O. Wilson would call "biophilia" where characters find solace in a more porous consciousness open to arboreal influences—a unmanaged diffusion of connections where they are brought into larger circles of identification and belonging.

In the elm of Mary Wilkins Freeman's collection of stories, something "about the superb acres of those great branches curving skyward and earthward with matchless symmetry of line which seemed to furnish an upward lift for thought and imagination" (5). A tree, however, is not symmetrical by design. Its structural balance is the result of incremental adjustments, ecological emergence rather than centralized planning. In the untended apple tree at the end of the collection, "not one dead branch was there on the tree, not one missing from its fair symmetry. The blooming spread of it was even to the four winds; it described a perfect circle of wonderful bloom" (174). The apple-tree stands in contrast to the over-cropped pear tree of the woman who believes "in keeping trees nice an' neat as well as houses" (198).

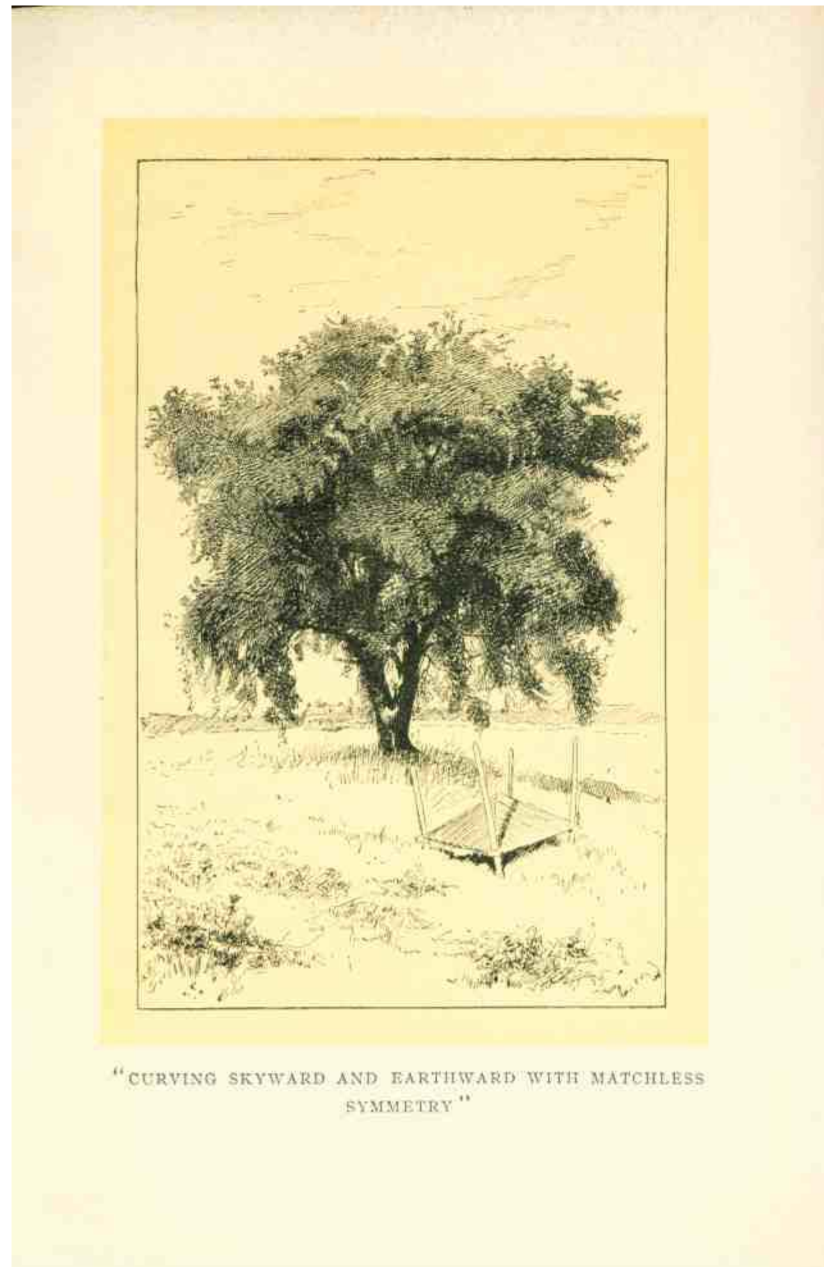

Figure 9. The Elm Tree, *Six Tees* (1903).

The deforestation of New England was likewise generally conceived by farmers and its middle-class, white citizens as orderly cultivation and progress. Rapid translation of the energies stored in New England's trees and waters into commodity value often had

an effect similar to the over-attention paid to the stunted pear tree, decreasing yields as they were brought more fully into human schemes of production. The instrumental properties of land were cultivated at the expense of the ecological, leading to soil depletion and economic hardship as the extractive practices of industry affected surrounding ecologies. “The drying up of streams,” Theodore Steinberg writes, “continued for decades after their forests were removed, and their eventual disappearance could mean economic crisis for the farms and towns which had depended on them” (125). The “symmetrical” and yet chaotic balance of New England’s ecology actually worked against industrial progress, transferring damage and depletions into the system as a whole, reducing landscapes’ complexity and potential to adapt to further changes.[122]

The miniature literary ecology presented by the collaborative chapters of *The Whole Family* is also symmetrical, in that it developed in a counterbalancing of its internal weights and external forces. The “blooming spread” of narrative events is symmetrical, however, not according to plan, but due to the simultaneous pursuit of opposite, unpredictable directions. Darwin’s tree-like figure in *On the Origin of Species* reflects this structure of an actual tree (or of human synaptic networks) to the extent that it is the selected result of generations of possibilities, the terminal points of which are all

[122] In “From Transcendence to Obsolescence: a Route Map” (from *The Ecocriticism Reader: Landmarks in Literary Ecology* that he edited with Cheryll Glotfelty) Harold Fromm writes that “…it appears that there is no Nature and that man has produced virtually everything out of his own ingenuity and it can be bought in a supermarket or a discount store, wrapped in plastic,” adding that for “man” the “roots of his being are in the earth; and he has failed to see this because Nature, whose effects on man were formerly *immediate*, is now *mediated* by technology so that it appears that technology and not Nature is actually responsible for everything” (35). Bill McKibben, an environmental activist and writer, argues in *Deep Economy: The Wealth of Communities and the Durable Future* (2007) that current economic models fail to account for real environmental costs and resource use.

in a co-determinate relationship. The symmetry of a tree is both adaptive and emergent, in its internal structure and its ecological position relative to the phylogenetic tree of evolutionary speciation.

Branches in evolution and in living trees rely on opportunistic expansion into empty space. Gregory Bateson, in *Steps to an Ecology of Mind* writes of a “multiple determination” that “is characteristic of all biological fields.” Describing these fields, he notes that “characteristically, every feature of the anatomy of an animal or plant and every detail of behavior is determined by a multitude of interacting factors at both the genetic and physiological levels; and correspondingly, the process of any ongoing ecosystem are the outcome of multiple determination” (508).[123] Evolution cares only about results, not causes, and has no qualms about adapting pre-existing structures in illogical but effective ways, or in having a species characteristic that serves an ecological purpose beyond that of the organism. The need for concision and efficiency, storing large degrees of functionality and instruction in a small amount of genetic or ecological space, contributes both to the elegance of evolved solutions and their resistance to instrumentalization, which often reduces ecological components to a single function.[124]

[123] Katherine Hayles writes that in the “distributed cognition environments” of post-human thought, “no longer is human will seen as the source from which emanates the mastery necessary to dominate and control the environment. Rather, the distributed cognition of the emergent human subject correlates with—in Bateson’s phrase, becomes a metaphor for—the distributed cognitive system as a whole, in which ‘thinking’ is done by both human and non-human actors” (290).

[124] The survival and evolution of scientific theories is said to operate according to rules similar to those of species. "To a considerable degree,” E. O. Wilson writes, “science consists in originating the maximum amount of information with the minimum expenditure of energy. Beauty is the cleanness of line in such formulations, along with symmetry, surprise, and congruence with other prevailing beliefs" (60).

Daniel Kemmis relates the persistence of certain forms in nature, such as spirals, to "that process the complexity theorists call "emergence," where new forms suddenly begin to emerge, often at several different scales at once, the way crystals emerge in a super-saturated solution" (xvii). Kemmis, in the foreword to *Bioregionalism* (1999) is interested in emergence as a metaphor for "the emergent phenomenon of regionalism" which "stands in stark contrast and challenge to the command-and-control structures we have placed on the landscape, structures like state and county boundaries by which we attempt to tell places what they are and are not part of" (xvi).[125]

*The Whole Family* and *Six Trees* both attempt to tell writers and readers "what they are and are not part of," whether this is question of kinship on the level of family or of species. In turn, ecology and kinship are central metaphors for understanding the interdependent growth and decay of publishing fortunes.[126] Authorial control becomes

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[125] Emerson wrote of the world as nested circles: the eye, the horizon, outward into increasing scope and comprehensiveness. "Our life," he writes, "is an apprenticeship to the truth that around every circle another can be drawn" (168). If Darwin's tree-figure were three-dimensional, every step backward along an evolutionary branching would in a sense place humans in a larger circle, with a broader range of inclusive identification. Emersonian transcendence may be another name for evolutionary regression, or a stirring of what Lawrence Buell calls "environmental unconscious." This unconscious is "to be seen as potential: as a residual capacity (of individual humans, authors, texts, readers, communities) to awake to fuller apprehension of physical environment and one's interdependence with it" (22).

[126] Jane Howard's *Publishing the Family* gives detailed study to the meta-fictional and intertextual dynamics involved in the project, and Elizabeth Freeman's *The Whole(y) Family: Economies of Kinship in the Progressive Era* (2004) shows how the novel's allegorical marriage plot "refuses the terms of monogamy" and "both the plot of *The Whole Family* and its collaborative production process suggest the lingering presence of two historically and perhaps even momentarily competing forms through which non heteronormative desires came into social meaning," namely Mormon polygamy and the Oneida free love community (642). Freeman argues that Henry James's chapter "The Married Son" and Mary Wilkins Freeman's "The Old Maid Aunt" suggest a more lateral diffusion of desires and narrative possibility, and a broadening of identification, similar to Emerson's ever widening circles or Lawrence Buell's "aesthetics of relinquishment."

ecologically multi-focal and fluid in *The Whole Family*. And, in *Six Trees*, the valuation of and identification with biotic life is arguably a response the widespread instrumentalization of nature Merchant describes in *Ecological Revolutions: Nature, Gender, and Science in New England* (1989).

