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The Later Literary Career

Natural History

SUCH modest fame as Thoreau possessed during the late nineteenth and early twentieth centuries derived mainly from his natural history writings, especially the four volumes of seasonal selections from his *Journal*, edited by H.G.O. Blake, that were issued at intervals during the eighties and nineties. Thoreau's public popularity today is likewise maintained by his reputation as the author of pronouncements about the importance of preserving wild nature that have provided, as Rodrick Nash has shown, the philosophical and programmatic cornerstones of conservation and preservation movements in this century.¹ But on the whole the rise of Thoreau's literary reputation has tended—among academics, at any rate—to throw his achievements as a naturalist into the shade. Increasingly his artistry and the self-referential sufficiency and integrity of his texts, especially *Walden*, have displaced the propositions of the natural scientist and social critic as centers of critical interest. Whatever the shifts and fluctuations in his reputation during our century, Thoreau's own development during the 1850s, the major phase of his abbreviated career, was clearly in the direction of increasing interest in the study of and writing about nature on the one hand, and on the other the expression of increasingly sharp and outspoken views on sensitive social and political issues of his day, especially the rampant materialism of his culture (e.g., "Life Without Principle") and the complicity of the North in the perpetuation of slavery (e.g., "Slavery in Massachusetts").

Beginning, as we have seen, at the time of his acquaintance with the great naturalist Louis Agassiz and his reading of Coleridge's *Theory of Life* during the late 1840s, the serious and concerted study of natural history gradually became, along with writing itself, his principal avocation. When he died, in May 1862, the town clerk listed his occupa-

1. *Wilderness and the American Mind*, rev. ed. (New Haven: Yale University Press, 1973), pp. 84–95.

tion as "Natural Historian,"² and this designation reflects not only his status and reputation in the community but one of his major intellectual and literary preoccupations as well. And far from being a retreat and a falling away from the high achievement of writing *Walden*, his natural history studies plunged Thoreau into one of the liveliest and most turbulent intellectual controversies of the nineteenth century.

Not all the books he read, however, bore on his serious theoretical study of the flora and fauna (especially the former) of New England. Thoreau read widely in natural history during this period, and a great deal of this reading was in ephemeral or popular works that, like some of his travel reading, were mainly useful to him in providing illustrative metaphors or allusions that could enliven his own prose. He also had certain basic texts, manuals of botany like Bigelow's and Gray's, that were essential tools for learning taxonomy. "One studies books of science merely to learn the language of naturalists,—to be able to communicate with them," he said (JL 5.42). He knew the natural history portions of the great government surveys of the West, some of them written by eminent scientists; compendiums like Loudon's *Encyclopedia of Plants* or the monumental *Arboretum et Fruticetum Britannicum*; books on such specialized subjects as ornithology, oology, zoology, conchology, herpetology; and popular "light reading" with such titles as *Gleanings in Natural History*, *Curiosities of Natural History*, *Leaves from the Notebook of a Naturalist*, *Illustrated Natural History*, and *Zoological Recreations*. He even knew the popular illustrated book that the young heroine of *Jane Eyre* is reading as the novel opens, Bewick's *British Birds*. Running through this apparently omnivorous reading, however, is a vein of serious theoretical contemporary natural science with direct bearing on Thoreau's own aims as a naturalist and on the history of scientific thought in the nineteenth century.

To be a naturalist during the 1850s—at least if one was as well read in the field as Thoreau—was to witness one of the most exciting and unsettling periods in the history of the discipline. For decades, evidence had been accumulating to undermine theories of creation that were consistent with a literal interpretation of the account rendered in Genesis. The gradual deciphering of the fossil record led to a growing awareness that the age of the earth would have to be measured at least in millions rather than in thousands of years. The earth itself, it was seen, must have been subject to great physical changes in its history to account for such phenomena as the presence of marine fossil beds deep in strata lifted thousands of feet above sea level. A corresponding and apparently confirming astronomical theory, positing vast amounts of

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During this period, every naturalist had to wrestle, if only indirectly, with the great scientific issue of the age: What was the agency or mechanism by which change and development in nature occurred? Change there surely was. Among scientists even the most ardent supporters of special creation no longer defended the static view of nature that Thoreau had been exposed to in college. But how did nature change, how much, in what directions, and what did change portend or signify about humanity's place in nature? Not even the casual classifier or amateur naturalist (which Thoreau was assuredly not, in any case) could entirely escape the controversy and the unsettling questions, for even learning taxonomy required one to choose a system, and a system of classification in turn reflected an attitude toward the arrangement of species, genera, families, and so on that expressed an implicit adherence to some theory of creation or natural development. Thoreau's reading in natural science during this period served to acquaint him with the principal theoretical divisions among contemporary scientists, to provide him with a basic knowledge of the history of the major issues in science during his century, and to prepare him to read and be able to make an informed judgment about Darwin's *Origin of Species* early in 1860, almost immediately upon its publication in America.

At the same time, in his own field studies and writings he practiced a type of natural history that was different in kind from either that of the creationists and scriptural apologists on the one hand, or the more positivistic, proto-evolutionary biologists on the other,³ a kind of nat-

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ural history more closely related to Coleridge, Goethe, and German *Naturphilosophie* than either, but also containing highly distinctive elements of his own, marked by his increasing interest in such ancient natural historians as Aristotle, Pliny, and Herodotus. Thoreau's work as a naturalist during this decade was characterized, as we shall see, by an effort to give equal weight to both the natural and the historical components of *natural history*: that is, understanding the nomenclature and the relationships among phenomena as described by current science (the "natural" part) and at the same time treating those phenomena as having ultimate significance only through the history of their association with humankind. Concomitantly, he found both the orthodox Christian apologias for special creation and the nascent theory of organic evolution tinged with what he termed "infidelity." To fix the coordinates of his distinctive stance in the lively debate about the origin and development of life, then, it is necessary to sketch in some detail his reading of key documents and his own writing of natural history during the 1850s.

His grounding had been orthodox in the extreme, as I have suggested in the treatment of his natural history education (or lack of it) at Harvard, where he had read a classic apology for the "argument from design" in William Smellie's *The Philosophy of Natural History*. As the nineteenth century progressed, it became increasingly impossible to reconcile, as Smellie and his kindred had tried to do, the Mosaic account of creation with the discoveries of such new sciences as geology, paleontology, embryology, and comparative anatomy. In 1840, for example, Thoreau read one of the key works in the accelerating dismantling of the biblical chronology, Lyell's *Principles of Geology* (a book that, about the same time, was having a profound influence on the young Charles Darwin on board the *Beagle*).⁴ Although Lyell was a vigorous opponent of evolution, he argued for a uniformitarian geology whose imaginatively provocative vistas of eons upon eons opening backward in time provided a necessary prerequisite for a serious consideration of evolution. Another such essential prerequisite was the disproof of the fixity of species, and this had been provided principally by Baron Cuvier, another outspoken opponent but unwitting ally of the progressive development view, whose *The Animal Kingdom* Thoreau read in 1851. Cuvier established on a scientific footing the comparative study and classification of fossil fauna and announced the discovery of more than a score of extinct species. He furnished a portion

1979), esp. chap. 1, "Special Creation Among British and American Naturalists 1830–59," for an extremely useful overview of the terms of the debate.

4. Loren Eiseley, *Darwin's Century* (Garden City, N.Y.: Doubleday, 1958), p. 99.

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of the methodology by which later paleontologists would demonstrate the common ancestry of various species through progressive structural differentiation.⁵

Gradually the old orthodoxy of the natural theologians who had defended for the most part the literal interpretation of Genesis (with some occasional slippage on the score of what a biblical "day" of creation consisted of) gave way to a somewhat awkward new orthodoxy that posited distinctly different periods of creation separated, if need be, by the long stretches of time required by the geologic and astronomical calendars. The large gaps frequently encountered in the fossil record and the appearance of highly developed organisms without the apparent existence of appropriately primitive earlier forms in older strata made it for a time plausible to argue that, although the different major classes of plants and animals had clearly come into existence at different times and not all at once, there was not sufficient evidence to prove that later groups had developed from earlier ones. As Edward Hitchcock, an eminent Massachusetts geologist whose work Thoreau knew well, put it, "Geology shows a divine hand cutting the chain asunder at intervals, and commencing new series of operations."⁶

This theory provided for a carefully circumscribed sort of evolution and a generally beneficent sort of progressionism. If the major subdivisions of organic life had, as the fossil record then suggested, appeared suddenly at different times in the history of the earth, and if some modern animals, including man, bore striking resemblances to earlier forms, then a kind of organic typology was evident in nature. Although the major groups themselves gave indications of progressive development in complexity from the one to the other over time (from invertebrates to vertebrates, for example), such profound gaps existed between them that they could only have been created separately and could not have arisen gradually from a common ancestor. Thus, the argument went, the fossil record revealed creation in steps, with natural laws sufficing to explain development within but not between major groups. Read this way, as it was by many competent scientists, the geological record seemed to reveal an anticipation of man, as the creator gradually and carefully prepared for the apotheosis of creation by successively bringing into existence increasingly sophisticated forms, all ultimately pointing toward the pinnacle that would be reached in *Homo sapiens*.

A refined and idealistic—as opposed to the earlier utilitarian—argument from design was still intact, in other words, one refined to in-

5. Ibid. pp. 80–89.

6. *The Religion of Geology*, quoted in Gillespie, *Charles Darwin*, p. 23.

corporate the results of the new sciences. The scientists who made the discoveries and provided much of the evidence later adduced to support the theory of evolution were often the most vigorous in their defense of what was still called "the plan of the Creator." The principal American apologist of this school of progressive but separate creations was also the most distinguished, popular, and in many ways the most brilliant scientist of his day, Louis Agassiz, with whom Thoreau was personally acquainted and whose works he knew well. It will be remembered that Thoreau's first contact with Agassiz had occurred in 1847, when he began corresponding with Agassiz (through his assistant James Elliot Cabot) and collecting specimens for him. Thoreau also may have attended Agassiz's fashionable "Plan of Creation" lectures in Boston the previous winter. He acquired in 1850 or 1851 as his major zoological text the manual that Agassiz wrote with Augustus A. Gould, *Principles of Zoology*.

This book was considerably more than a mere manual of zoology, however, for in it Agassiz set forth and argued for his particular theory of creation, from which it will be necessary to quote at some length in order to give an idea of the prevailing theoretical climate in which Thoreau worked:

It is evident that there is a manifest progress in the succession of beings on the surface of the earth. This progress consists in an increasing similarity to the living fauna, and among the Vertebrates, especially, in their increasing resemblance to Man.

But this connection is not the consequence of a direct lineage between the faunas of differing ages. There is nothing like parental descent connecting them. . . . The link by which they are connected is of a higher and immaterial nature; and their connection is to be sought in the view of the Creator himself, whose aim, in forming the earth, in allowing it to undergo the successive changes which Geology has pointed out, and in creating successively all the different types of animals which have passed away, was to introduce Man upon the surface of our globe. Man is the end towards which all the animal creation has tended, from the first appearance of the first Palaeozoic fishes.

To study, in this view, the succession of animals in time, and their distribution in space, is, therefore, to become acquainted with the ideas of God himself.⁷

A graphic synopsis of Agassiz's plan of creation is contained in the diagram that serves as the frontispiece to *Principles* showing the five

7. Louis Agassiz and Augustus A. Gould, *Principles of Zoology*, new revised ed. (Boston: Gould and Lincoln, 1873), pp. 237–238.

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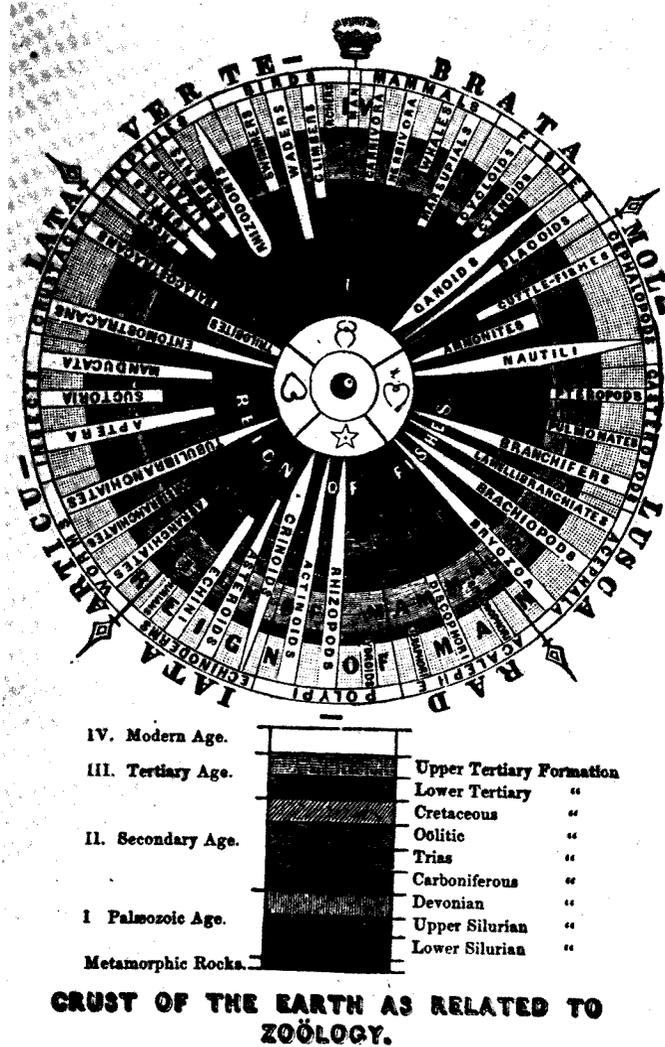
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major groups of fauna and their successive but separate first appearances on the globe.

Thus Agassiz's theory of different epochs of creation required him to posit what he termed in the *Essay on Classification*, another work with which Thoreau was acquainted, "repeated interventions on the part of the Creator," so that he was in the uncomfortable position (for a scientist) of having to argue for and defend not one divine suspension of natural law, but several. Agassiz had been influenced in his youth by the *Naturphilosophie* of Oken and Schelling, and he never lost his belief in the "higher and immaterial" essence of nature, a belief that eventually led him to become the leading spokesman for the opponents of Darwinism in America.⁸ Agassiz retained his public popularity, but as a consequence of his opposition to Darwin he and the other proponents of the creationist philosophy gradually lost credibility in the scientific community after 1860.

But before this time he had no real opponents and his theory dominated the field, at least in America. Ironically, Agassiz too was one of the unwitting contributors to the general and eventual triumph of the Darwinian model, for like Lyell and Cuvier he was a brilliant scientist whose work in paleontology and embryology—stressing the tendency of the embryo to pass through successive earlier stages of development (work that played a part in the development of the now-familiar idea that ontogeny recapitulates phylogeny)—Darwin himself cited as a point of support for the theory of natural selection.⁹ One of Agassiz's other major contributions to science was a theory of glaciation which solved a major problem in geology and further weakened the biblical explanations that began by assuming the literal truth of the Noachian deluge.

