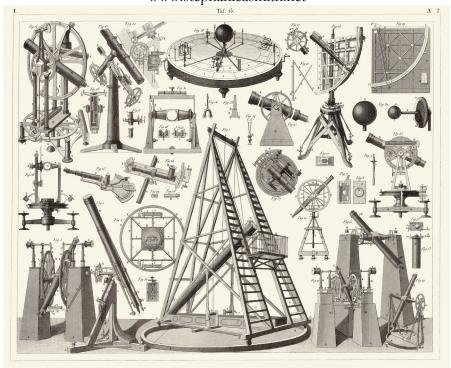
AML 6017: Representations of Science in 19th C. American Literature

Professor Stephanie A. Smith Fall 2024/W 3-5 (9:35-12:35) ssmith@ufl.edu www.stephanieasmith.net



Data-driven, experimental science and the technologies that arise from that science, as well as more esoteric scientific theories are frequently under attack. America's communal acceptance of what science is 'real' remains a moving target in contemporary political and cultural debates (well, shouting matches.) What does it mean to know a scientific fact, when said facts are often subject to violent political revisions (the earth is flat; no, it's round! no it's flat!) or socio-historical change (doctor: abortion can be a necessary medical procedure; anti-abortion activist: it is *never* necessary, we can provide in-uterine palliative care)?

Galileo's reaffirmation of the Copernican heavens gained him severe censure from the Catholic church; Newton's theory of gravity was scoffed at; AIDS was initially and widely believed to be a disease that would only infect gay men, a dangerous belief that epidemiologists at the time warned was farcical; Covid can be treated by taking a horse dewormer. Few today would argue that the earth and not the sun is the center of the universe, or that gravity doesn't exist or that only gay men can die of AIDS, or that a horse dewormer is an effective treatment of a corona virus (one can only hope).

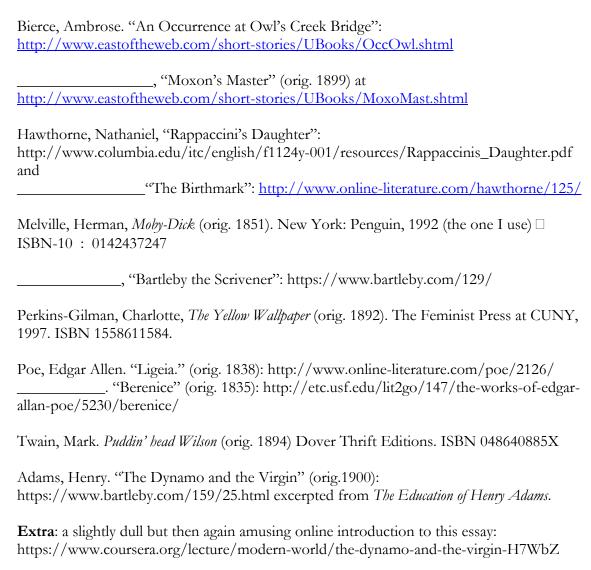
But scientific facts can and do change. Still, those changes should always "be based on demonstrable and reproducible data," as has been standard scientific practice since at least the 17th century (if not before). Of course, how such scientific data is acquired, revised, revisited, or rejected has also changed drastically over time, so that what was once considered a fact in 1848 can seem quaint in 2024 (to some of us anyway). In this class, we

shall read 19th c. American literature(s) which questioned, revised, revisited, or even invented what the majority in that time considered "scientific" knowledge, in order to shed some historical and cultural light on our similar, current debates.

Oh, and if you've never read Moby Dick: Or The Whale before, here's your chance.

Required Readings:

First, a word about these texts: many of these are available in electronic form, and in various hard-copy formats. Given that most students now use electronic texts, I've given up trying to get us all "on the same page" even if I still think this is the most effective way of understanding literature in a classroom. So, if there is a reliable online link to the text, I have provided it; if there is a decent PDF version, it will be on our Canvas page.