The adaptations of species, and the peaks in their fitness landscapes to which these adaptations gravitate, are only meaningful when seen in patterns of interdependence and emergent co-evolution within their environment. As a system, ecologies show evolving symmetry and emergent structure, but one that resists attempts at top-down mechanization, prediction, or "command and control." In *The Elm Tree*, David Ransom is forced to sell a house he spent his life saving for. "He had loved and handled tenderly every nail he had put into it, every fragrant length of pine; he had built it with the utmost that was in him. Then, just as it was finished, he had lost it. The bank in which his savings were stored had failed, and there was nothing to meet the payments for the stock" (7). In New England, ecological changes since the late 18th century meant decreasing possibilities for solvency through subsistence farming and traditional industries. Both Merchant and William Cronon trace trends of increasing population and diminishing yields from lands under European rather than indigenous agricultural practices. In the case of the elderly Ransom, he is threatened with being involuntary placed in a boarding house, and takes refuge in the branches of the Elm. He is eventually found, but his respite in the tree had somehow drained him of his bitterness over losing the house he had

planned for. In a resolution typical of *Six Trees*, he agrees to live with his neighbors, the Slocums.[127]

The Elm, like other trees in Wilkins' fiction, widens the scope of human identification. "The [elm] tree," she writes, "was compelling. Let one try to pass him unheeded and sunken in the contemplation of his own little affairs, and lo! he would force himself out of the landscape not only upon the eyes, but the very soul, which, turned away from self, would see the tree through its windows, like a revelation and proof of that which is outside and beyond" (4).The tree forces itself out of the landscape, but it also forces the "soul" back into the landscape by turning its gaze outward. "Its windows," grammatically, seems to refer to the windows of the tree, but can also refer to the windows of the "soul," out of which the tree can be seen.

At the end of the story, however, after he is living with Maria and Abner Slocum who saved him from the boarding house, David Ransom confuses the Elm Tree he had hidden in with the house he had lost: "…and it's all mine," he says. "Nobody else has the right to set foot in it. I had it painted green, and it's higher than the meetin' house. Can't nobody find any fault with that house" (39).The fantasy of this tree/house merges the instrumental and constructed with the ecological. Carolyn Merchant writes, in *American Environmental History* that "Ecology derives from the Greek word *oikos*, meaning 'household,' and is the study of the relationships among organisms and their surroundings" (177). In this sense, both *Six Trees* and *The Whole Family* should be

[127] In Brander Matthews' *The Family Tree* (1889), A character named Martha Ransom and her lover are nearly destroyed by an Aspen tree and the cursed family history that it represents.

counted among Mary Wilkins Freeman's most "ecological" writings, because they reveal the selective landscapes to which the texts were adapted.[128]

<u>The Family Tree: Symbiosis in New England Publishing</u>

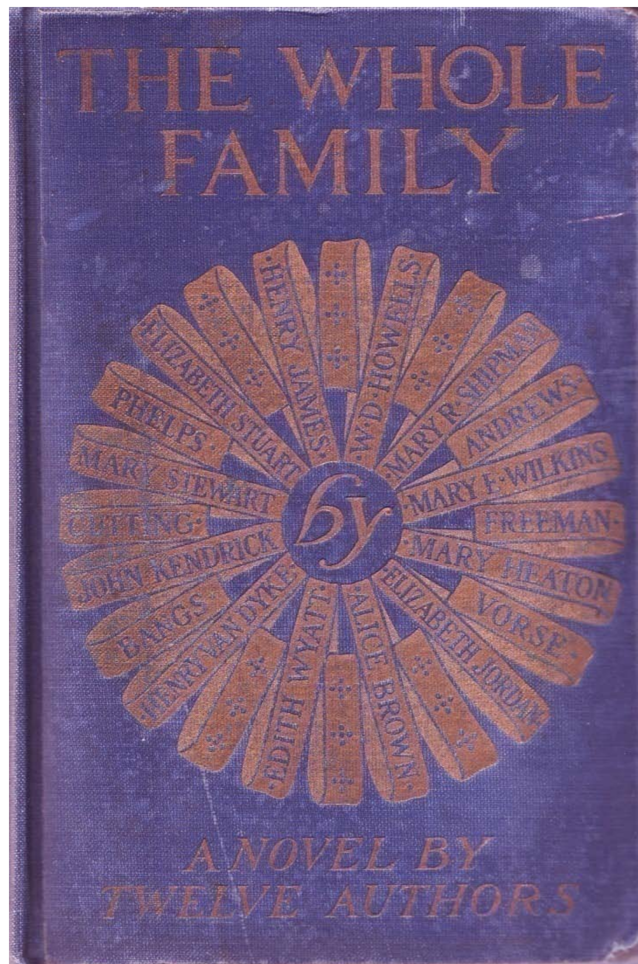


Figure 10. Cover of *The Whole Family* (1908).

[128] See "Beyond Nature/Writing: Virtual Landscapes Online, in Print, and in 'Real Life'" (2001) by H. Lewis Ulman.

On the cover of *The Whole Family* (1908) the names of the contributing authors are written on twelve banners,  radiating from a smaller circle in the center, in which the word “by” is written. The banners, extending outward from the sign of authorship, curve back, flower-like, at an equal distance from the center, which is empty (as if to represent the negative, anonymous/ambiguous space where collaborative authorship resides).[129] Graphically, the flower shape represents an ideal of collaboration, in which the talents of the contributors describe a pleasing symmetry by limiting and determining each other’s growth. This dynamic ideal of balance, however, was opposed to a different model of linear, hierarchical branching. Both June Howard  in *Publishing the Family* (2001) and Elizabeth Freemans “The Whole(y) Family: Economies of Kinship in the Progressive Era” (2004) show how Howells and Jordan, the editor of *Harper’s Bazar* where the magazine was serialized, attempt to limit and control the growth and expression of their unruly “family” through professional and ideological hierarchies.[130]

The next “tree” then, I would like to examine is the family tree created by the *Harpers’* collaboration that produced *The Whole Family* from texts commissioned from

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[129] Herman Melville’s *Omoo* (1846) features a “round robin” of similar design, used by sailors to make it indecipherable who was the first to sign: “the great object of a Round Robin being to arrange the signatures in such a way, that, although they are all found in a ring, no man can be picked out as the leader of it” (402).

[130] “I am sick to death of bonding through kinship and ‘the family’” Donna Harroway writes in “Universal Donors in a Vampire Culture” (1996), “and I long for models of solidarity and human unity and differences rooted in friendship, work, partially shared purposes, intractable collective pain, inescapable mortality, and persistent hope. It is time to theorize an ‘unfamiliar’ unconscious, a different primal scene, where everything does not stem from the dramas of identity and reproduction. Ties through blood—including blood recast in the coin of genes and information—have been bloody enough already” (366).

twelve writers.[131] Its manner of publication suggests two competing models of literary ecology, one of which is dominated by linear sequence and individual achievement, and the other by relationality and emergent symmetries. One is static and prescriptive, the other recursive and evolving. Because of how it was written, *The Whole Family* ultimately captures the complex literary and commercial environment of *Harper's* magazine in miniature (an environment outside of and corrosive to the predictable progress and order imagined by the magazine). The book is unique in showing Freeman ,who wrote the second chapter, in ecological relationship with her contemporaries, suggesting her role in an integrated system of mutual aggrandizement and selection. It is also useful in revealing how the "family" business of publication organized and conceptualized its members within a system of idealized kinship. Writers from New England existed in an ecological web of interdependencies, since as Buell notes, "the number of instances in which New Englanders promoted each other's literary fortunes in New York are altogether so numerous as almost to justify the paranoia of Edgar Allan Poe" (37).[132] *The Whole Family* is somewhat unique in that it has structurally internalized the multiform ecological relationships among authors that are always present, but usually obscured by each text's publication as isolated works, ascribed to a

[131] In 1916, Elizabeth Jordan edited another collaborative novel entitled *The Sturdy Oak: A Composite Novel of American Politics* (1916), written by fourteen different authors to advance the cause of women's suffrage. In terms of quality, the later collaboration is more successful, perhaps because the political cause of suffrage provided a more coherent and powerful impetus than the self-promotion and commercial publicity behind *The Whole Family*.

[132] See Chapter 1 for Poe's fear and figuration of a determining market environment.

single "original" source. [133] The intra-textual relationships of the collaborative (one could say improvised) novel provide opportunities for meta-fictional reference, making the interdependencies among the authors particularly legible. As June Howard points out, *The Whole Family* literalizes the notion of a "social text" (21).

When it first appeared in *Harper's* (a popular women's magazine) readers of *The Whole Family* (1908) were "given a list of the 12 authors and invited to guess the authorship of each chapter" ("The Whole(y) Family," 622). In some cases, like the chapter by Henry James, the ease with which his prose could be identified underscored both his celebrity and presumably inimitable style. The role each writer was assigned was also intended to imply that literary relationships could be mapped onto a traditional familial structure (or family tree), with W.D. Howells as the authoritative father initiating or originating the project. As Elizabeth Freeman writes in "The Whole(y) Family", Howells intended his first chapter "to serve as a template for the succeeding ones; he had imagined them being developed in chapters proceeding dynastically from grandmother to father and mother, then through their children all organized in a hierarchy of relations dictated by maleness and marriage" (622). This order, however, did not survive the process of composition because "the monthly serialization process demanded that each chapter be published when it was ready, with the cumulating manuscript forwarded like a chain letter to the next available author, for him or her to build upon in the next chapter.

[133] In "The Art and Mystery of Collaboration" (1891) Brander Matthews argues that "in a genuine collaboration each of the parties thereto ought to have so far contributed to the story that he can consider every incident to be his, and his the whole work when it is completed" (15).

Authors had other professional commitments to juggle, and so the novel was handed off to whomever could write his or her part soonest" (ibid).

From the first chapter, “The Father,” the novel centers around the marriage plot of Peggy, the youngest daughter, and issues of sexual and textual selection become intertwined. The interference of various family members in the marriage corresponds with the respective authors’ meddling with the plot by “plotting” with or against one another. When family members overstep their prescribed literary and familial role they open themselves to meta-fictional criticism by the other contributors, who attempt to contain and redirect the dangerous influences of wayward members in subsequent chapters. "In the early twentieth century,” as June Howard notes, “the gesture of equating a publishing enterprise and a family evoked powerful fantasies of wholeness and fears of fragmentation" (8).

Mary Wilkins Freeman, given by Jordan and Howells the character of “The Old Maid Aunt,” subverts Howell’s hierarchy, and foils possibilities of a conventional plot, by making her character central to the novel. Despite maiden Aunt Elizabeth’s claim that “I am relegated here in Eastridge to the position in which I suppose I properly belong,” Freeman refuses to let her character remain in the peripheral position in relation to the marriage plot (30). On the contrary, she successfully recenters the entire book around the aunt by having Harry Goward, the young betrothed, fall in love with her. The other characters and contributors are left to rail against Elizabeth’s vanity, meddlesomeness, and poor taste, but they also have to adapt (in a sense not to be confused with Darwinian “adaptation” at a macro-level) to the fact that Freeman managed to make her character

the primary obstacle to the marriage.[134] Structurally, the need for such an obstacle as a plot device is generically conventional, and once this move is made, literary propriety prevents its being ignored or entirely deflected. *The Whole Family*, in this way, dramatizes the ecological interrelatedness of a complex publishing environment, as well as the overlapping pull of various popular genres, in which writers negotiate their own niche position through various competitive or cooperative strategies.