One of the most bizarre offshoots of Agassiz's theory of separate creations was its use by pro-slavery scientists to defend the South's peculiar institution. If the characteristic human races of each part of the globe had been created separately, they might not be intrinsically equal, and it became easier to construct a rationale for the subservience of those supposedly inferior races. Two such works that Thoreau knew were Charles Pickering's *The Races of Man* and Nott and Glidden's *Types of Mankind*, the latter containing a prefatory sketch by Agassiz. Although a patriotic supporter of the North during the Civil War, Agassiz continued to assert the separate creation and physical inferiority of the Negro race.



Frontispiece of Agassiz and Gould's *Principles of Zoology*, illustrating the different epochs of creation.

8. Edward Lurie, *Louis Agassiz: A Life in Science* (Chicago: University of Chicago Press, 1960), pp. 27-28.

9. *Ibid.* p. 288.

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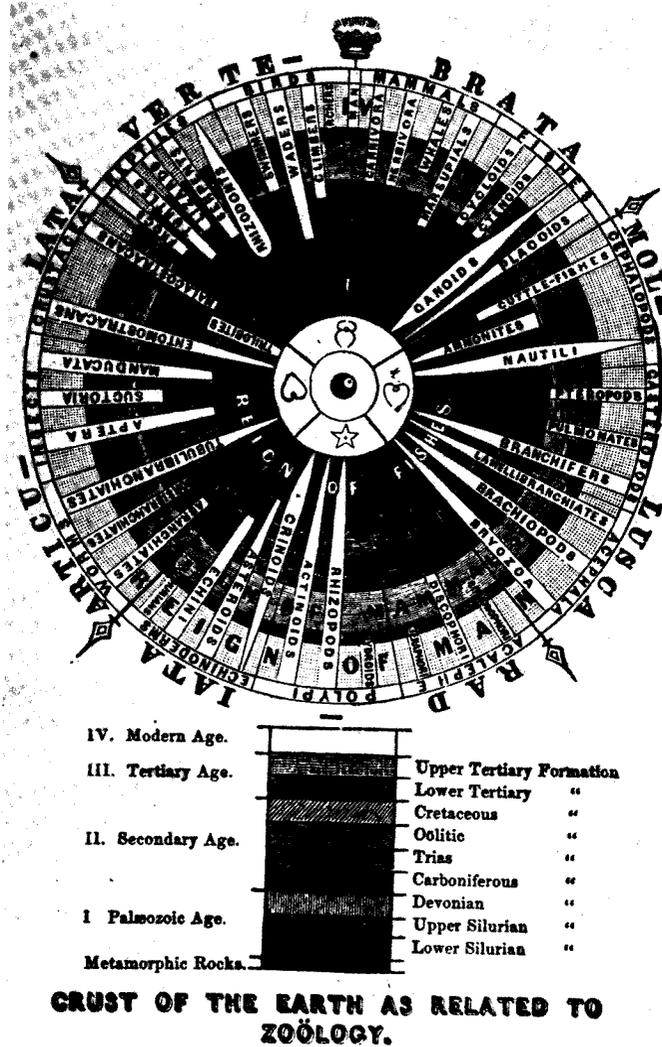
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8. Edward Lurie, *Louis Agassiz: A Life in Science* (Chicago: University of Chicago Press, 1960), pp. 27-28.

9. *Ibid.* p. 288.



Frontispiece of Agassiz and Gould's *Principles of Zoology*, illustrating the different epochs of creation.

In the passage from the conclusion of *Principles of Zoology* quoted earlier, it will be noted that Agassiz takes pains explicitly to deny the possibility of "parental descent" in the evolution of major groups from a common ancestor, and that he makes this denial well in advance of Darwin's postulation of such a theory of descent. The idea of organic evolution, in other words, was already in the air and being widely discussed by scientists, theologians, and educated persons generally. That it required rebuttal this early was due largely to the controversy beginning in 1844 over an anonymously published book titled *Vestiges of the Natural History of Creation*, by a Scottish journalist and amateur naturalist named Robert Chambers. *Vestiges* put forward for the first time in England a comprehensive and elaborately buttressed theory of organic evolution without the need for a first cause or special creation at any point. Despite the fact that its arguments and evidence were often weak or wrong, and that Chambers himself was not highly qualified in all the branches of natural science from which he adduced evidence, the book made the first really bold and in many ways impressive argument for the creation of organic life out of inorganic materials and for its successive evolution through time into the various classes of flora and fauna that came to populate the globe—all without requiring the direct or indirect intervention of God.¹⁰ Milton Millhouser, in *Just Before Darwin*, his study of Chambers and *Vestiges*, describes the furor that ensued: "For four years now [in 1848] it [*Vestiges*] had been the center of a fierce little storm, the target of a steady fire of philosophic analysis, scientific ridicule, and theological vituperation. Its author was variously denounced as atheist, shallow smatterer, and credulous dupe. The work itself, alarmingly popular despite a merciless critical pounding, was regarded by the orthodox as pernicious in the very highest degree."¹¹

It was of Chambers principally that Agassiz was thinking when he denied the possibility of "parental descent," and this cudgel was taken up by numerous other scientists and religious thinkers during the 1850s, the chief among whom was Hugh Miller, another Scotsman who was also an amateur geologist and a polemicist in the Presbyterian Free Church controversy. He published in 1849 a somewhat strident refutation of *Vestiges* with the wonderful title *The Foot-prints of the Creator; or, The Asterolepis of Stromness*, issued in an American edition in 1850 with a laudatory memoir of Miller by Agassiz—which, in

10. Milton Millhouser, *Just Before Darwin* (Middletown, Conn.: Wesleyan University Press, 1959), esp. chap. 4, "Vestiges of the Natural History of Creation," pp. 86–115.

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the climate of the day, amounted to a kind of semi-official imprimatur. In this and other popular works such as *The Old Red Sandstone* and *The Testimony of the Rocks*, Miller became the chief reconciler of orthodox religion with the new geological science, like Agassiz trying to show that the fossil record revealed the creator's progressive plan and that, without a first cause and successive interventions by God, evolution was impossible. Even more important, perhaps, it was greatly to be feared. In *Foot-prints of the Creator*, with characteristic bluntness, Miller let the real cat out of the bag. The "development hypothesis" he says, referring to Chambers's theory of organic evolution, "would fain transfer the work of creation from the department of miracle to the province of natural law, and would strike down, in the process of removal, all the old landmarks, ethical and religious."¹²

The reason that these landmarks would be struck down is quite clear if one carries, as Miller does, the implications of the "development hypothesis" to their logical conclusion:

If, during a period so vast as to be scarce expressible by figures, the creatures now human have been rising, by *almost* infinitesimals, from compound microscopic cells,—minute vital globules within globules, begot by electricity on dead gelatinous matter—until they have at length become the men and women whom we see around us, we must hold either the monstrous belief that all the vitalities, whether those of monads or of mites, of fishes or of reptiles, of birds or of beasts, are individual and inherently immortal and undying, or that human souls are *not* so.¹³

Thoreau knew not only the principal works of Agassiz but also Chambers's *Vestiges*, Miller's refutation of Chambers in *Foot-prints*, and the other works by Miller named earlier. He knew Agassiz and his work well enough to refer to him frequently in the *Journal* in the 1850s and to discuss learnedly with him the copulation of turtles and like matters at dinner at Emerson's in 1857 (JL 9.298–299). For the most part in his *Journal* and notebooks, in fact, he confines himself to such phenomenal or factual matters as these and does not comment directly upon the relative merits of the arguments on either side of the large issue of development versus special creation. A significant exception to this reticence, however, comes in a *Journal* entry for September 28, 1851, after Thoreau had been reading Miller's *Old Red Sandstone*. Miller had described the beauty of a fossil fish and then ventured to

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The earth is not a mere fragment of dead history, stratum upon stratum like the leaves of a book, to be studied by geologists and antiquaries chiefly, but living poetry like the leaves of a tree, which precede flowers and fruit,—not a fossil earth, but a living earth; compared with whose great central life all animal and vegetable life is merely parasitic. (p. 309)

As Thoreau's comments about the worse "infidelity" of Miller suggest, a thoroughgoing Transcendental naturalist would find it easier to accept organic evolution than special creation. The notion of a universe in a continual state of becoming, where nature is dynamic and evolving, was a world image far more appealing to Transcendentalists than the model of a world of creative starts and stops advanced by the reconcilers of science with Christian orthodoxy. The assumption that Thoreau made—his primary article of faith, as it were—that nature was an externalization of spirit, did not preclude his acceptance of ev-

olution, which dealt really only with nature as phenomena, the "dumb, beautiful ministers" of Walt Whitman's "Sun Down Poem." Scientific evolution might accurately describe the actual, in other words, without touching what was ultimately real; and it was certainly a more powerful paradigm for the study of natural history than the patchwork theory of Agassiz and his allies that required successive episodes of miraculous intervention by God interspersed with eons of uninterrupted natural law in order to account for the diversity of types and species.

Thus, when Darwin's *Origin of Species* appeared in late 1859, Thoreau was not only ready and eager to read it but also inclined to be favorably disposed toward it. He acquired the book from the Town Library early in 1860, immediately upon its accession, it would appear, and made extracts from it in his natural history "fact book." Shortly afterward, he told Franklin Sanborn that he liked the *Origin of Species* very much.¹⁴ Although, characteristically, his extracts do not distill Darwin's thesis directly, but rather consist mostly of curious or significant phenomena that he was interested in, he did note details about the naturalization of plants and the dispersion of seeds that show his careful attention to aspects of the theory that bore on his current project of studying the dispersion and succession of plant species within a given area.

He seems, in fact, to have seized on both the theoretical strength of Darwin and the corresponding weakness of Agassiz. In the spring of 1860, Emerson quotes a remark of Thoreau's that cogently expresses a fundamental difference between the two theories: On being told, apparently, that Agassiz had scoffed at Darwin, Thoreau said, "If Agassiz sees two thrushes so alike that they bother the ornithologist to discriminate them, he insists they are two species; but if he sees Humboldt [the great German natural scientist] and Fred Cogswell [a retarded inmate of the Concord Almshouse], he insists that they come from one ancestor" (JMN 14.350). What Agassiz and his school of scientists were not willing to acknowledge, in other words, was the infinite series of gradations in nature that suggested that species varied naturally. At the same time, they clung to a belief in the uniqueness of human beings—at least Caucasians—despite the evidence that they, too, varied widely, naturally, and in precisely the same ways.

Thoreau's reading of Darwin, as William L. Howarth has suggested, may even have given him considerable impetus for his own natural history writing. He had been interested for several years in the dispersion of seeds and the succession of plants within particular habitats,

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At the same time that he was following the developments in contemporary natural science that culminated in the *Origin of Species*, however, Thoreau was also discovering another world of natural history of equal fascination and importance to him in the works of ancient Greek and Latin naturalists and earlier English natural historians and herbalists. He began reading Aristotle, Aelianus, Theophrastus, Herodotus, and Pliny in earnest in 1859 and made rather extensive extracts from their works in his notebooks and frequent allusions to them in his Journal. He also began working references to them into his current natural history writings. Ellery Channing, who knew Thoreau's current interests better than anyone, believed that "he meant probably to translate and write on the subject [natural history] as viewed by the ancients."¹⁶ Whether or not Channing was correct, it is nevertheless true that Thoreau devoted a great deal of time and care to reading the ancient natural history writers and the earlier English herbalists and natural historians—Gerard for example, and Evelyn, and Edward Topsell's sixteenth-century translation of *The Historie of Four-footed Beasts*. Thoreau found in these earlier writers a freshness of language and a vividness of description that were a pleasing antidote to contemporary scientific writing and nomenclature:

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In another sense these writers were less a restorative contrast to the dryness of modern scientific writing than they were a necessary complement to it and an essential component of the true natural history of any phenomenon, because their very words, according to Thoreau's extension of the Transcendental theory of language, were literally as well as figuratively true to life:

As in the expression of moral truths we admire any closeness to the physical fact which in all language is the symbol of the spiritual, so, finally, when natural objects are described, it is an advantage if words derived originally from nature, it is true, but which have been turned (tropes) from their primary signification to a moral sense, are used, i.e., if the object is personified. The one who loves and understands a thing the best will incline to use personal pronouns in speaking of it. To him there is no neuter gender. Many of the words of the old naturalists were in this sense doubly tropes. (JL 13.145–146)

As words generally reveal their full meaning only if one is acquainted with their etymologies, so particular natural facts disclose their real significance only through the history of their association with man. Thoreau's appreciation of the old natural history writers marks his belief that the meaning of nature is dependent upon man, the perceiver, and that natural *history* must indeed have a historical component: To know a natural object—the apple tree in "Wild Apples," for example—requires more than fixing its genus and species and being able to identify its varieties; it involves tracing, as Thoreau does in the beginning of that essay, the history of the apple tree's association with man, giving the sum of its histories, so to speak, and attempting to write a diachronic natural science in which the discoveries of the present day do not invalidate but rather take their place in succession with those of the past.¹⁷ As "The Succession of Forest Trees" is part of a longer unfinished manuscript on the dispersion of seeds, "Wild Apples" is part of a longer unfinished work on wild fruits, only one other part of which, a lecture on huckleberries, Thoreau was able to put into something like finished form before he died.¹⁸ These few pieces, however, all show the coalescence of his careful observation, acquaintance

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with contemporary scientific work, and incorporation of the work of the ancients into what was—inchoately, perhaps—a distinctive mode of natural history writing in America, one that placed equal emphasis on the natural and the historical.

Civil History

IN APRIL 1858, Emerson reported to a correspondent, H. S. Randall, that “[Thoreau’s] study seems at present to be equally shared between Natural and Civil History; . . . he reads both with a keen and original eye.”¹⁹ The “Civil History” Emerson refers to is the history of the early exploration and discovery of the North American continent, especially the northeast coast of New England and Canada, and his observation that this interest was equally shared with natural history is accurate, for Thoreau’s preoccupations with the two types of history did indeed develop together and with equal strength during the last decade of his life. And like his absorption in natural science, his fascination with regional and early American history began to be concerted and serious during the period of stabilization and redirection in his career around 1850. He had explored local New England and Concord history earlier for *A Week* and in the elegiac account “Former Inhabitants” in *Walden* (much of which was drafted in the *Journal* as early as 1845–1846), but history first became a major intellectual preoccupation following his visits to Cape Cod in 1849 and 1850 and his trip to Montreal and Quebec in 1850. These excursions stimulated his interest in the wider field of early American history by presenting him with certain intellectual problems and opportunities that he attempted to work out and capitalize upon during the ensuing decade. The most important of these discoveries was the realization that the story of early exploration and colonization was much more complex, varied, and problematic than he had realized, and that Cape Cod itself offered a unique ground upon which to practice the discipline of history. A cape, as he described its etymology in the beginning of his narrative, was “that part by which we take hold of a thing,” and the “thing” that Thoreau had in mind was ultimately no less than the historical evolution of the idea of America itself.