Some Recommended Secondary Reading and online resources:

American Memory: http://www.memory.loc.gov/ammem/browse/updatedList.html

American Literature and Science: https://muse.jhu.edu/book/37037 18th c. Science and Literature in America: https://www.loc.gov/rr/scitech/tracer-bullets/scitech18tb.html

Scholnick, Robert J. American Literature and Science. Lexington: University of Kentucky, 1992. Society for Literature, Science, and the Arts: https://litsciarts.org/

Requirements: We shall be doing primarily a mid-term assignment, and a final seminar paper. Final grades will be assigned according to the following numerical breakdown: Attendance/class participation 40% (this includes any question-responses we may do); mid-term: 30% and final paper: 30%.

Grading Scale A = 94-100; A- = 90-93; B+ = 87-89; B = 84-86; B- = 80-83; C+ = 77-79; C = 74-76; C- = 70-73; D+ = 67-69; D = 64-66; D- = 60-63; E = 0-59.

Policies:

- 1. Using AI: I ask you to keep in mind that ChatGPT (and like AI content generation platforms) produces identifiable blather (which often sounds exactly like what it is, a robot) and that I have access to it as much as you do, and that it's as reliable as Wikipedia, which is to say so-so. If you make use of AI to generate your work, it shows, so please don't. Also technically using AI is against the UF Honor Code, because it is (technically) a form of plagiarism. UF now has an Ethics policy about AI at https://ai.ufl.edu/about/ai-ethics/
- **2. Late-work policy:** you have a 24-hour grace period for all written work except the asynchronous assignments; so if you turn in a piece 24 hours late, it will not be counted as late. After that, I take 3 points a day off the grade you would've gotten if the paper had not been late.
- **3.** Calculation of Final Grades: I am always available to talk to you about your grade, but I can't do so over email because email is not private in Florida, and your grade is private. I can offer to pre-calculate your final grade for you if Canvas is not enough, but it must be done in a Zoom meeting.
- **4. Absence policy:** you have three class periods (one class day) off scot-free, no penalty and if you are ill, you are also excused. Ditto for religious holidays. After that, I take three points of your final grade for every day that you miss.

Class participation: This is a graduate seminar, so this class should belong to you as much as is possible on Zoom—this means active, responsible engagement during the Zoom class period, and I ask for a good faith effort. Class participation includes:

a. Attendance. You should attend our virtual sessions virtually, preferably with your camera on but that is not mandatory. The participation portion of your grade for this class will be calculated based on your attendance and your participation in

class activities. Since the pedagogical approach of this course depends on student engagement and interaction—and we are small—you are required, **at a minimum**, to participate in class activities through the audio function of Zoom and/or the chat function. I print out the chat after every class and I keep track of who is engaged there.

b. Preparation. You will agree to have prepared the assignment and will be ready to discuss it or write about it or ask questions about it.

Just turning on your computer and logging in to Zoom does not constitute good class participation.

Mid-Term: For your mid-term, I am asking you to write what is often called a 'critical crux' paper about one of the texts on our reading list: what does this mean? It means that most literary works have a critical history that will reveal a problem about that text (or problems) that critics return to, redefine, re-hash, re-visit over the course of the text's critical history. The job here is to review as much of the critical history of your chosen text as you can, and then write a critical narrative (12-15 pages at most) where you locate the critical crux of the novel, and detail some of the more important approaches to that crux.

An example: for my own critical crux paper, I chose Henry James' *Portrait of a Lady* (okay, so I was a crazy graduate student) and soon discovered one of the most vexing issues for critics was this: why does Isabel Archer go back to her nasty, greedy, controlling husband, Gilbert Osmond, when she really doesn't have to? I wrote a paper about that 'crux' which later turned into the final chapter of my first book, and my first published article.

Final Paper: for your final project, I ask that you write a seminar paper about some aspect of the nexus between literature and science that interests you (25 pages). A seminar paper is a critical argument in dialogue with the critical discourse ongoing about some issue, topic, text etc. of the sort we shall examine across the semester. As noted above, you can use the critical crux mid-term as a way to get a leg up on your final. Why is this paper and the presentations weighted so heavily (each 30%)? Because you are a graduate student, yes? You will be spending much of your time at conferences in the future, where you will have to present your own work, and then try to publish it. These final papers often turn into convention papers and/or chapters and/or publishable essays.

And now for the obligatory UF stuff

Academic Honesty Policy: UF students are bound by the Honor Pledge that states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: 'On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code

(http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of this class.