Del Close, who founded the theater company Improv Olympic in Chicago in 1981, is quoted as saying that "a melding of the brains occurs on stage. When improvisers are using seven or eight brains instead of just their own, they can do no wrong! Time slows down, and the player has a sense of where he is" (87). The guidelines for improvisation Del Close taught are still used by impovisational comedy troupes in Chicago venues, and have evolved out of what has proven successful for collaborative, unscripted efforts at generating stories on stage.[135] The common structures and patterns of improvised narrative Close describes are evident in *The Whole Family*, despite its status as a pint, rather than theatrical, improvisation. Today the textual artifact of the

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[134] Elizabeth Freeman notes that "because Freeman's second chapter recentered *The Whole Family* around Lily Talbert, the other authors were forced to focus on the complications the "pretty girl" both reflected and seemed to engender" (630). June Howard describes particularly how "In Chapter 7 Henry James turns the mild pretensions Howells, and all the other contributors except Freeman, attribute to Elizabeth into something more sinister. His 'deadly Eliza' is a poseur who has misrepresented her friends to her family, and her family to her friends, in order to claim a spurious social standing. Later, Alice Brown accepts and extends his characterization of the spinster as a maneuvering egoist and finally exiles her from Eastridge and the novel" (170).

[135] See also *Improvisation, by John Hodgson and Ernest Richards.*

novel, closed and immutable, fails to convey the sense of a living, unstable, and temporally situated process that accompanied the original publication and publicity.

One of Close's most important prescriptions is for agreement among the actors. "When the improvisers meet on stage," he says, "they agree to accept each other's initiations; they must completely commit to the reality they create for each other without a moment's hesitation" (47).[136] Close calls this attention to other actors on stage being "environmentally aware" (101-105). A good scene, according to Close, is not derived from the imagination of any one performer. Just as Lawrence Buell writes about an "aesthetics of relinquishment," in which individual identity becomes porous and coterminous with its environment, Close describes an ideal scene emerging organically from the shared environment improvisers create by acknowledging and responding to one another in a collaborative space.

The ways in which the competing voices of a literary text are managed—whether through the fantasy of a top-down, vertically integrated blueprint, or through a tolerance of chaotic emergence and evolutionary randomness—reflect ways of conceiving humanity's relationship with nature. Carolyn Merchant writes that "The merger of mechanistic science with technology and capitalism during the first half of the nineteenth century sculpted an American instrumental mentality" (*Ecological Revolutions*, 230).[137]

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[136] Denials of a previously established plot, while tempting as meta-commentary to assert one's own authority or ability at the expense of the collaborator, are ultimately damaging to the story.

[137] The strategy of instrumentalization and control of natural forces is visible at various ideological, physical, and political levels in the historical period when *Six Trees* and *The Whole Family* were written. Howard Zinn writes of the end of the U.S. imperialist projects in Cuba, the Philippines, Puerto Rico and the Hawaiian Islands, that "the taste of empire was on the lips of

The difference between an inert, manageable environment full of tools and resources and one in which there is a reciprocal balance between the human and the nonhuman is played out in the way editors, authors, or publishers interact with a collaboratively-defined reality, such as that of *The Whole Family*.

Howells' first chapter, for example, is meant to be magisterial and prescriptive. It is quickly mutated and undermined, however, by the narrative events that follow. The authority of each writer to determine events is gone (entirely, except perhaps in the case of Howells and Jordan) as soon as it is exercised, the fate of their characters left in the hands of others. In the chapter "Peggy," Alice Brown seems to break Del Close's improvisational rule of agreement by denying outright the reality of a previous chapter. Mary Raymond Shipman Andrews had written in the voice of "the school boy," who is recording, at a sister's insistence, the details of a secret love affair between Peggy (the object of romantic interest through the whole novel) and Dr. Denbigh, an unattractive match because of his age. Her contribution is intended to represent the objective view of a child recording, like a camera, evidence without understanding. Alice Brown, in a blatant revision of this recent history, makes the entire previous chapter a forgery of the sister's, who had passed her writing off as that of her brother, Billy. "I told him I'd help him write it," she says, "as it ought to be 'if life were a banquet and beauty were wine'; but I told him we must make him say in it how he'd got to conceal it from me, or they'd

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politicians and business interests throughout the country now. Racism, paternalism, and talk of money mingled with talk of destiny and civilization" (306). This taste for empire was evident in some of the literary "utopias" like Arthur Bird's *Looking Forward* in the previous chapter. The United States and other expanding, industrial nations were operating on the principle of unlimited growth, and the right to endlessly market products overseas.

think we got it up together. So I wrote it,...and Billy copied it" (266). Brown is justifying her denial in terms of the plot by implicitly asserting that the previous story was unrealistic and overly sentimental. She wants to convince the reader that her drastic revision is, in a larger sense, more in agreement with the overall content and realist tone of the novel.

Henry Van Dyke, then a professor of English at Princeton University, writes the last chapter, "The Friend of the Family," in which he repeatedly frames his contribution as a reassertion of unity and authority. He narrates the return of a family friend, Gerrit Wendel, who "had been travelling the effete, luxurious Orient" for two years, selling goods from the local silverplate factory to the Shah of Persia and the Empress of China. (293). "The perfection of the whole thing," this friend of the family says (a telegram brought on a silver tray hours after his arrival) "brought me back with a mild surprise to my inheritance as an American, and made me dimly conscious of the point to which New York has carried republicanism and the simple life" (294). The telegram refers to a promise exchanged years earlier that either Cyrus or Gerrit (previously an assistant-editor for Cyrus' newspaper, *The Eastridge Banner*), that they would come to one another's assistance whenever such help was needed. Upon arriving, however, Gerrit can only conclude that "everything has turned out just as it should, like a romance in an old-fashioned ladies' magazine" (303). The interference of the various characters (and, by extension, the various contributors) are summarily denounced or praised. Freeman's creation, Lily Talbert, is called a "preposterous old-maid sister," consistent with the chapter's thinly-veiled meta-fictional review of the whole project, desperately trying to

contain the novel's lateral meanings within the paternal management of the family-as-publisher.

While the project of *The Whole Family* began with a letter from W.D. Howells to Elizabeth Jordan, the novel ends with the friend of the family summoned by a telegram sent by the father to oversee and condone Peggy's new match to a professor of psychology, Stillman Dane. In the process, the indeterminate literary ecology of the novel is rendered inert, reconfigured as an indulgence on the part of the magazine, and an illustration of the father's (Cyrus/Howell's) theory of educational psychology. "As a matter of education," Van Dyke's character relates, "each child had a secret illusion of superiority to the parental standard, and not only made wild dashes at originality and independent action, but at the same time cherished a perfect mania for regulating and running all the others" (297).

The character of *Lily* (Elizabeth) Talbert, like the flower-like figure on the cover of *The Whole Family*, takes its shape from the balanced forces of twelve different authors. The design, however, has significance for Freeman's other collections as well. In *Six Trees*, the main characters were developed through their identification with an elm, birch, pine, fir, poplar, and apple tree, but in *Understudies* (1901), there are *twelve* chapters, six of which are about animals (a cat, monkey, squirrel, dog, parrot, and horse) along with their human counterparts, and six of which take flowers for their title and symbolic center. The twelve stories in *Understudies*, like the twelve chapters in the *Harper's* collaboration, testify to Freeman's perception of human interconnectedness,

and how the web of human relationships also mirrors the branching networks that connect the human species with its wider ecology, and ecological history.

In *Graphs, Maps, and Trees* Franco Moretti compares the "tree of life" with the tree of "human culture." (79). While the branches of the tree of life (individual species) do not intersect once they have divided, the branches of human culture are (the argument goes) constantly crossing and converging. The tree of life (like Darwin's illustration for natural selection and species divergence) is therefore thought to be fundamentally dissimilar to the tree of culture (like Saussure's two-dimensional illustration of the linguistic sign). The fallacy of this separation, however, is borne out by Mary Wilkins Freeman's story "The Tree of Knowledge" (1901) in which a tiny New England settlement uses an elm tree as their post office. "'The Tree of Knowledge,'" she writes, "so called by the people who dwelt in its vicinity, stood on the border of the turnpike road to *Boston*. It was an ancient elm, as venerable as any prophet, with the wide benediction of his giant arms and the shelter of his green mantle on a hot noon-tide" (85, my italics). It is in the trunk of this tree that information is sent, received, and misapprehended. The letters Annie Pryor believes were posted by an anonymous lover were actually written by her sister, Cornelia. The tree, then, is a *family* tree as well as an ecological one, both living and literary, branching in all directions.

# CONCLUSION: SOFT TISSUES, AMBIGUOUS PROGRESS

"'There were originally but three Muses—Melete, Mneme, Aoede—meditation, memory, and singing.' You may make a great deal of that little fact if properly worked. You see it is not generally known, and looks recherché. You must be careful and give the thing with a downright improviso air."

Edgar Allan Poe
How to Write a Blackwood Article

Whenever one is looking at an artifact from the past, whether it is a narrative, text, or archaeological fossil, it is safe to assume that the vast majority of the supporting structure—the "soft tissues" of the organism and its ecology—have not survived. Usually, this can only be assumed, not proven, since by definition the evidence has ceased to exist. The amount of non-preserved material from the past can be inferred, however, from the complexity of the cultural and biological present.

In *Wonderful Life: Burgess Shale and the Nature of History* (1989) Stephen J. Gould shows how the fossilized evidence of the Burgess shale in British Columbia has been misunderstood because of assumptions about evolutionary tendencies towards diversification and progress. According to Gould, rather than merely representing incipient forms of modern species, the Burgess Shale fossils actually give evidence for prehistoric fauna as diverse and complex as our own. Due to preconceptions of archaeologists, however, the primary lesson of the shale: that life on Earth *could* have evolved in radically different directions, remained unlearned. The problem was typified by Charles R. Knight, who categorized and labeled the species according to what was expected, a "march of evolutionary progress," that Gould argues is a distortion caused by humans (on one twig of the evolutionary tree) "looking backward" and viewing the entire

history of the biosphere relative to their own position. The importance of the 570 million year old Burgess Shale is that by preserving the soft tissues of its organisms, it can be used to question basic assumptions about an increase in the diversity and complexity of biotic life over evolutionary time, culminating "inevitably" in the human species. The soft tissues preserved in the Shale attest to a far greater degree of complexity and divergent potential in the impermanent structures of the past.