Since Thoreau traveled infrequently, he customarily tried to make his excursions as intense and concentrated as possible by reading as much as he could lay his hands on about the history of the object of

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These two reading projects at first overlapped and then became differentiated from one another over the years. Thoreau was fascinated by Cape Cod, so much so that he was able to compose and deliver a quite popular lecture on the Cape within a few months of his first visit. He took pains to return to gather more impressions and information the following summer. He remained interested in the Cape, its history, and its people, returning again in 1855 and 1857 and adding information to the unpublished portion of his manuscript of *Cape Cod* until shortly before his death.²¹ The Canadian excursion, on the other hand, failed to arouse much enthusiasm in him. Thoreau responded somewhat chauvinistically to French Canadian civilization, the British military presence there, and the Roman Catholicism of the inhabitants. His account of the excursion in “A Yankee in Canada,” which was suspended part way through its serialization in *Putnam’s* when Thoreau refused to excise or tone down what the genteel George William Curtis considered to be “heresies” in the essay,²² is probably the least inspired of his travel essays. He himself confessed to being strangely unmoved by this trip—his only one outside the United States—and largely indifferent to the literary project that developed from it.²³

Yet imaginatively his visit to French Canada was perhaps the key to his sustained interest in Cape Cod and in early American history, for in the process of researching the early history of French settlement and exploration in North America, he began to piece together the threads of a story that he would devote much of his attention in *Cape Cod* to

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with contemporary scientific work, and incorporation of the work of the ancients into what was—inchoately, perhaps—a distinctive mode of natural history writing in America, one that placed equal emphasis on the natural and the historical.

Civil History

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The Canada notebook itself gives physical testimony to this bifurcation of interest. It divides into two sections, one commencing at each end of the notebook (that is, Thoreau wrote one series of notes starting from the front of the notebook and then, turning the notebook upside down, another series starting from the back). The first section, as Lawrence Willson has described it, was made "from late 1850, just after his return from Canada, until he wrote his lecture and presented 'A Yankee in Canada' for publication early in 1852," and consisted mostly of information that would help fill out and embellish the narrative—details about the St. Lawrence River, statistics about the population of Canada, early settlement, the climate (especially the effects of extreme cold), and so forth.²⁴ The sources quoted are not, for the most part, historical, although Thoreau does extract primary material on early voyages to New France by Cartier and Jean Alphonse from a volume of the *Transactions* of the Literary and Historical Society of Quebec and from Charlevoix's *Histoire . . . de la Nouvelle France* (1744), both of which would be important sources for him. In general, however, this material does not suggest a depth of historical interest growing out of the Canada trip.

The other section of the notebook begins in parallel with the first section of notes as far as chronology is concerned—commencing in November 1850 and running to 1855 or 1856—but consists of quite different though related material. Thoreau's first entry in the section suggests the nature of his interests:

November 18, 1850
Saw at Cambridge . . . the following old books containing maps.
1570 to 84. Ortelius
1597 Wytfliet
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1609 . . . Lescarbot [etc.]²⁵

The notes that he took on these early maps of the New World pay special attention to the depiction of Canada and the St. Lawrence, so they are related to the Canadian project, but they opened for him a much more interesting subject than could be subsumed or contained in the account of his rather disappointing excursion. The progress of cartography, starting with the very earliest sixteenth-century sources in which the ratio of wishful thinking and fantasy to accurate depiction

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This discovery was leading him in a direction that was at odds with the atmosphere and themes of his Canada story, in which he portrayed the French-based civilization of Quebec as derivative, decadent, and marked by feudal anachronisms repugnant to a Yankee. The subject belonged, more naturally, with his story of Cape Cod, an isolable American geographical entity that could serve to represent the developments and the vicissitudes in American history. Accordingly, at some point in the composition of both works he made a decision to integrate the results of his historical researches into the Cape Cod narrative. In the manuscript of "An Excursion to Canada" there survives a portion of an early draft that indicates this decision clearly: In the midst of a discussion about Champlain he notes on the blank portion of a leaf, "Missing pages transferred to Cape Cod," and the next surviving leaf has several reworkings of a passage on Champlain and Lescarbot, praising their "instructive & interesting" accounts and taking to task the contemporary American historian George Bancroft, who "appears never to have heard of" Champlain's early *Voyages*. The polemic concludes: "It is remarkable that so interesting & particular an account of the coast of New England should have been written and given to the world—as early as 1613 several editions of which are to be found at Cambridge—& yet no Historian[s] of America have even seen them!"²⁷

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But like "An Excursion to Canada," *Cape Cod* was suspended in the midst of its serialization in *Putnam's* in August 1855, and the remainder of the manuscript, including "Provincetown," was not published until Ticknor and Fields brought out a posthumous edition of the book in 1865. During the years after 1855, however, Thoreau continued to revise the manuscript, especially the Provincetown chapter, and so broadened and deepened the historical focus of the book that it grew to be a meditation on American history in which the Cape itself becomes metonymically the ground for examining the adequacy of contemporary American historiography. Like *Walden*, which benefited enormously from the enforced prolongation of its genesis as a result of the commercial failure of *A Week* in 1849, *Cape Cod* emerged the better—at least the more serious and scholarly—book for its interruption. And like *Walden*, which derives its simultaneously dramatic and retrospective character from the fact that Thoreau added during the 1850s details of natural history and reflection about the significance of his experiences at the pond, *Cape Cod* absorbed its influx of historical material into the framework of the original 1849 narrative in such a way as to make the resulting product a blend of narrative immediacy and historical reflection. The depth and the extent of the reading that went into this late revision can best be gauged by two important paragraphs in "Provincetown" in which Thoreau develops in great detail a theme first articulated in the draft of the Canada excursion, the su-

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count of his voyage), there is a map of it made when it was known to Christendom as New France, called *Carte Geographique de la Nouvelle Franse faicte par le Sieur de Champlain Saint Tongois Cappitaine ordinaire pour le Roy en la Marine,—faict l'en 1612*, from his observations between 1604 and 1607; a map extending from Labrador to Cape Cod and westward to the Great Lakes, and crowded with information, geographical, ethnographical, zoological, and botanical. (pp. 179–181)

Pride in his own ancestry may account in some measure for Thoreau's allegiance to the French explorers, but his critique is really directed against the narrowness of conception and the lack of imagination that characterized both the English explorers and later American historians. From his reading of the early voyages and explorations he concluded that "the most distinguished navigators of that day were Italians, or of Italian descent, and Portuguese. The French and Spaniards, though less advanced in the science of navigation than the former, possessed more imagination and spirit of adventure than the English, and were better fitted to be the explorers of a new continent even as late as 1751" (CC, 184–185). His principal criteria for judging the adequacy of the explorers' accounts were not only accuracy and truth but also an adequacy of imagination and something like that capacity for wonder before the New World that Nick Carraway lyrically describes at the end of *The Great Gatsby*. The historical analysis in "Provincetown," based as it is on the careful comparison of early accounts to later historians, is perhaps somewhat tedious and tendentious at times. But it is no mere groping among the dry bones of the past; it is a re-creative activity that strives to inculcate a wider, more catholic, and hospitable attitude toward the richness and the plenitude of American discovery than contemporary historians had displayed.

From these early-seventeenth-century explorations Thoreau gradually works his way further back in time, citing first various sixteenth-century sources—including Verrazzano, Hakluyt, Diego Ribero (a Spanish cartographer), and Jean Alphonse, the pilot for Roberval in 1542. Then he extends his range of reference even farther by way of C. C. Rafn's *Antiquitates Americanae*, an edition of Norse (Icelandic) sagas with historical and geographical introduction and notes that provided information about the Norse exploration of the New England coast in the eleventh century. (He had briefly encountered this tradition in Samuel Laing's translation of the *Heimskringla* of Snorri Sturluson a few years earlier.) He goes on to cite Lescarbot on the probability that French sailors had frequented the Newfoundland banks "from time immemorial," and Postel, a sixteenth-century

French writer quoted by Lescarbot, who averred that this area had been visited by Gauls since about the time of Christ. "But let us not laugh at Postel and his visions," Thoreau concludes. "He was perhaps better posted up than we; and if he does seem to draw the long-bow, it may be because he had a long way to shoot,—quite across the Atlantic. If America was found and lost again once, as most of us believe, then why not twice? . . . Consider what stuff history is made of,—that for the most part it is merely a story agreed upon by posterity" (CC, 196–197).

The revision of "Provincetown" from 1855 to around 1860 (the last dateable additions of historical material to the manuscript) suggests that Thoreau was attempting to conceive and write history in rather the same way that he was attempting to write natural history, that is, by familiarizing himself not only with the theories and conclusions of contemporary writers (i.e., Romantic historians such as Bancroft) but also with the oldest, sometimes legendary, accounts of the same events and places. The purpose of this process and the incorporation of these findings in his writing were not merely to debunk the more or less official "Pilgrim version" of early American history currently being promulgated by such orators on Plymouth Rock as Edward Everett (although this was surely a part of his aim) but rather to create a different historical conception of America as the gradual unfolding of a drama of discovery and imaginative appropriation of the continent by the European mind. Cape Cod became the logical locus for this effort because it was both the point of first contact for many explorers and an isolable geographical entity that could stand for the whole sweep of American history. "A man may stand there," he concludes in "Provincetown," stating a natural fact that simultaneously expresses an intellectual one, "and put all America behind him" (CC, 215).

Aboriginal History

THE remaining historical interest that occupied Thoreau during the 1850s—the history of North American Indian tribes before or just at the point of their first contact with white men—was perhaps even more difficult than early American history to pursue and to disentangle from the legends and myths that grew up around it. As in his early employment of historical material in *A Week*, his mature interest in Indian history grew out of or grew up simultaneously with his interest in American history in general, constituting in fact a sort of alternate or counter-history, attractive to him both because its subject was shrouded in mystery and because it was by definition tantalizingly pre-historic. At the same time that he was interested in Indians as the shad-

count of his voyage), there is a map of it made when it was known to Christendom as New France, called *Carte Geographique de la Nouvelle Franse faicte par le Sieur de Champlain Saint Tongois Cappitaine ordinaire pour le Roy en la Marine,—faict l'en 1612*, from his observations between 1604 and 1607; a map extending from Labrador to Cape Cod and westward to the Great Lakes, and crowded with information, geographical, ethnographical, zoological, and botanical. (pp. 179–181)

Pride in his own ancestry may account in some measure for Thoreau's allegiance to the French explorers, but his critique is really directed against the narrowness of conception and the lack of imagination that characterized both the English explorers and later American historians. From his reading of the early voyages and explorations he concluded that "the most distinguished navigators of that day were Italians, or of Italian descent, and Portuguese. The French and Spaniards, though less advanced in the science of navigation than the former, possessed more imagination and spirit of adventure than the English, and were better fitted to be the explorers of a new continent even as late as 1751" (CC, 184–185). His principal criteria for judging the adequacy of the explorers' accounts were not only accuracy and truth but also an adequacy of imagination and something like that capacity for wonder before the New World that Nick Carraway lyrically describes at the end of *The Great Gatsby*. The historical analysis in "Provincetown," based as it is on the careful comparison of early accounts to later historians, is perhaps somewhat tedious and tendentious at times. But it is no mere groping among the dry bones of the past; it is a re-creative activity that strives to inculcate a wider, more catholic, and hospitable attitude toward the richness and the plenitude of American discovery than contemporary historians had displayed.

From these early-seventeenth-century explorations Thoreau gradually works his way further back in time, citing first various sixteenth-century sources—including Verrazzano, Hakluyt, Diego Ribero (a Spanish cartographer), and Jean Alphonse, the pilot for Roberval in 1542. Then he extends his range of reference even farther by way of C. C. Rafn's *Antiquitates Americanae*, an edition of Norse (Icelandic) sagas with historical and geographical introduction and notes that provided information about the Norse exploration of the New England coast in the eleventh century. (He had briefly encountered this tradition in Samuel Laing's translation of the *Heimskringla* of Snorri Sturluson a few years earlier.) He goes on to cite Lescarbot on the probability that French sailors had frequented the Newfoundland banks "from time immemorial," and Postel, a sixteenth-century

French writer quoted by Lescarbot, who averred that this area had been visited by Gauls since about the time of Christ. "But let us not laugh at Postel and his visions," Thoreau concludes. "He was perhaps better posted up than we; and if he does seem to draw the long-bow, it may be because he had a long way to shoot,—quite across the Atlantic. If America was found and lost again once, as most of us believe, then why not twice? . . . Consider what stuff history is made of,—that for the most part it is merely a story agreed upon by posterity" (CC, 196–197).

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His studies in this area included not only what was known of the history and prehistory of Indian tribes but also natural history (their pharmacopeia, for example, or their uses and names for other natural products), ethnology, anthropology, linguistics, and other related disciplines, mostly in their infancy at the time. The material that he amassed in his studies was extensive—eleven volumes of notes on and extracts from his reading—but it proved to be relatively unmalleable as far as his own literary pursuits were concerned. He certainly entertained for a time, at least, the notion of writing a book on the Indians, but precisely what form it might have taken is difficult to say.²⁹ His reading in this field is relatively easy to chart, however, since he kept such careful extracts over the years. Its principal relation to his literary career appears to have been to provide a context in which to establish his growing capacity to appreciate and extract significance from his own rapprochement with a series of Indian guides on his Maine wilderness expeditions. The state of knowledge about Indian cultures in the 1850s was sketchy and inexact by modern standards, and like his contemporaries Thoreau was never able completely to overcome his predisposition to divide humanity into “civilized” and “savage” or “barbarian” categories. Nevertheless, in his Indian reading he attempted, albeit with limited success, to accomplish in a general way what his natural history and historical studies were also calculated to achieve: to humanize the discipline and to seek a way of expressing the results of his research that would preserve and communicate the personal immediacy of the act of knowing, and that would demonstrate the relatedness of facts discovered to other facts in the observer’s (or the reader’s) experience.

So intertwined are all Thoreau’s studies during this period that his series of Indian books containing the extracts from his reading seem to grow initially out of the reading he did for *Cape Cod* in 1849; and just as the reading he did for “An Excursion to Canada” eventually spilled over to the historical essay in *Cape Cod*, his notes on the history of Indians on Cape Cod eventually became the first surviving volume of his eleven-volume set of extracts and notes covering all aspects of Indian history and culture.³⁰ Moreover, the subject of Indians was inex-

29. Sayre, *Thoreau and the American Indians*, chap. 4, “A Book About Indians,” pp. 101–122.

30. Johnson, “Into History: Thoreau’s Earliest ‘Indian Book’ and His First Trip to Cape Cod.”

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Thoreau’s general interest in Indians dates back to his youth, when he had some familiarity with local legends and collected, as he continued to do for the rest of his life, arrowheads and other Indian artifacts.³¹ At this time, his reading consisted mainly of such popular collections of Indian lore and biography as Samuel Drake’s *Indian Biography* and B. B. Thatcher’s *Indian Traits*, miscellaneous compilations of legend, hearsay, travelers’ reports, and information of varying degrees of accuracy, all regarded from a perspective of Romantic and nostalgic lament for the inevitable passing away of the race. Thatcher, for example, in a passage that is representative of this sort of literature, describes Indian life before the coming of the Europeans as blissful and even edenic:

But generally they lived in circumstances of health, security and ease. The woods and the waters supplied them with their abundant livelihood, almost without effort. The hunter’s game was all around him, and above him, in the streams, forests and skies of his native land. And, above all, he was not only hardy, patient and brave, able to encounter the elements, and fearless to meet his foe in the field of battle; but he was a *free man*. The mountain eagle that screamed over the slow-soaring smoke of his wig-

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We find the cellars of their wigwams in our old pastures, moss-grown and yawning. We decipher their rude inscriptions on the rocks of the forest. The farmer's plough, perhaps, turns up the mouldering relics of their ancient dead. . . .

The time will come but too soon, we fear, when the history of the Indians will be the history of a people of which no living specimen shall exist upon the earth;—too soon will the places that now know them know them never again. Their council-fires will have gone out upon the green hills of the South. Their canoes shall plough no more the bosom of the Northern Lakes. Even the prairies and mountains of the far West will cease to be their refuge from the rushing march of civilization.³²

This curious but typical mixture of Rousseau-like admiration for the noble savage in the unfallen natural state and an almost gothic taste for melancholy reminders of the Indians' decline (Freneau's "Indian Burying Ground" is perhaps the most notable expression of the latter) may be detected in the background of Thoreau's early treatment of New England's Indian history in *A Week*. At this stage in his life, he conceived of the Indians largely as a race either extinct or on its way to extirpation. However sad or melancholy this fact, it was inevitable. Thus his treatment in "Ktaadn" (1848) of Louis Neptune, the Indian who was to guide him on his first wilderness trip to Maine, concludes with an apostrophe to the passing of the Indian that was actually quite conventional: "In a bark vessel sewn with the roots of the spruce, with horn-beam paddles he dips his way along. He is but dim and misty to me, obscured by the aeons that lie between the bark canoe and the batteau. . . . He glides up the Millinocket and is lost to my sight, as a more distant and misty cloud is seen flitting by behind a nearer, and is lost in space. So he goes about his destiny, the red face of man" (MW, 79). As the title of Cooper's *The Last of the Mohicans* suggests, early-nineteenth-century American books typically depict the Indian as passing away, a portent of the gradual disappearance of his race from the continent itself.

As he began his mature study of the subject, Thoreau started collecting—in a manner similar to the change in his natural history reading habits about the same time—more precise and concrete information about Indian customs, especially from the various contributors' accounts in the *Collections* of the Massachusetts Historical Society,

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With Indian book 4, however, compiled in 1850–1851 after his trip to Canada, Thoreau began to expand his Indian reading to the same primary French sources—Champlain, Roberval, Cartier, Lescarbot—that he had begun to draw upon for his American historical researches. The French explorers and even their missionaries he would find more useful than the English in providing reliable and even sympathetic descriptions of Indian life, for they were more prone to regard the Indians as human beings, to adopt their habits and mode of life, and actually to live among them. At the same time, he consulted writers in other fields who could provide corroborating or complementary information: Jacob Bigelow's *American Medical Botany* for the Indians' uses of medicinal plants, Charles Darwin's account of the voyage of the *Beagle* for the characteristics of the Indians of South America, and E. G. Squier's early work on Indian religion, *The Serpent Symbol*. He continued to collect miscellaneous information from the accounts of travelers, naturalists, missionaries, and explorers, but there was beginning to be a somewhat more scientific and comparative cast to the extracted material. At the same time that the subject thus began to open up to Thoreau it was also so enormous and simultaneously so embryonic (with vast amounts of new information appearing annually) that no real discernible shape or focus is evident in his note taking.

By 1852, with his sixth notebook, Thoreau had begun to make his major discoveries of important primary sources and to grasp the underlying social and political issues that made the "Indian question" so vexing to his culture. Behind all the collections and descriptions of Indian manners and customs was an extraordinarily touchy problem: Were the Indians a separate variety of humans, and if so, how had they gotten that way, and when? Were their differences to be ascribed to external conditions of environment or the hand of Providence? The contemporary literature on Indians thus participated in the larger ongoing debate about variation in nature, the fixity of species, and the plan of the Creator, if there was one, that characterized the natural sciences during the decade. Additionally, the 1840s and the 1850s were a period of explosive westward expansion, bringing the United States and its doctrine of manifest destiny into conflict with large numbers of potentially hostile tribes in Texas, the Great Plains, and the Far West. It was a period that saw, in Wilcomb Washburn's words, "the greatest real estate transaction in history," as tribe after tribe was in-

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time during which matter had become progressively more organized, was offered by Sir William Herschel's nebular hypothesis: that the celestial bodies had been formed out of primordial gas during remote eons—a view not too distant from our present cosmology. The fixity of species, heretofore an unquestioned and unquestionable assumption, was undermined by fossil records of animals that clearly existed no more, and by contemporary testimony from travelers and explorers that other animals—notably the dodo—had become extinct in modern times. In this interregnum between the passing away of the old static and rigidly hierarchic conception of the organization of nature, each of whose elements had been ordained and created from the beginning, and the gradual victory attained by the Darwinian model of development and speciation through *natural* selection (that is to say, through physical laws), Thoreau passed his career as a naturalist.

During this period, every naturalist had to wrestle, if only indirectly, with the great scientific issue of the age: What was the agency or mechanism by which change and development in nature occurred? Change there surely was. Among scientists even the most ardent supporters of special creation no longer defended the static view of nature that Thoreau had been exposed to in college. But how did nature change, how much, in what directions, and what did change portend or signify about humanity's place in nature? Not even the casual classifier or amateur naturalist (which Thoreau was assuredly not, in any case) could entirely escape the controversy and the unsettling questions, for even learning taxonomy required one to choose a system, and a system of classification in turn reflected an attitude toward the arrangement of species, genera, families, and so on that expressed an implicit adherence to some theory of creation or natural development. Thoreau's reading in natural science during this period served to acquaint him with the principal theoretical divisions among contemporary scientists, to provide him with a basic knowledge of the history of the major issues in science during his century, and to prepare him to read and be able to make an informed judgment about Darwin's *Origin of Species* early in 1860, almost immediately upon its publication in America.

At the same time, in his own field studies and writings he practiced a type of natural history that was different in kind from either that of the creationists and scriptural apologists on the one hand, or the more positivistic, proto-evolutionary biologists on the other,³ a kind of nat-

3. For a more sophisticated system of classifying the orientations of mid-nineteenth-century biologists, see Dov Ospovat, "Perfect Adaptation and Teleological Explanation: Approaches to the Problem of the History of Life in the Mid-Nineteenth Century," *Studies in the History of Biology* 2 (1978): 33–56. See also Neal C. Gillespie, *Charles Darwin and the Problem of Creation* (Chicago: University of Chicago Press,

ural history more closely related to Coleridge, Goethe, and German *Naturphilosophie* than either, but also containing highly distinctive elements of his own, marked by his increasing interest in such ancient natural historians as Aristotle, Pliny, and Herodotus. Thoreau's work as a naturalist during this decade was characterized, as we shall see, by an effort to give equal weight to both the natural and the historical components of *natural history*: that is, understanding the nomenclature and the relationships among phenomena as described by current science (the "natural" part) and at the same time treating those phenomena as having ultimate significance only through the history of their association with humankind. Concomitantly, he found both the orthodox Christian apologias for special creation and the nascent theory of organic evolution tinged with what he termed "infidelity." To fix the coordinates of his distinctive stance in the lively debate about the origin and development of life, then, it is necessary to sketch in some detail his reading of key documents and his own writing of natural history during the 1850s.

His grounding had been orthodox in the extreme, as I have suggested in the treatment of his natural history education (or lack of it) at Harvard, where he had read a classic apology for the "argument from design" in William Smellie's *The Philosophy of Natural History*. As the nineteenth century progressed, it became increasingly impossible to reconcile, as Smellie and his kindred had tried to do, the Mosaic account of creation with the discoveries of such new sciences as geology, paleontology, embryology, and comparative anatomy. In 1840, for example, Thoreau read one of the key works in the accelerating dismantling of the biblical chronology, Lyell's *Principles of Geology* (a book that, about the same time, was having a profound influence on the young Charles Darwin on board the *Beagle*).⁴ Although Lyell was a vigorous opponent of evolution, he argued for a uniformitarian geology whose imaginatively provocative vistas of eons upon eons opening backward in time provided a necessary prerequisite for a serious consideration of evolution. Another such essential prerequisite was the disproof of the fixity of species, and this had been provided principally by Baron Cuvier, another outspoken opponent but unwitting ally of the progressive development view, whose *The Animal Kingdom* Thoreau read in 1851. Cuvier established on a scientific footing the comparative study and classification of fossil fauna and announced the discovery of more than a score of extinct species. He furnished a portion

1979), esp. chap. 1, "Special Creation Among British and American Naturalists 1830–59," for an extremely useful overview of the terms of the debate.

4. Loren Eiseley, *Darwin's Century* (Garden City, N.Y.: Doubleday, 1958), p. 99.

of the methodology by which later paleontologists would demonstrate the common ancestry of various species through progressive structural differentiation.⁵

Gradually the old orthodoxy of the natural theologians who had defended for the most part the literal interpretation of Genesis (with some occasional slippage on the score of what a biblical "day" of creation consisted of) gave way to a somewhat awkward new orthodoxy that posited distinctly different periods of creation separated, if need be, by the long stretches of time required by the geologic and astronomical calendars. The large gaps frequently encountered in the fossil record and the appearance of highly developed organisms without the apparent existence of appropriately primitive earlier forms in older strata made it for a time plausible to argue that, although the different major classes of plants and animals had clearly come into existence at different times and not all at once, there was not sufficient evidence to prove that later groups had developed from earlier ones. As Edward Hitchcock, an eminent Massachusetts geologist whose work Thoreau knew well, put it, "Geology shows a divine hand cutting the chain asunder at intervals, and commencing new series of operations."⁶

This theory provided for a carefully circumscribed sort of evolution and a generally beneficent sort of progressionism. If the major subdivisions of organic life had, as the fossil record then suggested, appeared suddenly at different times in the history of the earth, and if some modern animals, including man, bore striking resemblances to earlier forms, then a kind of organic typology was evident in nature. Although the major groups themselves gave indications of progressive development in complexity from the one to the other over time (from invertebrates to vertebrates, for example), such profound gaps existed between them that they could only have been created separately and could not have arisen gradually from a common ancestor. Thus, the argument went, the fossil record revealed creation in steps, with natural laws sufficing to explain development within but not between major groups. Read this way, as it was by many competent scientists, the geological record seemed to reveal an anticipation of man, as the creator gradually and carefully prepared for the apotheosis of creation by successively bringing into existence increasingly sophisticated forms, all ultimately pointing toward the pinnacle that would be reached in *Homo sapiens*.

A refined and idealistic—as opposed to the earlier utilitarian—argument from design was still intact, in other words, one refined to in-

5. Ibid. pp. 80–89.

6. *The Religion of Geology*, quoted in Gillespie, *Charles Darwin*, p. 23.

corporate the results of the new sciences. The scientists who made the discoveries and provided much of the evidence later adduced to support the theory of evolution were often the most vigorous in their defense of what was still called "the plan of the Creator." The principal American apologist of this school of progressive but separate creations was also the most distinguished, popular, and in many ways the most brilliant scientist of his day, Louis Agassiz, with whom Thoreau was personally acquainted and whose works he knew well. It will be remembered that Thoreau's first contact with Agassiz had occurred in 1847, when he began corresponding with Agassiz (through his assistant James Elliot Cabot) and collecting specimens for him. Thoreau also may have attended Agassiz's fashionable "Plan of Creation" lectures in Boston the previous winter. He acquired in 1850 or 1851 as his major zoological text the manual that Agassiz wrote with Augustus A. Gould, *Principles of Zoology*.

This book was considerably more than a mere manual of zoology, however, for in it Agassiz set forth and argued for his particular theory of creation, from which it will be necessary to quote at some length in order to give an idea of the prevailing theoretical climate in which Thoreau worked:

It is evident that there is a manifest progress in the succession of beings on the surface of the earth. This progress consists in an increasing similarity to the living fauna, and among the Vertebrates, especially, in their increasing resemblance to Man.

But this connection is not the consequence of a direct lineage between the faunas of differing ages. There is nothing like parental descent connecting them. . . . The link by which they are connected is of a higher and immaterial nature; and their connection is to be sought in the view of the Creator himself, whose aim, in forming the earth, in allowing it to undergo the successive changes which Geology has pointed out, and in creating successively all the different types of animals which have passed away, was to introduce Man upon the surface of our globe. Man is the end towards which all the animal creation has tended, from the first appearance of the first Palaeozoic fishes.

To study, in this view, the succession of animals in time, and their distribution in space, is, therefore, to become acquainted with the ideas of God himself.⁷

A graphic synopsis of Agassiz's plan of creation is contained in the diagram that serves as the frontispiece to *Principles* showing the five

7. Louis Agassiz and Augustus A. Gould, *Principles of Zoology*, new revised ed. (Boston: Gould and Lincoln, 1873), pp. 237–238.

major groups of fauna and their successive but separate first appearances on the globe.

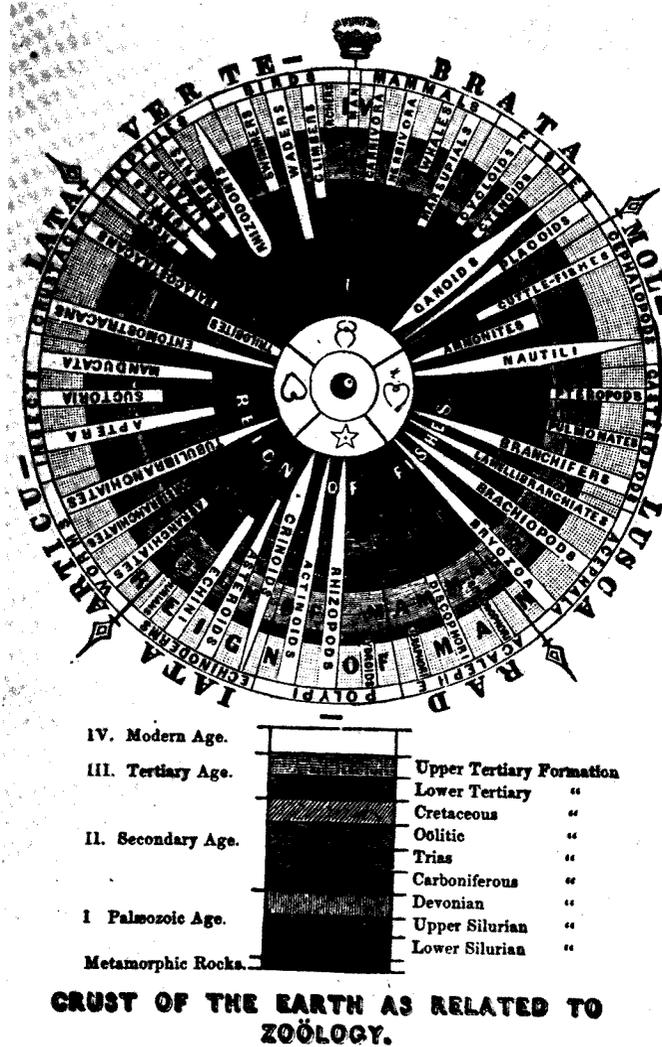
Thus Agassiz's theory of different epochs of creation required him to posit what he termed in the *Essay on Classification*, another work with which Thoreau was acquainted, "repeated interventions on the part of the Creator," so that he was in the uncomfortable position (for a scientist) of having to argue for and defend not one divine suspension of natural law, but several. Agassiz had been influenced in his youth by the *Naturphilosophie* of Oken and Schelling, and he never lost his belief in the "higher and immaterial" essence of nature, a belief that eventually led him to become the leading spokesman for the opponents of Darwinism in America.⁸ Agassiz retained his public popularity, but as a consequence of his opposition to Darwin he and the other proponents of the creationist philosophy gradually lost credibility in the scientific community after 1860.