In 1971, the “odd organisms" of the Burgess Shale site were again made visible by the radical reinterpretation led by a Cambridge professor, Harry Wittington. In Knight's earlier version, the organisms occupy a static and ideal place in the evolutionary ladder (25). The actual evidence of the Burgess shale, Wittington demonstrated, shows that they constituted a complex prehistoric ecology with no analogue in modern species. The importance of this find is that it implied that the organisms that became the Cambrian ancestors of all subsequent life on Earth were not necessarily more “fit” than their various competitors. If things had happened differently, Gould maintains, some other phylogenetic branch could have taken the lead, and entirely new zoological kingdoms could have been developed.

The metaphor of biological evolution is important to literature, in part, because it has been and continues to be the iconography within which cultural exceptionalism is based.[138] Cultures with narrative modes other than those of print become invisible to a

[138] Michael Ruse argues in the chapter of *Evolutionary Naturalism* (1995) called “Scientific Change is a Family Affair!” that “evolution is the child of progress” (141-144). Progress, as developed in several countries in the 18th century, he defines as “the belief that it is possible to improve aspects of human existence, and that this improvement can come about through human effort and ability…” (142).

specific context of valuation, based on profit and permanence. Long-lived narratives, or "species" of texts with a high degree of fixity, are taken as representative of a wider narrative ecology.[139] For the nineteenth century, individual texts (like Poe's persistently recurring detective stories) are taken to be points through which a line of evolutionary development can be drawn, without acknowledging the arbitrary selection of those points from a much wider field of forgotten possibility.[140]

In Geissler's sequel to *Looking Backward*, *Looking Beyond*, a character called Mr. Brown offers the heretical opinion that human beings cannot justly take pride in mechanical or technological development, since no individual plays more than an insignificant role in the evolution of this knowledge. In Darwinian terms, technology is invented less than it is evolved through the blind and anonymous process of trial and error. Under the fawning eyes of Miss Moore, Mr. Brown asks about electricity:

> Where did we get the knowledge of subjugating that giant to serve our demands? Did we discover it? Did we invent the process? No, we inherited it from the last century. We merely improved on it. Our ancestors could well be proud of it; for them it was an innovation, a great progress; it was the child of their time. But we, during a whole century have found nothing better; we still use

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[139] In the terms of 19th century literature, equally important to canonical works would be those texts that lie, to use Michael Reynold's phrase, "beneath the American Renaissance." Narratives adapted to less permanent media, such as oral stories or handwritten letters, would have faster reproductive rates but far less time between generations.

[140] "The most general conclusion," about evolution among populations, according to Sewall Wright, "is that evolution depends on a certain balance among its factors. There must be gene mutation, but an excessive rate gives an array of freaks, not evolution; there must be selection, but too severe a process destroys the field of variability, and thus the basis for further advance; prevalence of local inbreeding within a species has extremely important evolutionary consequences, but too close inbreeding leads merely to extinction. A certain amount of crossbreeding is favorable but not too much. In this dependence on balance the species is like a living organism. At all levels of organization life depends on the maintenance of a certain balance among its factors" (10).

> that clumsy wasteful power, dangerous in the highest degree in spite of all our improvements and safety-guards” (30).

To refer to a text mentioned earlier, John Steinbeck in *The Log from the Sea of Cortez* (1951) allies close scientific observation of the biological world with the erosion of teleological thinking. "Non-teleological ideas,” Steinbeck observes, “derive through 'is' thinking, associated with natural selection as Darwin seems to have understood it. They imply depth, fundamentalism, and clarity—seeing beyond traditional or personal projections. They consider events as outgrowths and expressions rather than as results" (139). Steinbeck offers a view of progress that claims individual accomplishment is an illusion created by ascribing a false sense of determinacy to events after they occur (the same could be said of individual authorship). A "non-teleological notion,” according to Steinbeck, would be “that the people we call leaders are simply those who, at the given moment, are moving in the direction behind which will be found the greatest weight, and which represents a future mass movement" (142). Both literary and evolutionary thinking have been inhibited by a tendency to think in terms of individual organisms, at the expense of more complex ecological or super-organic systems. Pressures of evolutionary selection, however, act at the level of environments, not individuals, and are visible only in light of the enormous masses of unpreserved material.

## Prehistoric Fictions: Evolution and American Literature

Evolutionary theory and American literature intersect in a number of ways, so any argument combining the two will largely be the result of selection. A final focus on Jack London's *Before Adam* (1910) in this section comes from a desire to illustrate how

biological evolution, contrary to the view of many influential writers and philosophers in London's time, cannot be read as a straightforward metaphor for the advancement of civilization. By applying Darwinian logic in his adaptation of earlier, more optimistic narratives, London's paleolithic story comments on the failure of progress, as a morally meaningful trajectory, when plotted far into evolutionary horizons. *Before Adam*, more than its predecessors, shows how the iconography of human evolution as a steady march towards perfectibility and enlightenment distorts a less conceivable narrative of contingency and emergence implied by the evolutionary theories of natural and sexual selection.

Like that of many naturalist writers in America, London's fiction was shaped by an evolutionary paradigm extending beyond the biological implications of Darwin's theory of evolutionary change. The prehistoric narratives written by London preserve in the fossilization of print Darwinian theory of the time as a pseudo-scientific network of ideas encompassing social Darwinism, Darwinian socialism, Herbert Spencer's cosmic progressivism, and an varied assortment of spiritual beliefs tending to reinforce cultural superiority and racial destiny. Jonathan Berliner has recently discussed what he calls London's “Anglo-Saxon primitivism” which “served as a temporal anchor set deep in time to legitimize his strongman ethic.” Berliner also notes the difficulty of tracing a consistent philosophy in London's primitive fiction, which balances conflicting demands of literary naturalism, political socialism, and popular adventure fiction.

In many stories, London seems merely to be adapting scientific theories to narrative purpose. “A Relic of the Pleistocene” (1901) recounts the hunting and killing of

the last woolly mammoth, as an act of instinctual retribution for its having unwittingly stepped on a rare litter of puppies around a campfire. “The Scarlet Plague” (1912) describes a future where civilization has returned to the stone age, and in "When The World Was Young" (1910) a forty-year old business man has a dual personality, half of which is a prehistoric doppelganger whose nocturnal habits threaten his own and others' safety. “The Strength of the Strong” (1911) is a moralistic political fable about the joining of individual stone-age families into a collective tribe. Unfortunately, in London's story, the tribe is taken advantage of by a cabal of Paleolithic proto-monopolists and tyrants.

Each of these stories is indicative of the evolutionary ideas London appropriated at various times and with varying degrees of ingenuousness. *Before Adam* is the only novel-length work of London's, however, that takes evolution as an explicit theme, and where the more teleologically indeterminate version of evolutionary change, closer to Darwin than to Herbert Spencer, is emphasized over materialist destinies of social and technological progress. In the framing device for the novel, the narrator as a boy has dreams of life in a Pleistocene tribe of proto-humans, memories that only make sense when he grows up and learns about evolution. For him, "evolution was the key. It gave the explanation, gave sanity to the pranks of this atavistic brain of mine that, modern and normal, harked back to a past so remote as to be contemporaneous with the raw beginnings of mankind" (21). Big-Tooth, the narrator's Paleolithic double, in turn has dreams of species far more distant in the evolutionary tree.

Stanley Waterloo accused London of plagiarizing, on account of similarities between *Before Adam* and his own book, *The Story of Ab: A Tale of the Time of the Cave Man* (1897). London's reply was printed in *Everybody's*, the magazine serializing the novel in 1906: “the only resemblance between your 'The Story of Ab' and my 'Before Adam' is that both deal with the primitive world.”[141] London's denial of Waterloo's copyright claim is interesting because of the metaphor he chooses for literary ownership. “If only the first exploiter to a primitive world story has a right to it,” London admonishes, “then you'll have to get out yourself, for Wells was on that ground before you, and so was Andrew Lang. I might point out also that Kipling and a few score others have exploited that same primitive world before you” (11).The primitive world functions here as both a literary and national resource.[142]

Ab, the hero of Waterloo's novel, is, even in name, little more than a causal trajectory upwards (a linear sequence from A to B). On the first page we learn that he "loved and fought well"—precisely what a Darwinian theory of natural and sexual selection would demand. In the same way that *Before Adam* takes a Darwinian perspective, *The Story of Ab* exemplifies Herbert Spencer's belief that the fundamental principle of evolutionary change, whether social or biological, was a shift from homogenous mobile forms to heterogeneous, relatively stable forms. “The change from

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[141] London and Waterloo are enacting a plagiarism dispute that seems a convention in American literature since the “Longfellow Wars” between Poe and the anonymous defender of Longfellow's originality, Outis.

[142] Waterloo's accusation, though groundless, illustrates how *Before Adam* is part of a sequence of similar texts with which London's novel had to compete, under rules that made the discovery of literary landscapes analogous to colonial acquisition of “new” geographical territory.

homogeneity to heterogeneity is multitudinously exemplified," he argues in *Principles of Sociology*, "up from the simple tribe, alike in parts, to the civilized nation, full of structural and functional unlikenesses" (596). Like an organism, super-organic society is supposed to have evolved by incorporation and division of labor.

Joseph Meeker, in the book *The Comedy of Survival: A Literary Ecology and a Play Ethic* (1997), distinguishes between a pastoral attitude of escape, where nature and civilization become idealized opposites, and that of picaresque literature, where society becomes an ecosystem for the hero, whose choices are made in terms of adaptations calculated for survival. In the picaresque, distant idealisms are replaced by immediate concerns. "Looking to avoid danger and to exploit advantages," Meeker writes, "the picaro lives life as an infinite game played with the world, the only prizes for which are more life and an occasional hearty laugh" (59).