But before this time he had no real opponents and his theory dominated the field, at least in America. Ironically, Agassiz too was one of the unwitting contributors to the general and eventual triumph of the Darwinian model, for like Lyell and Cuvier he was a brilliant scientist whose work in paleontology and embryology—stressing the tendency of the embryo to pass through successive earlier stages of development (work that played a part in the development of the now-familiar idea that ontogeny recapitulates phylogeny)—Darwin himself cited as a point of support for the theory of natural selection.⁹ One of Agassiz's other major contributions to science was a theory of glaciation which solved a major problem in geology and further weakened the biblical explanations that began by assuming the literal truth of the Noachian deluge.

One of the most bizarre offshoots of Agassiz's theory of separate creations was its use by pro-slavery scientists to defend the South's peculiar institution. If the characteristic human races of each part of the globe had been created separately, they might not be intrinsically equal, and it became easier to construct a rationale for the subservience of those supposedly inferior races. Two such works that Thoreau knew were Charles Pickering's *The Races of Man* and Nott and Glidden's *Types of Mankind*, the latter containing a prefatory sketch by Agassiz. Although a patriotic supporter of the North during the Civil War, Agassiz continued to assert the separate creation and physical inferiority of the Negro race.

8. Edward Lurie, *Louis Agassiz: A Life in Science* (Chicago: University of Chicago Press, 1960), pp. 27-28.

9. *Ibid.* p. 288.



Frontispiece of Agassiz and Gould's *Principles of Zoology*, illustrating the different epochs of creation.

In the passage from the conclusion of *Principles of Zoology* quoted earlier, it will be noted that Agassiz takes pains explicitly to deny the possibility of "parental descent" in the evolution of major groups from a common ancestor, and that he makes this denial well in advance of Darwin's postulation of such a theory of descent. The idea of organic evolution, in other words, was already in the air and being widely discussed by scientists, theologians, and educated persons generally. That it required rebuttal this early was due largely to the controversy beginning in 1844 over an anonymously published book titled *Vestiges of the Natural History of Creation*, by a Scottish journalist and amateur naturalist named Robert Chambers. *Vestiges* put forward for the first time in England a comprehensive and elaborately buttressed theory of organic evolution without the need for a first cause or special creation at any point. Despite the fact that its arguments and evidence were often weak or wrong, and that Chambers himself was not highly qualified in all the branches of natural science from which he adduced evidence, the book made the first really bold and in many ways impressive argument for the creation of organic life out of inorganic materials and for its successive evolution through time into the various classes of flora and fauna that came to populate the globe—all without requiring the direct or indirect intervention of God.¹⁰ Milton Millhouser, in *Just Before Darwin*, his study of Chambers and *Vestiges*, describes the furor that ensued: "For four years now [in 1848] it [*Vestiges*] had been the center of a fierce little storm, the target of a steady fire of philosophic analysis, scientific ridicule, and theological vituperation. Its author was variously denounced as atheist, shallow smatterer, and credulous dupe. The work itself, alarmingly popular despite a merciless critical pounding, was regarded by the orthodox as pernicious in the very highest degree."¹¹

It was of Chambers principally that Agassiz was thinking when he denied the possibility of "parental descent," and this cudgel was taken up by numerous other scientists and religious thinkers during the 1850s, the chief among whom was Hugh Miller, another Scotsman who was also an amateur geologist and a polemicist in the Presbyterian Free Church controversy. He published in 1849 a somewhat strident refutation of *Vestiges* with the wonderful title *The Foot-prints of the Creator; or, The Asterolepis of Stromness*, issued in an American edition in 1850 with a laudatory memoir of Miller by Agassiz—which, in

10. Milton Millhouser, *Just Before Darwin* (Middletown, Conn.: Wesleyan University Press, 1959), esp. chap. 4, "Vestiges of the Natural History of Creation," pp. 86–115.

11. *Ibid.* p. 4.

the climate of the day, amounted to a kind of semi-official imprimatur. In this and other popular works such as *The Old Red Sandstone* and *The Testimony of the Rocks*, Miller became the chief reconciler of orthodox religion with the new geological science, like Agassiz trying to show that the fossil record revealed the creator's progressive plan and that, without a first cause and successive interventions by God, evolution was impossible. Even more important, perhaps, it was greatly to be feared. In *Foot-prints of the Creator*, with characteristic bluntness, Miller let the real cat out of the bag. The "development hypothesis" he says, referring to Chambers's theory of organic evolution, "would fain transfer the work of creation from the department of miracle to the province of natural law, and would strike down, in the process of removal, all the old landmarks, ethical and religious."¹²

The reason that these landmarks would be struck down is quite clear if one carries, as Miller does, the implications of the "development hypothesis" to their logical conclusion:

If, during a period so vast as to be scarce expressible by figures, the creatures now human have been rising, by *almost* infinitesimals, from compound microscopic cells,—minute vital globules within globules, begot by electricity on dead gelatinous matter—until they have at length become the men and women whom we see around us, we must hold either the monstrous belief that all the vitalities, whether those of monads or of mites, of fishes or of reptiles, of birds or of beasts, are individual and inherently immortal and undying, or that human souls are *not* so.¹³

Thoreau knew not only the principal works of Agassiz but also Chambers's *Vestiges*, Miller's refutation of Chambers in *Foot-prints*, and the other works by Miller named earlier. He knew Agassiz and his work well enough to refer to him frequently in the *Journal* in the 1850s and to discuss learnedly with him the copulation of turtles and like matters at dinner at Emerson's in 1857 (JL 9.298–299). For the most part in his *Journal* and notebooks, in fact, he confines himself to such phenomenal or factual matters as these and does not comment directly upon the relative merits of the arguments on either side of the large issue of development versus special creation. A significant exception to this reticence, however, comes in a *Journal* entry for September 28, 1851, after Thoreau had been reading Miller's *Old Red Sandstone*. Miller had described the beauty of a fossil fish and then ventured to

12. Hugh Miller, *Footprints of the Creator; or, the Asterolepis of Stromness* (Boston: Gould and Lincoln, 1856), p. 36.

13. *Ibid.* p. 38.

speak of it as *almost* approaching a kind of moral beauty. Thoreau's comment makes clear the grounds of his divergence from both Miller's and Chambers's school of thought: "The hesitation with which this is said—to say nothing of its simplicity—betrays a latent infidelity more fatal far than that of the 'Vestiges of Creation,' which in another work this author endeavors to correct. He describes that as an exception which is in fact the rule. The supposed want of harmony between 'the perception and love of the beautiful' and a delicate moral sense betrays what kind of beauty the writer has been conversant with" (JL 2.30–31). Although he appears to be speaking as much about art and beauty as about nature here, Thoreau's point is that the realms of the beautiful and the good and the natural cannot be separated, and the fatal flaw or "infidelity" in Miller's treatment of nature is simply another manifestation of the flaw of orthodox Christianity generally in fixing creation at some former date. For Thoreau, as for Emerson, morality or virtue was not to be separated from beauty, and creation was not to be assigned to some former era, no matter how ingeniously the fossil record might be interpreted. It was the perception of the divine that rendered nature both beautiful and good and made it live. To treat it as evidence of creation at some former time, whether through science or religion, was to convert it into dead matter. For Emerson, in the Divinity School Address, the duty of the minister was to show not that God was, but is; for Thoreau, the duty of the naturalist was to show not that creation was, but is. The triumphant climax of "Spring" in *Walden*, in this context, is both an assertion of the vital principle animating nature and a fairly explicit refutation of the contemporary squabbles over the meaning of the geologic record:

The earth is not a mere fragment of dead history, stratum upon stratum like the leaves of a book, to be studied by geologists and antiquaries chiefly, but living poetry like the leaves of a tree, which precede flowers and fruit,—not a fossil earth, but a living earth; compared with whose great central life all animal and vegetable life is merely parasitic. (p. 309)

As Thoreau's comments about the worse "infidelity" of Miller suggest, a thoroughgoing Transcendental naturalist would find it easier to accept organic evolution than special creation. The notion of a universe in a continual state of becoming, where nature is dynamic and evolving, was a world image far more appealing to Transcendentalists than the model of a world of creative starts and stops advanced by the reconcilers of science with Christian orthodoxy. The assumption that Thoreau made—his primary article of faith, as it were—that nature was an externalization of spirit, did not preclude his acceptance of ev-

olution, which dealt really only with nature as phenomena, the "dumb, beautiful ministers" of Walt Whitman's "Sun Down Poem." Scientific evolution might accurately describe the actual, in other words, without touching what was ultimately real; and it was certainly a more powerful paradigm for the study of natural history than the patchwork theory of Agassiz and his allies that required successive episodes of miraculous intervention by God interspersed with eons of uninterrupted natural law in order to account for the diversity of types and species.

Thus, when Darwin's *Origin of Species* appeared in late 1859, Thoreau was not only ready and eager to read it but also inclined to be favorably disposed toward it. He acquired the book from the Town Library early in 1860, immediately upon its accession, it would appear, and made extracts from it in his natural history "fact book." Shortly afterward, he told Franklin Sanborn that he liked the *Origin of Species* very much.¹⁴ Although, characteristically, his extracts do not distill Darwin's thesis directly, but rather consist mostly of curious or significant phenomena that he was interested in, he did note details about the naturalization of plants and the dispersion of seeds that show his careful attention to aspects of the theory that bore on his current project of studying the dispersion and succession of plant species within a given area.

He seems, in fact, to have seized on both the theoretical strength of Darwin and the corresponding weakness of Agassiz. In the spring of 1860, Emerson quotes a remark of Thoreau's that cogently expresses a fundamental difference between the two theories: On being told, apparently, that Agassiz had scoffed at Darwin, Thoreau said, "If Agassiz sees two thrushes so alike that they bother the ornithologist to discriminate them, he insists they are two species; but if he sees Humboldt [the great German natural scientist] and Fred Cogswell [a retarded inmate of the Concord Almshouse], he insists that they come from one ancestor" (JMN 14.350). What Agassiz and his school of scientists were not willing to acknowledge, in other words, was the infinite series of gradations in nature that suggested that species varied naturally. At the same time, they clung to a belief in the uniqueness of human beings—at least Caucasians—despite the evidence that they, too, varied widely, naturally, and in precisely the same ways.

Thoreau's reading of Darwin, as William L. Howarth has suggested, may even have given him considerable impetus for his own natural history writing. He had been interested for several years in the dispersion of seeds and the succession of plants within particular habitats,

14. Harding, *Days*, p. 429.

and in 1860 he began composing a long work on this subject that remained unfinished at his death.¹⁵ He did manage in the fall of 1860 to extract from this work in progress a lecture and an essay titled "The Succession of Forest Trees" that probably gives a fair indication of the direction of the whole. Working in the essay as a self-proclaimed Transcendentalist, one whose interest ultimately is the significance of the seed as expressive of a vital principle of nature, Thoreau nonetheless offers a convincing and scientifically sound analysis of how plant communities—in this case oaks and pines—progress toward what botanists would later call the climax phase of vegetation. The image of the natural world that he depicts is in certain senses compatible with the Darwinian view—one of constant competition, struggle, and change—but on the other hand still expressive of the integral and dynamic whole that speaks to humanity of nature's vital spiritual center.

At the same time that he was following the developments in contemporary natural science that culminated in the *Origin of Species*, however, Thoreau was also discovering another world of natural history of equal fascination and importance to him in the works of ancient Greek and Latin naturalists and earlier English natural historians and herbalists. He began reading Aristotle, Aelianus, Theophrastus, Herodotus, and Pliny in earnest in 1859 and made rather extensive extracts from their works in his notebooks and frequent allusions to them in his Journal. He also began working references to them into his current natural history writings. Ellery Channing, who knew Thoreau's current interests better than anyone, believed that "he meant probably to translate and write on the subject [natural history] as viewed by the ancients."¹⁶ Whether or not Channing was correct, it is nevertheless true that Thoreau devoted a great deal of time and care to reading the ancient natural history writers and the earlier English herbalists and natural historians—Gerard for example, and Evelyn, and Edward Topsell's sixteenth-century translation of *The Historie of Four-footed Beasts*. Thoreau found in these earlier writers a freshness of language and a vividness of description that were a pleasing antidote to contemporary scientific writing and nomenclature:

The most poetic and truest account of objects is generally by those who first observe them, or the discoverers of them, whether a sharper perception and curiosity in them led to the discovery or the greater novelty more inspired their report. Accordingly, I love most to read the accounts of a country, its natural produc-

15. Howarth, *The Book of Concord*, pp. 195, 203–208.

16. *Thoreau: The Poet-Naturalist*, p. 61.

tions and curiosities, by those who first settled it, and also the earliest, though often unscientific, writers on natural science. (JL 9.232)

In another sense these writers were less a restorative contrast to the dryness of modern scientific writing than they were a necessary complement to it and an essential component of the true natural history of any phenomenon, because their very words, according to Thoreau's extension of the Transcendental theory of language, were literally as well as figuratively true to life:

As in the expression of moral truths we admire any closeness to the physical fact which in all language is the symbol of the spiritual, so, finally, when natural objects are described, it is an advantage if words derived originally from nature, it is true, but which have been turned (tropes) from their primary signification to a moral sense, are used, i.e., if the object is personified. The one who loves and understands a thing the best will incline to use personal pronouns in speaking of it. To him there is no neuter gender. Many of the words of the old naturalists were in this sense doubly tropes. (JL 13.145–146)

As words generally reveal their full meaning only if one is acquainted with their etymologies, so particular natural facts disclose their real significance only through the history of their association with man. Thoreau's appreciation of the old natural history writers marks his belief that the meaning of nature is dependent upon man, the perceiver, and that natural *history* must indeed have a historical component: To know a natural object—the apple tree in "Wild Apples," for example—requires more than fixing its genus and species and being able to identify its varieties; it involves tracing, as Thoreau does in the beginning of that essay, the history of the apple tree's association with man, giving the sum of its histories, so to speak, and attempting to write a diachronic natural science in which the discoveries of the present day do not invalidate but rather take their place in succession with those of the past.¹⁷ As "The Succession of Forest Trees" is part of a longer unfinished manuscript on the dispersion of seeds, "Wild Apples" is part of a longer unfinished work on wild fruits, only one other part of which, a lecture on huckleberries, Thoreau was able to put into something like finished form before he died.¹⁸ These few pieces, however, all show the coalescence of his careful observation, acquaintance

17. Robert Sattelmeyer, "Introduction," to Henry David Thoreau, *The Natural History Essays* (Salt Lake City: Peregrine Smith Press, 1980), pp. xxx–xxxiv.

18. Howarth, *The Book of Concord*, pp. 184–186.

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chronicling: the extent and richness of what he came to call the "Ante-Pilgrim" history of the New World.

The Canada notebook itself gives physical testimony to this bifurcation of interest. It divides into two sections, one commencing at each end of the notebook (that is, Thoreau wrote one series of notes starting from the front of the notebook and then, turning the notebook upside down, another series starting from the back). The first section, as Lawrence Willson has described it, was made "from late 1850, just after his return from Canada, until he wrote his lecture and presented 'A Yankee in Canada' for publication early in 1852," and consisted mostly of information that would help fill out and embellish the narrative—details about the St. Lawrence River, statistics about the population of Canada, early settlement, the climate (especially the effects of extreme cold), and so forth.²⁴ The sources quoted are not, for the most part, historical, although Thoreau does extract primary material on early voyages to New France by Cartier and Jean Alphonse from a volume of the *Transactions* of the Literary and Historical Society of Quebec and from Charlevoix's *Histoire . . . de la Nouvelle France* (1744), both of which would be important sources for him. In general, however, this material does not suggest a depth of historical interest growing out of the Canada trip.

The other section of the notebook begins in parallel with the first section of notes as far as chronology is concerned—commencing in November 1850 and running to 1855 or 1856—but consists of quite different though related material. Thoreau's first entry in the section suggests the nature of his interests:

November 18, 1850
Saw at Cambridge . . . the following old books containing maps.
1570 to 84. Ortelius
1597 Wytfliet
1612 1st ed
1609 . . . Lescarbot [etc.]²⁵

The notes that he took on these early maps of the New World pay special attention to the depiction of Canada and the St. Lawrence, so they are related to the Canadian project, but they opened for him a much more interesting subject than could be subsumed or contained in the account of his rather disappointing excursion. The progress of cartography, starting with the very earliest sixteenth-century sources in which the ratio of wishful thinking and fantasy to accurate depiction

24. "Thoreau's Canadian Notebook," p. 189.

25. *Ibid.* p. 190.

is especially high, provided him literally with a graphic representation of the evolution of the idea of America in the European mind in the sixteenth, seventeenth, and eighteenth centuries. The phenomenon of America, he was discovering, was a much wider and more important subject to the Western mind than the rather narrow range of events described by American historians generally suggested, since that version emphasized British exploration and settlement.

Soon he began making notes from Samuel de Champlain's *Voyages*, taking pains to describe to himself the material contained in different early editions of Champlain's work, and also from Marc Lescarbot's *Histoire de la Nouvelle-France*. These primary sources, especially Champlain, who quickly became Thoreau's standard by which to judge other explorers' accounts, opened his eyes for the first time to the superiority as well as the chronological precedence of the French explorers. He continues the notebook with a "general denunciation, by implication," as Willson terms it, "of English writers on America for their neglect of the French source books [and maps] he has consulted."²⁶

This discovery was leading him in a direction that was at odds with the atmosphere and themes of his Canada story, in which he portrayed the French-based civilization of Quebec as derivative, decadent, and marked by feudal anachronisms repugnant to a Yankee. The subject belonged, more naturally, with his story of Cape Cod, an isolable American geographical entity that could serve to represent the developments and the vicissitudes in American history. Accordingly, at some point in the composition of both works he made a decision to integrate the results of his historical researches into the Cape Cod narrative. In the manuscript of "An Excursion to Canada" there survives a portion of an early draft that indicates this decision clearly: In the midst of a discussion about Champlain he notes on the blank portion of a leaf, "Missing pages transferred to Cape Cod," and the next surviving leaf has several reworkings of a passage on Champlain and Lescarbot, praising their "instructive & interesting" accounts and taking to task the contemporary American historian George Bancroft, who "appears never to have heard of" Champlain's early *Voyages*. The polemic concludes: "It is remarkable that so interesting & particular an account of the coast of New England should have been written and given to the world—as early as 1613 several editions of which are to be found at Cambridge—& yet no Historian[s] of America have even seen them!"²⁷

The upshot of this discovery and the consequent professional deci-

26. *Ibid.* p. 194.

27. CSMH (HM 953).

sion to integrate the subject into the *Cape Cod* manuscript was that that work, especially the last chapter, "Provincetown," gradually expanded to become a detailed exposition and critique of early American history in both senses of the word—that is, the events of the past and the discipline of writing about them. Like "An Excursion to Canada," *Cape Cod* originally contained a fair number of historical references in addition to topographical, descriptive, social, and statistical information that fleshed out the narrative of Thoreau's 1849 journey. But "Provincetown" in this early (pre-1855) state probably contained for its historical theme mainly Thoreau's sarcastic running commentary on the difference between his and Channing's experiences of the Cape and those of the Pilgrims as described in Mourt's "Relation," a sort of collective journal of the Plymouth colony founders. (He counters, for example, the Pilgrim's assertion that the land of the Cape was "excellent black earth" to "a spit's depth" by observing that he and Channing "did not see enough black earth in Provincetown to fill a flowerpot").²⁸

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The revision of "Provincetown" from 1855 to around 1860 (the last dateable additions of historical material to the manuscript) suggests that Thoreau was attempting to conceive and write history in rather the same way that he was attempting to write natural history, that is, by familiarizing himself not only with the theories and conclusions of contemporary writers (i.e., Romantic historians such as Bancroft) but also with the oldest, sometimes legendary, accounts of the same events and places. The purpose of this process and the incorporation of these findings in his writing were not merely to debunk the more or less official "Pilgrim version" of early American history currently being promulgated by such orators on Plymouth Rock as Edward Everett (although this was surely a part of his aim) but rather to create a different historical conception of America as the gradual unfolding of a drama of discovery and imaginative appropriation of the continent by the European mind. Cape Cod became the logical locus for this effort because it was both the point of first contact for many explorers and an isolable geographical entity that could stand for the whole sweep of American history. "A man may stand there," he concludes in "Provincetown," stating a natural fact that simultaneously expresses an intellectual one, "and put all America behind him" (CC, 215).

Aboriginal History

THE remaining historical interest that occupied Thoreau during the 1850s—the history of North American Indian tribes before or just at the point of their first contact with white men—was perhaps even more difficult than early American history to pursue and to disentangle from the legends and myths that grew up around it. As in his early employment of historical material in *A Week*, his mature interest in Indian history grew out of or grew up simultaneously with his interest in American history in general, constituting in fact a sort of alternate or counter-history, attractive to him both because its subject was shrouded in mystery and because it was by definition tantalizingly pre-historic. At the same time that he was interested in Indians as the shad-

owy figures who flitted through the annals of early New England, however, he was more fascinated by what he came to perceive as their potential for guiding him toward some wisdom gained through the apprehension of nature that had been lost by civilized people.

His studies in this area included not only what was known of the history and prehistory of Indian tribes but also natural history (their pharmacopeia, for example, or their uses and names for other natural products), ethnology, anthropology, linguistics, and other related disciplines, mostly in their infancy at the time. The material that he amassed in his studies was extensive—eleven volumes of notes on and extracts from his reading—but it proved to be relatively unmalleable as far as his own literary pursuits were concerned. He certainly entertained for a time, at least, the notion of writing a book on the Indians, but precisely what form it might have taken is difficult to say.²⁹ His reading in this field is relatively easy to chart, however, since he kept such careful extracts over the years. Its principal relation to his literary career appears to have been to provide a context in which to establish his growing capacity to appreciate and extract significance from his own rapprochement with a series of Indian guides on his Maine wilderness expeditions. The state of knowledge about Indian cultures in the 1850s was sketchy and inexact by modern standards, and like his contemporaries Thoreau was never able completely to overcome his predisposition to divide humanity into “civilized” and “savage” or “barbarian” categories. Nevertheless, in his Indian reading he attempted, albeit with limited success, to accomplish in a general way what his natural history and historical studies were also calculated to achieve: to humanize the discipline and to seek a way of expressing the results of his research that would preserve and communicate the personal immediacy of the act of knowing, and that would demonstrate the relatedness of facts discovered to other facts in the observer’s (or the reader’s) experience.

So intertwined are all Thoreau’s studies during this period that his series of Indian books containing the extracts from his reading seem to grow initially out of the reading he did for *Cape Cod* in 1849; and just as the reading he did for “An Excursion to Canada” eventually spilled over to the historical essay in *Cape Cod*, his notes on the history of Indians on Cape Cod eventually became the first surviving volume of his eleven-volume set of extracts and notes covering all aspects of Indian history and culture.³⁰ Moreover, the subject of Indians was inex-

29. Sayre, *Thoreau and the American Indians*, chap. 4, “A Book About Indians,” pp. 101–122.

30. Johnson, “Into History: Thoreau’s Earliest ‘Indian Book’ and His First Trip to Cape Cod.”

trically bound up with American history and natural history, Thoreau’s other major areas of interest during the 1850s. One of the most sensitive and important issues in natural science at this time, for example, was the ancestry and origins of the various races, and Thoreau’s reading in the primitive anthropological speculations of his day took him over some of the same ground that he covered in following the debates among biologists about the origins and ancestry of other species—with the significant difference that theories about the ancestry and inherent characteristics of people were not solely academic or religious issues. They were sometimes used to justify social and political decisions (the removal of Indian tribes to the West, for example) affecting the lives and the very survival of so-called primitive peoples. For obvious reasons, it is even more difficult to separate Indian history from early American history when, as in the case of Thoreau, the researcher’s interest centers upon early exploration and discovery by Europeans and upon the period of first contact with Europeans by the Indians. The two subjects are merely different versions of or ways of looking at the same historical and cultural moment.

Thoreau’s general interest in Indians dates back to his youth, when he had some familiarity with local legends and collected, as he continued to do for the rest of his life, arrowheads and other Indian artifacts.³¹ At this time, his reading consisted mainly of such popular collections of Indian lore and biography as Samuel Drake’s *Indian Biography* and B. B. Thatcher’s *Indian Traits*, miscellaneous compilations of legend, hearsay, travelers’ reports, and information of varying degrees of accuracy, all regarded from a perspective of Romantic and nostalgic lament for the inevitable passing away of the race. Thatcher, for example, in a passage that is representative of this sort of literature, describes Indian life before the coming of the Europeans as blissful and even edenic:

But generally they lived in circumstances of health, security and ease. The woods and the waters supplied them with their abundant livelihood, almost without effort. The hunter’s game was all around him, and above him, in the streams, forests and skies of his native land. And, above all, he was not only hardy, patient and brave, able to encounter the elements, and fearless to meet his foe in the field of battle; but he was a *free man*. The mountain eagle that screamed over the slow-soaring smoke of his wig-

31. See, for example, COR, 16–18, 24–25; also Kenneth Walter Cameron, “Books on Indians Which Thoreau Knew or Might Have Known by November, 1837,” *Emerson Society Quarterly* 1 (4 Qtr. 1956): 10–12.

with contemporary scientific work, and incorporation of the work of the ancients into what was—inchoately, perhaps—a distinctive mode of natural history writing in America, one that placed equal emphasis on the natural and the historical.

Civil History

IN APRIL 1858, Emerson reported to a correspondent, H. S. Randall, that “[Thoreau’s] study seems at present to be equally shared between Natural and Civil History; . . . he reads both with a keen and original eye.”¹⁹ The “Civil History” Emerson refers to is the history of the early exploration and discovery of the North American continent, especially the northeast coast of New England and Canada, and his observation that this interest was equally shared with natural history is accurate, for Thoreau’s preoccupations with the two types of history did indeed develop together and with equal strength during the last decade of his life. And like his absorption in natural science, his fascination with regional and early American history began to be concerted and serious during the period of stabilization and redirection in his career around 1850. He had explored local New England and Concord history earlier for *A Week* and in the elegiac account “Former Inhabitants” in *Walden* (much of which was drafted in the Journal as early as 1845–1846), but history first became a major intellectual preoccupation following his visits to Cape Cod in 1849 and 1850 and his trip to Montreal and Quebec in 1850. These excursions stimulated his interest in the wider field of early American history by presenting him with certain intellectual problems and opportunities that he attempted to work out and capitalize upon during the ensuing decade. The most important of these discoveries was the realization that the story of early exploration and colonization was much more complex, varied, and problematic than he had realized, and that Cape Cod itself offered a unique ground upon which to practice the discipline of history. A cape, as he described its etymology in the beginning of his narrative, was “that part by which we take hold of a thing,” and the “thing” that Thoreau had in mind was ultimately no less than the historical evolution of the idea of America itself.

Since Thoreau traveled infrequently, he customarily tried to make his excursions as intense and concentrated as possible by reading as much as he could lay his hands on about the history of the object of

19. Partial transcription of letter in sale catalogue of *The Stephen H. Wakeman Collection of Books of Nineteenth-Century American Writers* (New York: American Art Association, 1924), item 211.

his journey before, during, and after the trip. He and his brother had carried John Hayward’s *New England Gazetteer* with them on the Concord and Merrimack in 1839, and when Thoreau and Ellery Channing first visited Cape Cod ten years later, he read “some short notices of the Cape towns” in the eighth volume of the first series of Massachusetts Historical Society *Collections* while the stagecoach passed through the various villages described (WE, 221; CC, 20). After (and possibly before as well) the trip to the Cape and his trip to Canada the next year, Thoreau began to compile a bibliography and take notes on documentary and secondary sources for the history of both Canada and Cape Cod in his Canada notebook.²⁰

These two reading projects at first overlapped and then became differentiated from one another over the years. Thoreau was fascinated by Cape Cod, so much so that he was able to compose and deliver a quite popular lecture on the Cape within a few months of his first visit. He took pains to return to gather more impressions and information the following summer. He remained interested in the Cape, its history, and its people, returning again in 1855 and 1857 and adding information to the unpublished portion of his manuscript of *Cape Cod* until shortly before his death.²¹ The Canadian excursion, on the other hand, failed to arouse much enthusiasm in him. Thoreau responded somewhat chauvinistically to French Canadian civilization, the British military presence there, and the Roman Catholicism of the inhabitants. His account of the excursion in “A Yankee in Canada,” which was suspended part way through its serialization in *Putnam’s* when Thoreau refused to excise or tone down what the genteel George William Curtis considered to be “heresies” in the essay,²² is probably the least inspired of his travel essays. He himself confessed to being strangely unmoved by this trip—his only one outside the United States—and largely indifferent to the literary project that developed from it.²³

Yet imaginatively his visit to French Canada was perhaps the key to his sustained interest in Cape Cod and in early American history, for in the process of researching the early history of French settlement and exploration in North America, he began to piece together the threads of a story that he would devote much of his attention in *Cape Cod* to

20. See Willson, “Thoreau’s Canadian Notebook.”

21. Harding, *Days*, pp. 270–272, 359–361, 382–385; see also “Historical Introduction,” *Cape Cod*, ed. Joseph J. Moldenhauer (Princeton: Princeton University Press, 1988).