Meeker's description of the adaptive picaro reflects the cave-people in London's *Before Adam*, who run away from danger, make discoveries only by accident, and forget them afterward. "In spite of the reign of fear under which we lived," the human double of Big-tooth remembers, "the Folk were always great laughers" (71). London's proto-humans reflect a more comic view of social pre-history, less amenable to the Spencerian "survival of the fittest" narrative often associated with social Darwinism.[143]

The definitions of Comedy and Tragedy used by Joseph Meeker suggest there is a relationship between a "comic" adaptive response and a non-teleological view of

[143] The cave people reflect the picaresque qualities of the train-car hobo in London's *The Road* (1907), who "has learned the futility of telic endeavor, and knows the delight of drifting along with the whimsicalities of chance" (54).

evolutionary science and historical destiny, as illustrated in *Before Adam*. Meeker, an ecological critic deeply concerned with the relationship between humans and their environment, locates the origins of comedy in evolutionary instinct, citing play behavior in animals. He outlines a “comic way” present in picaresque literary models, typically ending in the restoration of balance rather than principled sacrifice or annihilation. This non-teleological attitude is indicated by the Folk’s way of reacting to evil and tragedy. Red-Eye, the villain of *Before Adam*, is an atavism. "On more than one morning,” Big-Tooth relates, “at the base of the cliff, did we find the body of his latest wife. He had tossed her there, after she had died, from his cave-mouth. He never buried his dead" (106). Red-Eye is a betrayal the primitive social contract that according to enlightenment philosophy served as the necessary precondition for the sociality and division of labor culminating in the modern nation-state. Nonetheless, the narrator claims that Red-eye, "in spite of his tremendous atavistic tendencies, foreshadowed the coming of man, for it is the males of the human species only that murder their mates" (167). [144]

Darwin writes in *The Descent of Man, and Selection in Relation to Sex* (1871) that "the sensations and ideas excited in us by music, or by the cadences of impassioned oratory, appear from their vagueness, yet depth, like mental reversions to the emotions

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[144] London’s story “When the World was Young” contains an interesting episode where the atavistic businessman is chanting bits of prehistoric language to a philologist, Professor Wertz. Since Darwin, evolutionists have seen song as the likely precursor to language. London's story reflects this by having James Ward, reverting to primitive states, end “by giving a song that always irresistibly rushed to his lips when he was engaged in fierce struggling or fighting.” the professor recognizes it as from “a date that must far precede anything that had ever been discovered and handed down by the scholars”(238).

and thoughts of a long-past age" (1209). For Darwin, the universality of music in the human species was a mystery because "neither the enjoyment nor the capacity of producing musical notes are faculties of the least direct use to man in reference to his ordinary habits of life..." (1207). *Before Adam* also adopts this Darwinian perspective on the absence of a direct evolutionary role for music.

If human musical ability is an adaptation, it evolved in one of two ways: natural or sexual selection. In his recent book *The Art Instinct: Beauty, Pleasure, and Human Evolution* (2009) Denis Dutton has followed Darwin in linking music primarily with sexual selection, since this seems to be the its function in other species, notably birds. London's novel is consistent with this Darwinian emphasis, but does little to inspire confidence a laissez-faire musical eugenics. The Singing One is the wife of Crooked-leg, and the daughter of the Hairless One. The names are significant, since music, extending protection to the unfit, and becoming less hirsute are all conventional tokens of evolutionary progress. The Singing One's musicality, however, does not serve her or her hypothetical descendants well: it attracts the attention of Red-Eye, who murders Crooked-Leg and takes her to his cave where she will be raped and killed. This episode suggests that *Before Adam* is not only a response to Waterloo's novel, but a cynical reply to his entire view of evolutionary history.

The way the cave-people deal with the Singing One's abduction and likely death is, not surprisingly, to sing. Red-Eye's violence draws the rest of the Folk together in a gibbering rage, with rhythmic chanting and pounding of sticks, but because they lack the vocabulary and the capacity for cooperation, their "hee-hee council" fails to culminate in

any kind of retributive action. According to Big-tooth, these musical councils “splendidly illustrate the inconsecutiveness and inconsequentiality of the Folk.” Musical instinct, in London's account, does not seem to have developed out of natural selection, in which case the tribe would join forces, as in “The Strength of the Strong,” and defeat the atavistic Red-Eye. The Darwinian and picaresque response of the cave-people, oriented more towards immediate survival, is set against the consecutive and consequential evolution of Spencer.

Unlike *The Story of Ab*, London's cave people "were unconsecutive, illogical, and inconsequential,” the narrator recounts. “We had no steadfastness of purpose, and it was here that the Fire People were ahead of us" (89). Fire in both narratives serves as the sign of a species having being elected to carry on the evolutionary torch: Waterloo's heroes possess fire, London's do not. *Before Adam*, rather than being set at the transition from the paleolithic to neolithic, like *The Story of Ab*, is set instead millions of years ago, in the mid-Pleistocene. Rather than one of the fire people, who prove their evolutionary fitness by developing weapons and agriculture, or displaying of social virtue and Neolithic potential, London makes the narrator's prehistoric double one of the cave-people, "a branch of lower life budding toward the human" who were "nipped short off and perished down by the roaring surf where the river entered the sea"(138).[145]

[145] In his Science Fiction novel *The Star Rover* (1915), written five years later, the condemned criminal Darrell Standing relives key points in human evolutionary history through astral projection while confined in solitary. Although Standing concludes from his travels that “Man, the individual, has made no moral progress in the past ten thousand years,” his descriptions of these past lives, given only in outline, betray enlightenment ideals of rational social development (305). “I am that man,” he says, “the sum of him, the all of him, the hairless biped who struggled upward from the slime and created love and law out of the anarchy of fecund life that screamed and squalled in the jungle”(282).

Though he shifts his attention to a lower evolutionary branch, London seems to agree in *Before Adam* that the Fire-People, by evolutionary standards, are superior. Without the cooperative or technological skills necessary to make fire or plan strategies, the cave-people are, by the end of the novel, mostly slaughtered. The narrator's possession of Big-tooth's memories, however, proves there was, somehow, a "straight line of descent" between the cave people and modern homo-sapiens (227). The comic survives alongside the tragic, the inconsequential along with the linear. From a naturalist perspective in both science and literary fiction, survival is enough.

## Life: Scale and Selection

If human psychology has been designed to form cooperative strategies in groups, it would be groups in the hundreds: the average size of nomadic hunting and gathering tribes in the Pleistocene.[146] This would mean that humans are uniquely ill-equipped to understand their interpellation within systems of global capitalism, which happens at a scale of billions. Like the organization of insect societies, global economies emerge at the level of the super-organism. One of the most convincing arguments for the proposition that the way humans experience the world (even at the fundamental level of perception) is structured by the necessities of our evolutionary past, is that we can think so much more effectively at the biological scale we can actually affect with our sensory-motor

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[146] See *Homo Aestheticus* (1992) by Ellen Dissanayake for a prehistory of art as an evolved, adaptive behavior, as well as Brian Boyd's *On the Origin of Stories: Evolution, Cognition, and Fiction* (2009).

apparatus.[147] For a mammalian, primate brain, some things are simply unthinkable except as abstractions, because understanding them was never important for our survival. A strong interpretive bias towards the time scale of several life-spans can only be countered by a theorization of slow, Darwinian change resulting from innumerable rounds of mutation and selection. When literature is considered against a larger background, that of tens of thousands of years, the evolutionary history of our species begins to compete with human cultural or technological history in terms of importance.[148]

Conway's game of Life, also discussed in *The Recursive Universe* by William Poundstone (1985), is a set of formal rules determining the behavior of "counters" distributed on a two dimensional grid. "Because of its analogies with the rise, fall, and alternations of a society of living organisms," Gardner writes in 1970, "it belongs to a growing class of what are called 'simulation games'—games that resemble real-life processes" (120). Once an initial configuration of counters is established, their life cycle is encompassed by three simple rules. If an individual counter has two neighbors, it remains until the next generation. If the counter has four or more neighbors it "dies" and the counter disappears. Lastly, if there is an empty cell that has exactly three neighbors, then this is a "birth cell" and a counter appears in the following generation. These rules,

[147] Bergson offers an interesting view of perception in *Matter and Memory*, where "images" of the world are, in fact, potential actions.

[148] In *Memory: the Key to Consciousness* (2005), Thompson and Madigan point out that "the human brain evolved to its fully modern form well over 100,000 years ago. No changes in brain structure or organization have occurred for a very long time. Yet written language, and hence reading, was invented only about 10,000 years ago. Reading, after all, is a very unnatural act" (212).

in turn, were settled upon by Conway in order to meet a set of pre-established criteria: the need to create, in a simulation, the most complex behaviors using the simplest possible set of instructions.[149]

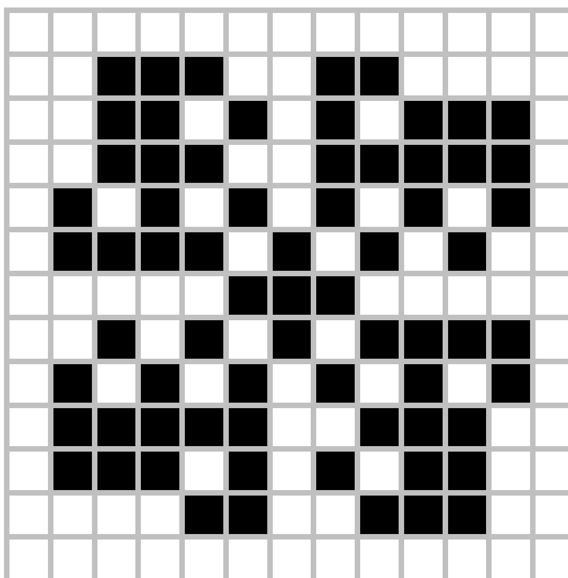

Figure 11. A Life Configuration, "Garden of Eden 5," found by Nikolay Beluchenko (2009).[150]

Although Life is a purely theoretical invention, the rules and behaviors of its organisms are "natural" in the sense that they can be inferred from mathematical logic. The same configurations would have been discovered, arguably, by intelligent beings in

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[149] The computer simulation Life is referenced by Greg Egan in *"Unstable Orbit's in the Space of Lies"* (1995) when the Earth's population becomes telepathic, as in *The Great Romance* (1881). In this case, "all across the [unnamed, metaphorical] city, competing belief systems fought for allegiance, mutating and hybridizing along the way…like those random populations of computer viruses they used to unleash against each other in experiments to demonstrate subtle points of evolutionary theory" (280).

[150] A "Garden of Eden" configuration in Life is one without any possible antecedent state.

any universe.[151] By calling his game “Life,” however, Conway includes in his simulation an implicit warning against carrying the analogy too far. Counters on a grid of squares may be a useful way to think about the universe, but at the same time it is *not* the universe. Life is an elegant (in the technical sense) illustration of the basic concepts that would inform a literary landscape of adaptive fitness: too few neighbors is bad for a text, while too many is also maladaptive.

The Life game, however, posits a completely neutral matrix of growth: an empty Euclidean landscape waiting to be colonized by blinking or thinking forms. Both "The Gold Bug" and the "Purloined Letter" suggest that spaces that appear to be blank may have already been inscribed with messages.[152] De Certeau, while careful not to fall into simple binaries between writing and orality, does identify the "blank page" as especially meaningful for the creation of Western subjectivity. The blank page is, for de Certeau, "a place where the ambiguities of the world have been exorcised" by a division between subject and object, the will of an individual and a delineated field for its operations (134). The subject, who before "remained possessed by the voices of the world" must, in order to write, create an "autonomous surface" where the voices can't be heard. In his chapter "Reading as Poaching" de Certeau affirms that these voices are spoken, and "from the

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[151] “…in an infinite field everything that is possible must happen sometime, someplace” Poundstone writes, so in Conway’s game, “even such astronomical improbabilities as complete self-reproducing patterns must turn up somewhere in an infinite random field” (222).