22. Harding, *Days*, pp. 282–283.

23. In a letter to Blake (COR, 299), he said frankly of “An Excursion to Canada,” “I do not wonder that you do not like my Canada story. It concerns me but little, and probably is not worth the time it took to tell it.”

chronicling: the extent and richness of what he came to call the "Ante-Pilgrim" history of the New World.

The Canada notebook itself gives physical testimony to this bifurcation of interest. It divides into two sections, one commencing at each end of the notebook (that is, Thoreau wrote one series of notes starting from the front of the notebook and then, turning the notebook upside down, another series starting from the back). The first section, as Lawrence Willson has described it, was made "from late 1850, just after his return from Canada, until he wrote his lecture and presented 'A Yankee in Canada' for publication early in 1852," and consisted mostly of information that would help fill out and embellish the narrative—details about the St. Lawrence River, statistics about the population of Canada, early settlement, the climate (especially the effects of extreme cold), and so forth.²⁴ The sources quoted are not, for the most part, historical, although Thoreau does extract primary material on early voyages to New France by Cartier and Jean Alphonse from a volume of the *Transactions* of the Literary and Historical Society of Quebec and from Charlevoix's *Histoire . . . de la Nouvelle France* (1744), both of which would be important sources for him. In general, however, this material does not suggest a depth of historical interest growing out of the Canada trip.

The other section of the notebook begins in parallel with the first section of notes as far as chronology is concerned—commencing in November 1850 and running to 1855 or 1856—but consists of quite different though related material. Thoreau's first entry in the section suggests the nature of his interests:

November 18, 1850
Saw at Cambridge . . . the following old books containing maps.
1570 to 84. Ortelius
1597 Wytfliet
1612 1st ed
1609 . . . Lescarbot [etc.]²⁵

The notes that he took on these early maps of the New World pay special attention to the depiction of Canada and the St. Lawrence, so they are related to the Canadian project, but they opened for him a much more interesting subject than could be subsumed or contained in the account of his rather disappointing excursion. The progress of cartography, starting with the very earliest sixteenth-century sources in which the ratio of wishful thinking and fantasy to accurate depiction

24. "Thoreau's Canadian Notebook," p. 189.

25. *Ibid.* p. 190.

is especially high, provided him literally with a graphic representation of the evolution of the idea of America in the European mind in the sixteenth, seventeenth, and eighteenth centuries. The phenomenon of America, he was discovering, was a much wider and more important subject to the Western mind than the rather narrow range of events described by American historians generally suggested, since that version emphasized British exploration and settlement.

Soon he began making notes from Samuel de Champlain's *Voyages*, taking pains to describe to himself the material contained in different early editions of Champlain's work, and also from Marc Lescarbot's *Histoire de la Nouvelle-France*. These primary sources, especially Champlain, who quickly became Thoreau's standard by which to judge other explorers' accounts, opened his eyes for the first time to the superiority as well as the chronological precedence of the French explorers. He continues the notebook with a "general denunciation, by implication," as Willson terms it, "of English writers on America for their neglect of the French source books [and maps] he has consulted."²⁶

This discovery was leading him in a direction that was at odds with the atmosphere and themes of his Canada story, in which he portrayed the French-based civilization of Quebec as derivative, decadent, and marked by feudal anachronisms repugnant to a Yankee. The subject belonged, more naturally, with his story of Cape Cod, an isolable American geographical entity that could serve to represent the developments and the vicissitudes in American history. Accordingly, at some point in the composition of both works he made a decision to integrate the results of his historical researches into the Cape Cod narrative. In the manuscript of "An Excursion to Canada" there survives a portion of an early draft that indicates this decision clearly: In the midst of a discussion about Champlain he notes on the blank portion of a leaf, "Missing pages transferred to Cape Cod," and the next surviving leaf has several reworkings of a passage on Champlain and Lescarbot, praising their "instructive & interesting" accounts and taking to task the contemporary American historian George Bancroft, who "appears never to have heard of" Champlain's early *Voyages*. The polemic concludes: "It is remarkable that so interesting & particular an account of the coast of New England should have been written and given to the world—as early as 1613 several editions of which are to be found at Cambridge—& yet no Historian[s] of America have even seen them!"²⁷

The upshot of this discovery and the consequent professional deci-

26. *Ibid.* p. 194.

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From these early-seventeenth-century explorations Thoreau gradually works his way further back in time, citing first various sixteenth-century sources—including Verrazzano, Hakluyt, Diego Ribero (a Spanish cartographer), and Jean Alphonse, the pilot for Roberval in 1542. Then he extends his range of reference even farther by way of C. C. Rafn's *Antiquitates Americanae*, an edition of Norse (Icelandic) sagas with historical and geographical introduction and notes that provided information about the Norse exploration of the New England coast in the eleventh century. (He had briefly encountered this tradition in Samuel Laing's translation of the *Heimskringla* of Snorri Sturluson a few years earlier.) He goes on to cite Lescarbot on the probability that French sailors had frequented the Newfoundland banks "from time immemorial," and Postel, a sixteenth-century

French writer quoted by Lescarbot, who averred that this area had been visited by Gauls since about the time of Christ. "But let us not laugh at Postel and his visions," Thoreau concludes. "He was perhaps better posted up than we; and if he does seem to draw the long-bow, it may be because he had a long way to shoot,—quite across the Atlantic. If America was found and lost again once, as most of us believe, then why not twice? . . . Consider what stuff history is made of,—that for the most part it is merely a story agreed upon by posterity" (CC, 196–197).

The revision of "Provincetown" from 1855 to around 1860 (the last dateable additions of historical material to the manuscript) suggests that Thoreau was attempting to conceive and write history in rather the same way that he was attempting to write natural history, that is, by familiarizing himself not only with the theories and conclusions of contemporary writers (i.e., Romantic historians such as Bancroft) but also with the oldest, sometimes legendary, accounts of the same events and places. The purpose of this process and the incorporation of these findings in his writing were not merely to debunk the more or less official "Pilgrim version" of early American history currently being promulgated by such orators on Plymouth Rock as Edward Everett (although this was surely a part of his aim) but rather to create a different historical conception of America as the gradual unfolding of a drama of discovery and imaginative appropriation of the continent by the European mind. Cape Cod became the logical locus for this effort because it was both the point of first contact for many explorers and an isolable geographical entity that could stand for the whole sweep of American history. "A man may stand there," he concludes in "Provincetown," stating a natural fact that simultaneously expresses an intellectual one, "and put all America behind him" (CC, 215).

Aboriginal History

THE remaining historical interest that occupied Thoreau during the 1850s—the history of North American Indian tribes before or just at the point of their first contact with white men—was perhaps even more difficult than early American history to pursue and to disentangle from the legends and myths that grew up around it. As in his early employment of historical material in *A Week*, his mature interest in Indian history grew out of or grew up simultaneously with his interest in American history in general, constituting in fact a sort of alternate or counter-history, attractive to him both because its subject was shrouded in mystery and because it was by definition tantalizingly pre-historic. At the same time that he was interested in Indians as the shad-

owy figures who flitted through the annals of early New England, however, he was more fascinated by what he came to perceive as their potential for guiding him toward some wisdom gained through the apprehension of nature that had been lost by civilized people.

His studies in this area included not only what was known of the history and prehistory of Indian tribes but also natural history (their pharmacopeia, for example, or their uses and names for other natural products), ethnology, anthropology, linguistics, and other related disciplines, mostly in their infancy at the time. The material that he amassed in his studies was extensive—eleven volumes of notes on and extracts from his reading—but it proved to be relatively unmalleable as far as his own literary pursuits were concerned. He certainly entertained for a time, at least, the notion of writing a book on the Indians, but precisely what form it might have taken is difficult to say.²⁹ His reading in this field is relatively easy to chart, however, since he kept such careful extracts over the years. Its principal relation to his literary career appears to have been to provide a context in which to establish his growing capacity to appreciate and extract significance from his own rapprochement with a series of Indian guides on his Maine wilderness expeditions. The state of knowledge about Indian cultures in the 1850s was sketchy and inexact by modern standards, and like his contemporaries Thoreau was never able completely to overcome his predisposition to divide humanity into “civilized” and “savage” or “barbarian” categories. Nevertheless, in his Indian reading he attempted, albeit with limited success, to accomplish in a general way what his natural history and historical studies were also calculated to achieve: to humanize the discipline and to seek a way of expressing the results of his research that would preserve and communicate the personal immediacy of the act of knowing, and that would demonstrate the relatedness of facts discovered to other facts in the observer’s (or the reader’s) experience.

So intertwined are all Thoreau’s studies during this period that his series of Indian books containing the extracts from his reading seem to grow initially out of the reading he did for *Cape Cod* in 1849; and just as the reading he did for “An Excursion to Canada” eventually spilled over to the historical essay in *Cape Cod*, his notes on the history of Indians on Cape Cod eventually became the first surviving volume of his eleven-volume set of extracts and notes covering all aspects of Indian history and culture.³⁰ Moreover, the subject of Indians was inex-

29. Sayre, *Thoreau and the American Indians*, chap. 4, “A Book About Indians,” pp. 101–122.

30. Johnson, “Into History: Thoreau’s Earliest ‘Indian Book’ and His First Trip to Cape Cod.”

trically bound up with American history and natural history, Thoreau’s other major areas of interest during the 1850s. One of the most sensitive and important issues in natural science at this time, for example, was the ancestry and origins of the various races, and Thoreau’s reading in the primitive anthropological speculations of his day took him over some of the same ground that he covered in following the debates among biologists about the origins and ancestry of other species—with the significant difference that theories about the ancestry and inherent characteristics of people were not solely academic or religious issues. They were sometimes used to justify social and political decisions (the removal of Indian tribes to the West, for example) affecting the lives and the very survival of so-called primitive peoples. For obvious reasons, it is even more difficult to separate Indian history from early American history when, as in the case of Thoreau, the researcher’s interest centers upon early exploration and discovery by Europeans and upon the period of first contact with Europeans by the Indians. The two subjects are merely different versions of or ways of looking at the same historical and cultural moment.

Thoreau’s general interest in Indians dates back to his youth, when he had some familiarity with local legends and collected, as he continued to do for the rest of his life, arrowheads and other Indian artifacts.³¹ At this time, his reading consisted mainly of such popular collections of Indian lore and biography as Samuel Drake’s *Indian Biography* and B. B. Thatcher’s *Indian Traits*, miscellaneous compilations of legend, hearsay, travelers’ reports, and information of varying degrees of accuracy, all regarded from a perspective of Romantic and nostalgic lament for the inevitable passing away of the race. Thatcher, for example, in a passage that is representative of this sort of literature, describes Indian life before the coming of the Europeans as blissful and even edenic:

But generally they lived in circumstances of health, security and ease. The woods and the waters supplied them with their abundant livelihood, almost without effort. The hunter’s game was all around him, and above him, in the streams, forests and skies of his native land. And, above all, he was not only hardy, patient and brave, able to encounter the elements, and fearless to meet his foe in the field of battle; but he was a *free man*. The mountain eagle that screamed over the slow-soaring smoke of his wig-

31. See, for example, COR, 16–18, 24–25; also Kenneth Walter Cameron, “Books on Indians Which Thoreau Knew or Might Have Known by November, 1837,” *Emerson Society Quarterly* 1 (4 Qtr. 1956): 10–12.

wam, was not freer than him who dwelt beneath that humble room. . . .

We find the cellars of their wigwams in our old pastures, moss-grown and yawning. We decipher their rude inscriptions on the rocks of the forest. The farmer's plough, perhaps, turns up the mouldering relics of their ancient dead. . . .

The time will come but too soon, we fear, when the history of the Indians will be the history of a people of which no living specimen shall exist upon the earth;—too soon will the places that now know them know them never again. Their council-fires will have gone out upon the green hills of the South. Their canoes shall plough no more the bosom of the Northern Lakes. Even the prairies and mountains of the far West will cease to be their refuge from the rushing march of civilization.³²

This curious but typical mixture of Rousseau-like admiration for the noble savage in the unfallen natural state and an almost gothic taste for melancholy reminders of the Indians' decline (Freneau's "Indian Burying Ground" is perhaps the most notable expression of the latter) may be detected in the background of Thoreau's early treatment of New England's Indian history in *A Week*. At this stage in his life, he conceived of the Indians largely as a race either extinct or on its way to extirpation. However sad or melancholy this fact, it was inevitable. Thus his treatment in "Ktaadn" (1848) of Louis Neptune, the Indian who was to guide him on his first wilderness trip to Maine, concludes with an apostrophe to the passing of the Indian that was actually quite conventional: "In a bark vessel sewn with the roots of the spruce, with horn-beam paddles he dips his way along. He is but dim and misty to me, obscured by the aeons that lie between the bark canoe and the batteau. . . . He glides up the Millinocket and is lost to my sight, as a more distant and misty cloud is seen flitting by behind a nearer, and is lost in space. So he goes about his destiny, the red face of man" (MW, 79). As the title of Cooper's *The Last of the Mohicans* suggests, early-nineteenth-century American books typically depict the Indian as passing away, a portent of the gradual disappearance of his race from the continent itself.

As he began his mature study of the subject, Thoreau started collecting—in a manner similar to the change in his natural history reading habits about the same time—more precise and concrete information about Indian customs, especially from the various contributors' accounts in the *Collections* of the Massachusetts Historical Society,

32. *Indian Traits*, 2 vols. (New York: Harper & Brothers, 1854) 1.17–18, 21.

extracts from which make up the bulk of the first surviving Indian book, compiled in 1849–1850. He was still confined at this stage, however, to the New England tribes (who *were* largely extinct) and to mostly descriptive and anecdotal material that was strongly colored by the theological biases of the early informants.

With Indian book 4, however, compiled in 1850–1851 after his trip to Canada, Thoreau began to expand his Indian reading to the same primary French sources—Champlain, Roberval, Cartier, Lescarbot—that he had begun to draw upon for his American historical researches. The French explorers and even their missionaries he would find more useful than the English in providing reliable and even sympathetic descriptions of Indian life, for they were more prone to regard the Indians as human beings, to adopt their habits and mode of life, and actually to live among them. At the same time, he consulted writers in other fields who could provide corroborating or complementary information: Jacob Bigelow's *American Medical Botany* for the Indians' uses of medicinal plants, Charles Darwin's account of the voyage of the *Beagle* for the characteristics of the Indians of South America, and E. G. Squier's early work on Indian religion, *The Serpent Symbol*. He continued to collect miscellaneous information from the accounts of travelers, naturalists, missionaries, and explorers, but there was beginning to be a somewhat more scientific and comparative cast to the extracted material. At the same time that the subject thus began to open up to Thoreau it was also so enormous and simultaneously so embryonic (with vast amounts of new information appearing annually) that no real discernible shape or focus is evident in his note taking.