[152] Steven Pinker’s *The Blank Slate: the Modern Denial of Human Nature* (2002) argues against a “tabula rasa” model of consciousness. See also Pinker’s *The Language Instinct* (1994) and *The Stuff of Thought* (2007).

child to the scientist, reading is preceded and made possible by oral communication, which constitutes the multifarious 'authority' that texts almost never cite" (168).

Tactics, for de Certeau, are opposed to strategies, which remain relatively fixed for longer periods of time. While writing is a strategy, speaking would be a tactic. As with Meeker's definitions of comedy and tragedy, the difference between a tactical and strategic approach is framed ecologically. A strategy is "the calculus of force-relationships which becomes possible when a subject of will and power (a proprietor, an enterprise, a city, a scientific institution) can be isolated from an 'environment' while a tactic insinuates itself into the other's place, fragmentarily, without taking it over in its entirety, without being able to keep it at a distance. It has at its disposal no base where it can capitalize on its advantages, prepare its expansions, and secure independence with respect to circumstances" (xix). The "practice of everyday life" is largely tactical, because "everyday life invents itself by poaching in countless ways on the property of others" (xii).

The goal of this project was not to develop a new theory of evolutionary philosophy, but merely to select from an existing environment of ideas, adapting or mutating evolutionary concepts to literary questions. If memetics (and ecological post-humanism in general) is correct in drawing an analogy between informational and biological survival, then a more cogent model of co-evolutionary strategies than organism-based competition and selection is needed. The figure of the Round-Robin, echoed by the emblematic circle of shared authorship on the cover of *The Whole Family* suggests that collective anonymity and professional collaboration comprise peaks (or

maelstroms) of literary fitness in the same way as do the structural and formal ambiguities examined in the works of Poe.

William James claims that "the important thing about a train of thought is its conclusion."[153] Of course, he gives away the conclusion he is moving towards by his choice of metaphor. The "particular image" that remains is the train—not an innocent figure on which to ground a psychological theory, considering the history of railroads in Westward expansion, instrumental both in creating a "human drift" (a phrase used by London to describe forced migrations), and at the same time a centralization of wealth and power in largely unregulated monopolies. The "thoughts" of government were, in fact, directed by the tracks laid by economic forces of industrial expansion. James also, however, refers to a "stream" of consciousness—from which flowed, presumably, a new modernist attitude towards literary representation.[154]

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[153] "It has perhaps struck you" Benjamin writes in "The Author as Producer" (1934), "that the train of thought about to be concluded presents to the writer only one demand, the demand to *think*, to reflect on his position in the process of production" (236).

[154] See *Reading Gertrude Stein* (1990) by Lisa Ruddick, where she argues that "[Stein's] initial attraction to William James, as well as her ultimate rejection of his ideas, was a matter not just of her intellectual but also of her emotional orientation" (4).

# BIBLIOGRAPHY

Ashton, Susanna. Collaborators in Literary America, 1870-1920. New York: Palgrave Macmillan, 2003.

Astor, John Jacob. A Journey in Other Worlds. A Romance of the Future. New York: D. Appleton and Co, 1894.

Auerbach, Jonathan. The Romance of Failure: First-Person Fictions of Poe, Hawthorne, and James. New York: Oxford University Press, 1989.

---"'The Nation Organized': Utopian Impotence in Edward Bellamy's Looking Backward." American Literary History. 6. 1 (1994): 24-47.

Aunger, Robert. The Electric Meme: A New Theory of How We Think. New York: Free Press, 2002.

Austin, John. "United States, 1780-1850". Ed. Moretti, Franco. The Novel. Princeton, N.J.: Princeton University Press, 2006.

Bakhtin, M. M., and M. M. Bakhtin. The Dialogic Imagination: Four Essays. University of Texas Press Slavic Series, no. 1. Austin: University of Texas Press, 1988.

Barkow, Jerome H., Leda Cosmides, and John Tooby. The Adapted Mind: Evolutionary Psychology and the Generation of Culture. New York: Oxford University Press, 1992.

Barthes, Roland. "Death of an Author." Critical Essays. Evanston, Ill.: Northwestern University Press, 1972.

---Mythologies. New York: Hill and Wang, 1972.

Bateson, Gregory. Steps to an Ecology of Mind; Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology. San Francisco: Chandler Pub. Co, 1972.

Baudrillard, Jean. The Mirror of Production. St. Louis: Telos Press, 1975.

---Simulacra and Simulation. Ann Arbor: University of Michigan Press, 1994.

Beatty, Jack. Age of Betrayal: the Triumph of Money in America, 1865-1900. New York: Vintage, 2007.

Beer, Gillian. Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction. London: Routledge & Kegan Paul, 1983.

Bellamy, Charles. An Experiment in Marriage. New York: Delmar, 1977.

Bellamy, Edward, and Franklin Rosemont. Apparitions of Things to Come: Tales of Mystery & Imagination. Chicago, Ill: Kerr, 1990.

---Equality. New York: D. Appleton and Co, 1897.

---Looking Backward: From 2000 to 1887. Bedford, MA: Applewood Books, 2000.

Bender, Bert. The Descent of Love: Darwin and the Theory of Sexual Selection in American Fiction, 1871-1926. Philadelphia: University of Pennsylvania Press, 1996.

Benford, Gregory. Far Futures. New York: Tor, 1995.

Benjamin, Walter. “The Author as Producer.” Reflections. New York: Schocken Books, 1978.

---“The Storyteller.” Illuminations. New York: Schocken Books, 1969.

Bergson, Henri, and Arthur Mitchell. Creative Evolution. New York: Modern library, 1944.

---Laughter: An Essay on the Meaning of the Comic. New York: Macmillan, 1911.

---Matter and Memory. New York: Zone Books, 1988.

Bird, Arthur. Looking Forward. Utopian literature. New York: Arno Press, 1971.

Blackmore, Susan J. The Meme Machine. Oxford: Oxford University Press, 1999.

Blitz, David. Emergent Evolution: Qualitative Novelty and the Levels of Reality. Dordrecht: Kluwer Academic Publishers, 1992.

Bloom, Harold. The Anxiety of Influence; A Theory of Poetry. New York: Oxford University Press, 1973.

---Deconstruction and Criticism. New York: Seabury Press, 1979.

Blythe, Hall and Sweet, Charlie. "The Reader as Poe's Ultimate Dupe in 'The Purloined.Letter". Studies in Short Fiction 26.3.Newberry, S.C.: Newberry College, 1989.

Boas, Franz. Race, Language and Culture. New York: The Macmillan Co, 1940.

Bowman, Sylvia E. Edward Bellamy Abroad; An American Prophet's Influence. New York: Twayne Publishers, 1962.

Boyd, Brian. On the Origin of Stories: Evolution, Cognition, and Fiction. Cambridge, Mass: Belknap Press of Harvard University Press, 2009.

Brown, Charles Brockden, Jay Fliegelman, and Charles Brockden Brown. Wieland; and Memoirs of Carwin the Biloquist. Penguin classics. New York: Penguin Books, 1991.

Buell, Lawrence. New England Literary Culture from Revolution Through Renaissance. Cambridge, U.K.: Cambridge University Press, 1986.

---Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond. Cambridge, Mass: Belknap Press of Harvard University Press, 2001.

Carroll, Joseph. Evolution and Literary Theory. Columbia., Mo: University of Missouri Press, 1995.

---Literary Darwinism: Evolution, Human Nature, and Literature. New York: Routledge, 2004.

Certeau, Michel de. The Practice of Everyday Life. Berkeley: University of California Press, 1984.

Charvat, William. The Profession of Authorship in America, 1800-1870; The Papers of William Charvat. Columbus: Ohio State University Press, 1968.

Close, Halpern and Johnson. Truth in Comedy: The Manual of Improvisation. Colorado: Meriwether Publishing, 1993.

Cohen, Lara Langer, "Democratic Representations: Puffery and the Antebellum Print Explosion." American Literature Vol. 74, 4 Durham: Duke University Press, December, 2007.

Cooke, Brett, and Frederick Turner. Biopoetics: Evolutionary Explorations in the Arts. Lexington, KY: Icus, 1999.

Cory, Gerald A. The Consilient Brain: The Bioneurological Basis of Economics, Society, and Politics. New York: Kluwer Academic / Plenum Publishers, 2004.

Cronon, William. Changes in the Land: Indians, Colonists, and the Ecology of New England. New York: Hill and Wang, 1983.

---Uncommon Ground: Toward Reinventing Nature. New York: W.W. Norton & Co, 1995.

Darwin, Charles, and Nora Barlow. The Autobiography of Charles Darwin, 1809-1882: With Original Omissions Restored. New York: Norton, 2005.

---From So Simple a Beginning: The Four Great Books of Charles Darwin. Ed. E.O. Wilson. New York: W.W. Norton & Co, 2006.

Dawkins, Richard. The Selfish Gene. Oxford: Oxford University Press, 1989.

---Unweaving the Rainbow: Science, Delusion, and the Appetite for Wonder. Boston: Houghton Mifflin, 1998.

Degler, Carl. In Search of Human Nature: the Decline and Revival of Darwinism in American Social Thought. 1991.

Delbanco, Andrew. Melville: His World and Work. New York: Knopf, 2005.

Dennett, Daniel Clement. Darwin's Dangerous Idea: Evolution and the Meanings of Life. New York: Simon & Schuster, 1995.

---"Memes and the Exploitation of Imagination." Journal of Aesthetics and Art Criticism. 48. 2 (1990): 127-135.

Depew, David. “Darwinism's Multiple Ontologies” in Hösle, Vittorio, and Christian Illies. Darwinism & Philosophy. Notre Dame, Ind: University of Notre Dame Press, 2005.

Dimock, Wai-chee. Empire for Liberty: Melville and the Poetics of Individualism. Princeton, N.J.: Princeton University Press, 1989.

Dissanayake, Ellen. Homo Aestheticus: Where Art Comes from and Why. New York: Free Press, 1992.

Distin, Kate. The Selfish Meme: A Critical Reassessment. Cambridge, U.K.: Cambridge University Press, 2005.

Drout, Michael D. C. "A Meme-Based Approach to Oral Traditional Theory." Oral Tradition. 21. 2 (2007): 269-294.

Dutton, Denis. The Art Instinct: Beauty, Pleasure, & Human Evolution. New York: Bloomsbury Press, 2009

Dyson, George. Darwin Among the Machines: The Evolution of Global Intelligence. Reading, Mass: Addison-Wesley Pub. Co, 1997.

Eco, Umberto. Foucault's Pendulum. San Diego: Harcourt Brace Jovanovich, 1989.

Egan, Greg. Axiomatic. London: Millennium, 1995.

Emerson, Ralph Waldo. "Lectures on the Times. Lecture II. The Conservative." Dial. 3. 2 (1842): 181-197.

Emerson, Ralph Waldo, and Stephen E. Whicher. Selections from Ralph Waldo Emerson; An Organic Anthology. Boston: Houghton Mifflin, 1960.

Empson, William. Seven Types of Ambiguity. New York: New Directions, 1966.

Evelev, John. Tolerable Entertainment Herman Melville and Professionalism in Antebellum New York. Amherst, Mass.: Univ. of Massachusetts Press, 2006.

Forbes, Allyn. “The Literary Quest for Utopia, 1880-1900” Social Forces. 6.2, Dec. 1927: 179-189.

Foust, Ronald E. “The Rules of the Game: A Para-Theory of Literary Theories” South Central Review, Vol. 3, No. 4, Winter, 1986.

Freeman, Elizabeth. "The Whole(Y) Family: Economies of Kinship in the Progressive Era." American Literary History. 16. 4, 2004: 619-647.

Freeman, Mary Eleanor Wilkins. The Debtor: A Novel. New York: Harper & Brothers, 1905.

---The Heart's Highway. New York: Doubleday, Page, 1904.

---Jane Field; A Novel. New York: Harper & Bros, 1893.

---The Love of Parson Lord, and Other Stories. New York: Harper & Bros, 1900.

---A New England Nun, And Other Stories. New York: Harper & Bros, 1891.

---“The Old Maid Aunt.”

---Pembroke A Novel. New York: Harper, 1894.

---Six Trees; Short Stories. New York: Harper & Bros, 1903.

--- Understudies Short Stories. New York: Harper & Bros, 1901.

Freeman, Mary Eleanor Wilkins, et al. The Whole Family: a Novel By Twelve Authors. New York: Harper & Bros, 1908.

Fuller, Alvarado Mortimer. A.D. 2000. Utopian literature. New York: Arno Press, 1971.

Geissler, Ludwig A. Looking Beyond. Utopian literature. New York: Arno Press, 1971.

Gilmore, Michael. American Romanticism and the Marketplace. Chicago:The University of Chicago Press, 1985.

Gilmore, Paul. The Genuine Article: Race, Mass Culture, and American Literary Manhood. New Americanists. Durham, N.C.: Duke University Press, 2001.

Glazener, Nancy. Reading for Realism: The History of a U.S. Literary Institution, 1850-1910. New Americanists. Durham: Duke University Press, 1997.

Goody, Jack. The Domestication of the Savage Mind. Themes in the social sciences. Cambridge [Eng.]: Cambridge University Press, 1977.

---“From Oral to Written: An Anthropological Breakthrough in Storytelling.” Ed. Franco Moretti. The Novel. Princeton, N.J.: Princeton University Press, 2006.

Gottschall, Jonathan, and David Sloan Wilson. The Literary Animal: Evolution and the Nature of Narrative. Evanston, Ill: Northwestern University Press, 2005.

Gould, Stephen Jay. The Hedgehog, the Fox, and the Magister's Pox: Mending the Gap between Science and the Humanities. New York: Harmony Books, 2003.

---Wonderful Life: The Burgess Shale and the Nature of History. New York: W.W. Norton, 1989

Grant, Robert, et al. The King's Men; A Tale of to-Morrow. Science fiction. New York: Arno Press, 1975.

Habermas, Jürgen The Future of Human Nature. Cambridge, UK: Polity, 2003.

Hales, Katherine. How we Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics. Chicago: the University of Chicago Press, 1999.

Haraway, Donna J. "Universal Donors in a Vampire Culture: It's All in the Family: Biological Kinship Categories in the Twentieth-Century United States" in Uncommon Ground: Rethinking the Human Place in Nature ed. William Cronon New York: Norton, 1996.

Hawthorne, Nathaniel. Nathaniel Hawthorne's Tales. New York: Norton, 1987.

Higgins, Brian, and Hershel Parker. Critical Essays on Herman Melville's Pierre, or, The Ambiguities. Critical essays on American literature. Boston, Mass: G.K. Hall, 1983.

Himmelfarb, Gertrude. Darwin and the Darwinian Revolution. Garden City, N.Y.: Doubleday, 1959.

Hodgson, John Reed, and Ernest Richards. Improvisation. London: Eyre Methuen, 1974.

Hofstadter, Richard. Social Darwinism in American Thought. New York: G. Braziller, 1959.

Hölldobler, Bert, and Edward O. Wilson. The Superorganism: The Beauty, Elegance, and Strangeness of Insect Societies. New York: W.W. Norton, 2009.

Holmes, Oliver Wendell. The Complete Poetical Works of Oliver Wendell Holmes. Boston: Houghton, Mifflin, 1895.

Hull, David. Science and Selection: Essays on Biological Evolution and the Philosophy of Science. 2001.

Howells, William Dean. A Traveler from Altruria, Romance. New York: Harper & Bros, 1894.

Hull D.L., R.E. Langman, and S.S. Glenn. "A General Account of Selection: Biology, Immunology, and Behavior." The Behavioral and Brain Sciences. 24. 3 (2001): 511-28.

Irwin, John T. The Mystery to a Solution: Poe, Borges, and the Analytic Detective Story. Baltimore: Johns Hopkins University Press, 1994.

Jakobson, Roman, Linda R. Waugh, and Monique Monville-Burston. On Language. Cambridge, Mass: Harvard University Press, 1990.

James, William. Principles of Psychology. New York: Dover Publications, 1950.

---Pragmatism. The Works of William James. Cambridge: Harvard University Press, 1975.

Jameson, Fredric. Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions. New York: Verso, 2005.

Jones, Alice Ilgenfritz and Ella Merchant. Unveiling a Parallel A Romance. Boston: Arena, 1893.

Kemmis, Daniel. "Foreword." Bioregionalism. Ed. Michael Vincent McGiniss Vincent, London: Routledge, 1999.

Knobloch, Frieda. The Culture of Wilderness: Agriculture As Colonization in the American West. Studies in Rural Culture. Chapel Hill: University of North Carolina Press, 1996.

Lacan, Jacques. "Seminar on 'The Purloined Letter'". Muller, John P., and William J. Richardson. The Purloined Poe: Lacan, Derrida & Psychoanalytic Reading. Baltimore: Johns Hopkins University Press, 1988.

Latham, Rob. Consuming Youth: Vampires, Cyborgs, and the Culture of Consumption. Chicago: University of Chicago Press, 2002.

Lévi-Strauss, Claude. The Savage Mind. The nature of human society series. London: Weidenfeld and Nicolson, 1974.

Lewontin, Richard C., Steven P. R. Rose, and Leon J. Kamin. Not in Our Genes: Biology, Ideology, and Human Nature. New York: Pantheon Books, 1984.

London, Jack. Before Adam. New York: McKinlay, Stone & Mackenzie, 1907.

---The Human Drift. London: Mills and Boon, 1919.

---Martin Eden. The Penguin American Library. Harmondsworth, Middlesex, England: Penguin Books, 1984.

Love, Glen A. Practical Ecocriticism: Literature, Biology, and the Environment. Charlottesville: University of Virginia Press, 2003.

Lukács, Georg. The Theory of the Novel: A Historico-Philosophical Essay on the Forms of Great Epic Literature. Cambridge, Mass: The MIT Pr, 1994.

Lumsden, Charles. "I Object: Mind and Brain as Darwinian Things" in The Mind as a Scientific Object. Oxford: Oxford University Press, 2005.

Matthews, Brander. "The Art and Mystery of Collaboration" in With My Friends: Tales Told in Partnership. New York: Longmans, Green, 1891.

---A Family Tree, and Other Stories. London: Longmans, 1859.

Matthiessen, F. O. American Renaissance: Art and Expression in the Age of Emerson and Whitman. London: Oxford Univ. Press, 1970.

Maturana, Humberto R., and Francisco J. Varela. The Tree of Knowledge: the Biological Roots of Human Understanding. Boston: Shambhala, 1992.

Mayr, Ernst. Populations, Species, and Evolution: An Abridgment of Animal Species and Evolution. Cambridge, Mass: Belknap Press, 1971.

McGill, Meredith L. American Literature and the Culture of Reprinting, 1834-1853. Material texts. Philadelphia: University of Pennsylvania Press, 2003.

McLaughlin, K. "Just Fooling: Paper, Money, Poe." Differences, 11. Bloomington, 1999.

McKibben, Bill. Deep Economy: The Wealth of Communities and the Durable Future. New York: Holt, 2007.

Meeker, Joseph W. The Comedy of Survival: Literary Ecology and a Play Ethic. Tucson: University of Arizona Press, 1997.

Melville, Herman. Mardi: And a Voyage Thither. Evanston: Northwestern University Press, 1970.

---Pierre, or, The Ambiguities. Penguin classics. New York: Penguin Books, 1996.

---Moby-Dick: An Authoritative Text. New York: W.W. Norton, 1967.

---Typee, Omoo, Mardi. New York: Library of America, 1982.

Menand, Louis. The Metaphysical Club. New York: Farrar, Straus, and Giroux, 2001.

Merchant, Carolyn. Ecological Revolutions: Nature, Gender, and Science in New England. Chapel Hill: University of North Carolina Press, 1989.

Michaelis, Richard. Looking Further Forward. Utopian literature. New York: Arno Press, 1971.

Michaels, Walter Benn. The Gold Standard and the Logic of Naturalism. Berkeley: University of California Press, 1987.

Mihm, Stephen. A Nation of Counterfeiters: Capitalists, Con Men, and the Making of the United States. Cambridge, Mass: Harvard University Press, 2007.

Miller, J. Hillis. “Critic as Host” in Bloom, Harold. Deconstruction and Criticism. New York: Seabury Press, 1979.

Miller, Perry. The Raven and the Whale: Poe, Melville, and the New York Literary Scene. Baltimore: Johns Hopkins University Press, 1997.

Moretti, Franco. Graphs, Maps, Trees: Abstract Models for a Literary History. London: Verso, 2005.

---Signs Taken for Wonders: Essays in the Sociology of Literary Forms. London: NLB, 1983.

Morris, Alfred. Looking Ahead!: A Tale of Adventure. London: Henry, 1892.

Muller, John P., and William J. Richardson. The Purloined Poe: Lacan, Derrida & Psychoanalytic Reading. Baltimore: Johns Hopkins University Press, 1988.

Newbury, Michael. Figuring Authorship in Antebellum America. Stanford, California: Stanford University Press, 1997.

Numbers, Ronald L. Darwinism Comes to America. Cambridge, Mass: Harvard University Press, 1998.

Ong, Walter J. Orality and Literacy: The Technologizing of the Word. New Accents. London: Routledge, 1997.

Parrington, Vernon Louis. American Dreams; A Study of American Utopias. New York: Russell & Russell, 1964.