By 1852, with his sixth notebook, Thoreau had begun to make his major discoveries of important primary sources and to grasp the underlying social and political issues that made the "Indian question" so vexing to his culture. Behind all the collections and descriptions of Indian manners and customs was an extraordinarily touchy problem: Were the Indians a separate variety of humans, and if so, how had they gotten that way, and when? Were their differences to be ascribed to external conditions of environment or the hand of Providence? The contemporary literature on Indians thus participated in the larger ongoing debate about variation in nature, the fixity of species, and the plan of the Creator, if there was one, that characterized the natural sciences during the decade. Additionally, the 1840s and the 1850s were a period of explosive westward expansion, bringing the United States and its doctrine of manifest destiny into conflict with large numbers of potentially hostile tribes in Texas, the Great Plains, and the Far West. It was a period that saw, in Wilcomb Washburn's words, "the greatest real estate transaction in history," as tribe after tribe was in-

duced by “wars, treaties, and a mass population movement” to cede its traditional lands to the onrushing Americans and retreat to reservations.³³ All the ethnographic and ethnologic information collected and disseminated by individual scientists and the government was necessarily adduced as evidence in the debate over Indian origins and Indian rights.

A key document in the scientific debate was Samuel G. Morton’s *Crania Americana*, a massive comparative study of aboriginal skulls from the Americas that Thoreau read in 1852. It was prefixed by an important essay, “On the Varieties of Human Species,” that described the supposed physical and mental characteristics of the various races. Typical of the age, Morton assigns differences in physical types to the aftermath of the biblical flood, when the Creator fitted each variety of the human species for its particular niche: “Each race was adapted from the beginning to its peculiar local destination,” Morton argues. “In other words, it is assumed that the physical characteristics which distinguish the different Races, are independent of external causes.”³⁴ This theory of special creation or providential adaptation harmonized neatly with Agassiz’s prevalent theory of separate epochs of creation in the natural world. Such differences as may be observed between races would thus be God-given and immutable, and Morton proceeds to class the various races according to such characteristics. The Caucasian race, not unexpectedly, is “distinguished for the facility with which it attains the highest intellectual endowments,” and the Indian, as one might also predict from the foregoing, is characterized as “averse to cultivation, and slow in acquiring knowledge; restless, revengeful, and fond of war.”³⁵ Such ostensibly scientific conclusions, buttressed by scores of plates and tables of various skulls and their dimensions, constituted the state of knowledge and theory about human origins and capacities at the time, and were taken over and assumed by most mid-nineteenth-century writers on the Indian.

The most important of these was Henry Rowe Schoolcraft, who between 1851 and 1857 published a massive six-volume folio series titled *Historical and Statistical Information Respecting the History, Condition, and Prospects of the Indian Tribes of the United States*, under the auspices of the government’s Bureau of Indian Affairs. Containing much miscellaneous material, randomly organized, and finally more literary than scientific (Longfellow drew upon it for *Hiawatha*), Schoolcraft’s work nonetheless had a kind of authority, if only because

33. *The Indian in America* (New York: Harper & Row, 1975), p. 196.

34. Morton, *Crania Americana* (see Bibliographical Catalogue no. 1012), p. 3.

35. *Ibid.* pp. 5–6.

of its bulk and its government sponsorship. Thoreau read the volumes consecutively as they appeared and made extensive extracts from them in his Indian notebooks. Schoolcraft’s avowed purpose was to educate white people about Indians so they could help to “reclaim such a race to the paths of virtue and truth; to enlighten the mind which has been so long in darkness.” Beginning from the biblical account of the dispersal of various races of men, Schoolcraft saw the Indians’ “barbarism” as a “lapsed state” (since God had provided all men with the capacity for agricultural life in antediluvian times) to be accounted for by the seductiveness of the wilderness in which they lived: “Wandering in the attractive scenes of the temperate and tropic zones . . . must have proved a powerful stimulus to erratic and barbaric notions.”³⁶ Similarly, the stated intention of Lewis H. Morgan’s *League of the Iroquois* (1851), a pioneering work of ethnology that was highly laudatory of the Iroquois’s social and political institutions, was “To encourage a kinder feeling toward the Indian . . . and of his capabilities for future elevation.”³⁷ Even the most ardent advocates of an “enlightened” policy toward the Indian—and perhaps the most eminent authorities on the subject before the Civil War—still assumed that the Indians were a lapsed race who might by herculean efforts on the part of whites make some progress toward civilization.

In 1852 Thoreau began reading the *Jesuit Relations*, an enormous body of firsthand information that would serve for him, along with Schoolcraft’s compendium, as a major source of facts about the cultures and customs of Indian tribes in the northeastern part of North America. These annual reports of the Jesuits’ missionary activity in the New World were a treasure trove of details for Thoreau, who read all the volumes of the *Relations* that were available at Harvard—those covering the years from 1632 to 1694. And despite his general anticlericalism and his Yankee suspicion of Roman Catholicism, one can imagine that he found the reports themselves engaging as well as informative, for they detailed heroic individual exertions, sacrifice, and perseverance, as well as being full of direct, homely, and ingenuous accounts of life among Indian tribes that had had relatively little contact with European civilization. Between 1852 and 1858, he copied over three hundred pages of extracts from this source.

This period from 1852 to 1858 also marks the time of his most extensive reading and note taking on the subject of Indians, and the time

36. Schoolcraft, *Historical and Statistical Information* (see Bibliographical Catalogue no. 1218), I.X, 47.

37. *League of the Ho-Dé-No-Sau-Nee or Iroquois* (New York: Dodd, Mead and Company, 1901), p. ix.

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He apparently did not pursue this structure or outline any further. Perhaps it was becoming evident to him from the voluminous data rapidly coming into print through government surveys and as a result of the westward movement generally that a book on "the Indian" was an impossible task conceptually: There were simply too much variation and diversity among various Indian tribes to permit valid generalizations about the Indian as a homogenous race or culture. By this time, he had looked over the seven volumes of government reports of the surveys for the Pacific railroad route, the report on the survey of the United States—Mexico boundary, a report of an exploring expedition to Saskatchewan, and similar documents containing information about Western tribes. How to assess and organize the masses of raw data about Indians that were accumulating so rapidly during the 1850s, without possessing a coherent anthropological methodology or theory, was certainly a serious obstacle to writing a book about the Indian.

Another very likely possibility, suggested by Robert F. Sayre, is that Thoreau lacked the extensive firsthand experience with the subject that his literary imagination required: A project essentially dependent upon research in secondary material was unsuited to his particular talents and capacities as a writer.³⁹ In any event, although he continued to read and make notes on works about Indians until 1861, the Indian books from the last few years of his life increasingly tend to reflect his reading in other areas of interest at that time, especially natural science, the ancient natural historians, and travel: books such as Gerard's *Herball*, Richard Owen's *Palaeontology*; Pliny, Aristotle, and Aelianus; Isaac Hayes's *Arctic Boat Journey*; and Richard Burton's *The Lake Region of Central Africa*. These are interspersed with entries from more typical sources such as Samuel Penhallow's *History of the Wars of New England*, Jefferson's *Notes on the State of Virginia*, and John Halkett's *Historical Notes Respecting the Indians of North America*. Thoreau made direct use of all this information about Indians only occasionally in his writings, and with the advantages of hindsight it is perhaps possible to understand why the project remained

38. Sayre, *Thoreau and the American Indians*, p. 120.

39. *Ibid.* pp. 121–122.

chiefly at the stage of collecting and compiling—intellectual activities that, as Sayre points out, were satisfying in themselves.⁴⁰

Thoreau's trip to Minnesota in 1861, which gave him a long-delayed opportunity to observe the flora and some of the Indian tribes of the northern plains, came too late in his life (he was already suffering from his final siege of tuberculosis) to provide such an autobiographical experiential framework for him. Additionally, however, the nature of his specific interest created a problem for him that was, given the state of cultural anthropology in his day, extraordinarily difficult if not impossible to solve. He was chiefly interested, as he wrote on his Association for the Advancement of Science membership form in 1853, in "The Manners & Customs of the Indians of the Algonquin Group previous to contact with the civilized man." There were two imposing obstacles to the fulfillment of this interest, one cultural and the other methodological. The cultural prohibition is the one previously mentioned: Thoreau carried with him to some extent the unquestioned assumption of his era that the Indian was a "savage" and that there existed an almost unbridgeable gap between him and the "civilized" person;⁴¹ it was not in the intellectual vocabulary of mid-nineteenth-century people to conceive of humanity as a broad spectrum of cultures—or indeed to think of "culture" itself as we do today as a descriptive rather than a normative term—subject to dispassionate descriptions and analysis. "What a vast difference between a savage & a civilized people," Thoreau observed in a note to Indian book 7 in 1852, and several years later, in 1858, he could only draw the conclusion from all his reading that "the fact is, the history of the white man is a history of improvements, that of the red man a history of fixed habits of stagnation" (JL 10.252). In the same way that he seems to have been at least partially caught up by the euphoria of westward expansion and manifest destiny in portions of "Walking," Thoreau here betrays, perhaps unconsciously, certain of his era's racist assumptions about the fundamental cultural, physiological, and mental differences between whites and Indians.

The methodological difficulty that he faced in trying to assess Indian culture "previous to contact with the civilized man" was that all he had to rely upon were the reports of civilized man. Such a task, to paraphrase a remark of William James's, is rather like trying to study the dark by turning the light up quickly. There were few techniques available for reconstructing, as an anthropologist might today, the pre-

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40. *Ibid.* p. 122.

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history of the tribes that he was interested in, and so Thoreau was forced to depend upon the testimony of observers whose very presence of necessity altered the state of the culture they described. The component of Indian culture that came closest to providing clues to prehistory was language, a subject in which Thoreau already had, by natural proclivity, a great deal of interest. He took notes from such early writers on Indian languages as Roger Williams and Jonathan Edwards, as well as from contemporary works such as Peter Duponceau's "The General Character and Forms of the Languages of the American Indians" and John Pickering's notes to Father Rasles's *Dictionary of the Abnaki Language*. Had he pursued this inquiry further, it is conceivable that he might have been able to see how relationships among languages and dialects could indicate cultural affinities among tribes and aid in the ethnographical study of origins and migration patterns, but such developments lay rather far in the future; the state of knowledge about Indian languages at the time was often confined to fairly primitive word lists and dictionaries of the sort that missionaries compiled for purposes of religious instruction. Theories that did exist were highly conjectural and generally contradictory, and Thoreau's notes indicate that he was acutely aware of the widely divergent views of contemporary writers about the origins and dispersion of North American Indian tribes.⁴²

Ultimately, however, this interest in the prehistory of American Indians was really an interest in the possibility of recovering whatever primal wisdom and knowledge the Indian might have possessed and that civilized man had lost, and Thoreau was able to approach this understanding only through his own very limited personal contact with Indians, especially Joe Polis, his guide on the last of his expeditions to Maine in 1857. As he tells the story in "The Allegash and East Branch," he was able for the first time to get some direct experiential confirmation of the Indian's superior powers to understand and accommodate himself to nature—a relationship that could finally only be demonstrated physically, as it was by Polis, and that was not susceptible of analysis and translation into literary terms with which a white audience would be comfortable. He wrote to H.G.O. Blake on his return from this trip to Maine:

Having returned, I flatter myself that the world appears in some respects a little larger, and not, as usual, smaller and shallower, for having extended my range. I have made a short excursion into

42. Lawrence Willson, "Thoreau: Student of Anthropology," *American Anthropologist* 61 (April 1959): 279–289; see esp. pp. 283–287 for a discussion of Thoreau's reading in such philological studies and speculations.

the new world which the Indian dwells in, or is. He begins where we leave off. It is worth the while to detect new faculties in man,—he is so much the more divine; and anything that fairly excites our admiration expands us. The Indian, who can find his way so wonderfully in the woods, possesses so much intelligence which the white man does not,—and it increases my own capacity, as well as faith, to observe it. I rejoice to find that intelligence flows in other channels than I knew. It redeems for me portions of what seemed brutish before. (COR, 491)

No experience in all his reading about Indians over the years had produced a moment of insight of this magnitude, although it was clearly what he had been searching for all along. His literary and intellectual heritage had actually led him away from this sort of expansive experience, and one suspects that he was finally unable to integrate it into the framework of received knowledge that he had so painstakingly collected in the Indian books.

In his last years Thoreau turned more regularly toward reading and writing about natural history, as we have seen, for there the state of theory was sufficiently advanced and in flux to permit at once a wider and more informed field for speculation; and he had of course in this field a multitude of those direct observations that he had so few of about Indians. If he seriously considered a book about Indians, it was likely that he gave it up by 1859 as his attention became more engrossed by the problems of the dispersal of plants and allied botanical phenomena, a subject in which his reading encompassed both ancient writers and contemporary theory, and about which he was able to collect data and perform experiments in the Concord environs that he knew so well. It is significant, perhaps, that the Indian remained a problem for him to the end of his life. He declined to print his "Allegash and East Branch" narrative during his lifetime, telling James Russell Lowell that he would not be able to face his guide Joe Polis again if he did so, even though Polis's portrait in the narrative is on the whole a favorable one. The subject may even have occupied his dying thoughts, for according to one tradition the last words that he is supposed to have uttered as his sister sat reading to him on the morning of his death were "Moose" and "Indian."⁴³

Significant and symmetrical it is too that his last words should have been a response to his reading, even if that reading was performed by someone else during his last days. Only the legendary Thoreau—the half-mythic though in part self-created persona who comes down to us

43. Channing, *Thoreau: The Poet-Naturalist*, p. 319.

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as the dweller by Walden Pond, the inmate of Concord jail, and the saunterer walking westward—epitomizes the Emersonian injunction that books are for the scholar's idle times. The historical Thoreau who had adopted letters as his profession, as he told Harvard's President Sparks, depended as all literary persons do upon books as a major part of his stock in trade. He was by inclination as well as long habit a bookish man with scholarly instincts, and a writer for whom the act of reading was the diastole to the systole of composition. Rightly conceived, his reading was the sort of heroic activity that he characterizes in *Walden* as "a noble exercise, and one that will task the reader more than any exercise which the customs of the day esteem." It was also the channel through which his intellectual and professional interests grew and evolved over the course of his career. This evolution—from a fairly conventional focus in the classics of antiquity and English literature to an absorption in American history, the American Indian, and natural history—bears witness to Thoreau's active participation in many of the liveliest intellectual problems of his age and demonstrates the extent to which his life was a fulfillment of Emerson's prophecy in "The American Scholar" that the revolution in American literature was "to be wrought by the gradual domestication of the idea of Culture."

Bibliographical Catalogue