Patai, Daphne. Looking Backward, 1988-1888: Essays on Edward Bellamy. Amherst: University of Massachusetts Press, 1988.

Pfaelzer, Jean. The Utopian Novel in America, 1886-1896: The Politics of Form. Critical Essays in Modern Literature. Pittsburgh, PA: University of Pittsburgh Press, 1984.

Pinker, Steven. The Blank Slate : The Modern Denial of Human Nature. New York: Viking, 2002.

---The Language Instinct. New York: W. Morrow and Co, 1994.

---The Stuff of Thought: Language As a Window into Human Nature. New York: Viking, 2007.

Poe, Edgar Allan. Papers of Thomas Olive Mabbott. University of Iowa Special Collections.

Popper, Karl R. The Open Society and Its Enemies. Princeton, N.J.: Princeton University Press, 1944/1963.

Portelli, Alssandro. “The Sign of the Voice: Orality and Writing in the United States.” Ed. Franco Moretti. The Novel. Princeton, N.J.: Princeton University Press, 2006.

Poundstone, William. The Recursive Universe: Cosmic Complexity and the Limits of Scientific Knowledge. New York: Morrow, 1985.

Powers, Richard. The Gold Bug Variations. New York, NY: Harper Perennial, 2001.

Pratt, Lloyd. Archives of American Time: Literature and Modernity in the Nineteenth Century. Philadelphia: University of Pennsylvania Press, 2010.

Propp, V. A. Morphology of the Folktale. Publications of the American Folklore Society, v. 9. Austin: University of Texas Press, 1968.

Purves D, L.E. White, and D.R. Riddle. "Is Neural Development Darwinian?" Trends in Neuroscience. 19. 11 (1996): 460-4.

Putnam, Hilary, "Meaning and Reference" in Martinich, Aloysius. The Philosophy of Language. New York: Oxford University Press, 1996.

Reynolds, David S. Beneath the American Renaissance: The Subversive Imagination in the Age of Emerson and Melville. New York: Knopf, 1988.

Reynolds, David. America, Empire of Liberty: A New History of the United States. New York: Basic Books, 2009.

Richards, Robert J. The Tragic Sense of Life: Ernst Haeckel and the Struggle Over Evolutionary Thought. Chicago: University of Chicago Press, 2008.

Roberts, J. W. Looking Within. Utopian literature. New York: Arno Press, 1971.

Robinson, Kim Stanley. Blue Mars. New York: Bantam Books, 1996.

---Green Mars. New York: Bantam Books, 1994.

---Red Mars. New York: Bantam Books, 1993.

Roemer, Kenneth. ed. by Daphne Patai. "Getting 'Nowhere' beyond Stasis: A Critique, a Method, and a Case," in Looking Backward, 1988-1888: Essays on Edward Bellamy. 1988.

---The Obsolete Necessity: America in Utopian Writings, 1888-1900. Ohio: Kent State University Press, 1976.

---Utopian Audiences: How Readers Locate Nowhere. Studies in print culture and the history of the book. Amherst: University of Massachusetts Press, 2003.

Roof, Judith. The Poetics of DNA. Posthumanities, 2. Minneapolis: Univ. of Minnesota Press, 2007.

Rolston, Holmes. Philosophy Gone Wild: Essays in Environmental Ethics. Buffalo, Buffalo: Prometheus Books, 1986.

Rorty, Richard. "The Pragmatists Progress" in Interpretation and Overinterpretation. Cambridge: Cambridge University Press, 1992.

Rosenheim, Shawn. The Cryptographic Imagination: Secret Writing from Edgar Poe to the Internet. Baltimore, Md: Johns Hopkins University Press, 1997.

Rosewater, Frank. '96: A Romance of Utopia. Utopian literature. New York: Arno Press, 1971.

Ruddick, Lisa Cole. Reading Gertrude Stein: Body, Text, Gnosis. Reading Women Writing. Ithaca: Cornell University Press, 1990.

Ruse, Michael. Evolutionary Naturalism: Selected Essays. New York: Routledge, 1995.

---Monad to Man: The Concept of Progress in Evolutionary Biology. Cambridge, Mass: Harvard University Press, 1996.

Russett, Cynthia Eagle. Darwin in America: The Intellectual Response, 1865-1912. San Francisco: W.H. Freeman, 1976.

Sahlins, Marshall. Islands of History. Chicago: University of Chicago Press, 1985.

Salk, Jonas. The Survival of the Wisest. New York: Harper & Row, 1973.

Sanders, George A. Reality; Or, Law and Order Vs. Anarchy and Socialism. A Reply to Edward Bellamy's Looking Backward and Equality. Cleveland: Burrows Bros. Co, 1898.

Satterlee, W. W. Looking Backward and What I Saw. New York: Arno Press, 1971.

Saussure, Ferdinand de, Charles Bally, Albert Sechehaye, and Albert Riedlinger. Course in General Linguistics. LaSalle, Ill: Open Court, 1986.

Schindler, Solomon, and Edward Bellamy. Young West: A Sequel to Edward Bellamy's Celebrated Novel "Looking Backward". Utopian Literature. New York: Arno Press, 1971.

Schivelbusch, Wolfgang. The Railway Journey: The Industrialization of Time and Space in the 19th Century. Berkeley, CA: University of California Press, 1986.

Serres, Michel, and Lawrence R. Schehr. The Parasite. Baltimore: Johns Hopkins University Press, 1982.

Simpson, William. The Man from Mars. His Morals, Politics and Religion. San Francisco: Bacon & Company, 1891.

Skinner, B.F. “Selection by Consequences.” Science Vol. 213, No. 4507. (Jul. 31, 1981): 501-504.

---Walden Two. New York: Macmillan, 1976.

Sober, Elliott. The Nature of Selection: Evolutionary Theory in Philosophical Focus. Cambridge, Mass: MIT Press, 1984.

Spencer, Herbert. Illustrations of Universal Progress; A Series of Discussions. New York: D. Appleton and Company, 1888.

---First Principles. New York: The De Witt Revolving Fund, 1958.

Smith, Barbara Herrnstein. Scandalous Knowledge: Science, Truth and the Human. Science and Cultural Theory. Durham, N.C.: Duke University Press, 2006.

Snow, C. P. The Two Cultures: and a Second Look. Cambridge: University Press, 1964.

Stanovich, Keith E. The Robot's Rebellion: Finding Meaning in the Age of Darwin. Chicago: University of Chicago Press, 2004.

Starke, Aubrey. ""No Names" and "Round Robins"." American Literature. 6. 4 (1935): 400-412.

Steen, R. Grant. The Evolving Brain: The Known and the Unknown. Amherst, N.Y.: Prometheus Books, 2007.

Steinbeck, John, Edward Flanders Ricketts, and John Steinbeck. The Log from the Sea of Cortez: The Narrative Portion of the Book, Sea of Cortez. New York: Viking Press, 1951.

Steinberg, Theodore. Nature Incorporated: Industrialization and the Waters of New England. Studies in environment and history. Cambridge [England]: Cambridge University Press, 1991.

Stock, Gregory. Redesigning Humans: Our Inevitable Genetic Future. Boston: Houghton Mifflin, 2002.

Stone, C. H. One of "Berrian's" Novels. New York: Welch, Fracker, 1890.

Thomas. The Crystal Button, or, The Adventures of Paul Prognosis in the Forty-Ninth Century. Boston and New York: Houghton, Mifflin, 1891.

Thompson, Richard F., and Stephen A. Madigan. Memory: The Key to Consciousness. Washington, D.C.: Joseph Henry Press, 2005.

Tumber, Catherine. "Edward Bellamy, the Erosion of Public Life, and the Gnostic Revival." American Literary History. 11. 4 (1999): 610-641.

Turner, Jonathan H. Human Institutions: A Theory of Societal Evolution. Oxford: Rowman & Littlefield, 2003.

Twain, Mark. A Connecticut Yankee in King Arthur's Court. New York: Oxford University Press, 1996.

Twain, Mark, and Charles Dudley Warner. The Gilded Age. New York: Oxford University Press, 1996.

Vinton, Arthur Dudley. Looking Further Backward. Utopian literature. New York: Arno Pr., 1971.

Waterloo, Stanley. A Tale of the Time of the Cave Men: Being the Story of Ab. London: Adam and Charles Black, 1904.

Webster, Anthony K. "Keeping the Word: On Orality and Literacy (With a Sideways Glance at Navajo)." Oral Tradition. 21. 2 (2007): 295-324.

Wells, H. G. In the Days of the Comet. Mahwah, New Jersey: Watermill Press, 1983.

Weinstein, Cindy. The Literature of Labor and the Labors of Literature: Allegory in Nineteenth-Century American Fiction. Cambridge Studies in American Literature and Culture, 89. Cambridge: Cambridge University Press, 1995.

Wexler, Bruce E. Brain and Culture: Neurobiology, Ideology, and Social Change. Cambridge, Mass: MIT Press, 2006.

Whalen, Terence. Edgar Allan Poe and the Masses: The Political Economy of Literature in Antebellum America. Princeton, N.J.: Princeton University Press, 1999.

Whelpley, J. D. "The Atoms of Chladni" [1860] in Future Perfect: American Science Fiction of the Nineteenth Century ed. Bruce Franklin. New York: Oxford University Press, 1978.

White, Hayden V. Metahistory: the Historical Imagination in Nineteenth-Century Europe. Baltimore: Johns Hopkins University Press, 1973.

Whitelock, William Wallace. The Literary Guillotine. New York: J. Lane, 1903.

Whitfield J. "Literary Darwinism: Textual Selection." Nature. 439. 7075 (2006): 388-9.

Williams, Michael. "'The Language of the Cipher': Interpretation in 'The Gold-Bug'. American Literature, Vol 53, No. 4 (Jan., 1982): 646-660.

Wilson, E. "Melville, Darwin, and the Great Chain of Being." Studies in America Fiction: 28 (2000): 131-150.

Wiener, Philip P. Evolution and the Founders of Pragmatism. Cambridge: Harvard University Press, 1949.

Wilson, Edward O. Biophilia. Cambridge, Mass: Harvard University Press, 1984.

---Consilience: The Unity of Knowledge. New York: Knopf, 1998.

---Sociobiology: The New Synthesis. Cambridge, Mass: Belknap Press of Harvard University Press, 1975.

Wright, S. "The Roles of Mutation, Inbreeding, Crossbreeding, and Selection in Evolution" in Proceedings of the Sixth International Congress on Genetics, 1932, pp. 355-366.

Yablon, Nick. "Echoes of the City: Spacing Sound, Sounding Space, 1888-1916." American Literary History. 19. 3 (2007): 629-660.

Zboray, Ronald J. A Fictive People: Antebellum Economic Development and the American Reading Public. New York: Oxford University Press, 1993.

Zinn, Howard. A People's History of the United States. New York: Harper & Row, 1980.