Plagiarism: I regret having to remind you that plagiarism is a serious offense. All students are required to abide by the Academic Honesty Guidelines, which have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain, and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity. Exhibiting honesty in academic pursuits and reporting violations of the Academic Honesty Guidelines will encourage others to act with integrity. Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XIV of the Student Conduct Code. The conduct set forth hereinafter constitutes a violation of the Academic Honesty Guidelines (University of Florida Rule 6C1_4.017). For more information about academic honesty, including definitions of plagiarism and collusion, see: http://www.dso.ufl.edu/judicial/academic.php

Civility: If you need to leave the Zoom room during class, please be sure to leave with discretion. You will be marked absent if you are gone more than 10 minutes; if you need to sleep, please stay offline and sleep; please do not be rude, either to me, or to your fellow students. It is the policy of The University of Florida to provide an educational and working environment for its students, faculty and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination based on sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages students, faculty, staff, and visitors to promptly report sex discrimination and sexual harassment. For more about the University of Florida policies regarding harassment, see the University of Florida Student Conduct Code at http://www.dso.ufl.edu/judicial/conductcode.php

The Disability Resource Center: The Dean of Student's Office provides students and faculty with information and support regarding accommodations for students with disabilities in the classroom. Staff at the Disability Resource Center will assist any student who registers as having a disability. Official documentation of a disability is required to determine eligibility for appropriate classroom accommodations. The professional employees at the Disability Resource Program serve as full-time advocates for students with disabilities ensuring students have physical and programmatic access to all college programs. For more information about Student Disability Services, see: http://www.ufl.edu/disability/

Course Delivery: UF Admin. has designated this course as a 100% online. The class will largely be synchronous, but we may have some asynchronous sessions.

Online Course Evaluation: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the

evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/

Final Grade Appeals: If you want to appeal the final grade you receive for this course, you should contact Professor Pam Gilbert, Associate Chair and Undergraduate Coordinator of the English Department. You will submit your course materials for evaluation by a committee assembled by Professor Gilbert. The committee may decide to raise, lower, or leave unchanged your final grade for the course. Its decision is final.

UF Grading Policies for Assigning Grade Points http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Week 1 Unit I: Mad Scientists and their Creations

R: August 22—First day of classes; we don't meet this week!

HMW: read Nathaniel Hawthorne's short stories and the assigned essay, on Canvas.

Week 2

W: August 28—Hawthorne's Alchemies (Birthmark, Rappaccini, Rappaccini essay)

HMW: read Edgar Allen Poe's short stories.

Week 3

W: September 4—Poe's Optical Obsessions (Berenice, Ligeia)

HMW: begin Herman Melville's Moby Dick

Week. 4

W: September 11—Authorship/Authority/Marine Biology: introduction to Moby Dick

Week 5 Unit II: The White Whale of Knowledge

W: September 18—Moby Dick

Week. 6

W: September 25—Moby Dick

Week. 7

W: October 2—Moby Dick

Week 8 (mid-term)

W: October 9—Moby Dick

Week 9

W: October 16—mid-terms due

HMW: read Henry Adams "The Virgin and the Dynamo"

Week 10 Unit II: The "Natural" Sciences

W: October 23—Henry Adams

HMW: Charlotte Perkins Gilman and Ambrose Bierce

Week 11

W: October 30 BOO!—Psychology: Gilman (YellowW) and Bierce (Owl Creek).

HMW: Mark Twain's Puddin' Head Wilson

Week. 12

W: November 6—Nature vs. Nurture: Twain

HMW: Melville and Bierce (Bartleby and Moxon)

Week. 13

W: November 14—Mechanical Men

Week. 14

W: November 20—con't

Week. 15

W: November 27—HOLIDAY

Week 16 SAJ

W: December 4—last day of class

Sonnet--To Science

Edgar Allan Poe

Science! true daughter of Old Time thou art!

Who alterest all things with thy peering eyes.

Why preyest thou thus upon the poet's heart,

Vulture, whose wings are dull realities?

How should he love thee? or how deem thee wise,

Who wouldst not leave him in his wandering

To seek for treasure in the jewelled skies,

Albeit he soared with an undaunted wing?

Hast thou not dragged Diana from her car,

And driven the Hamadryad from the wood

To seek a shelter in some happier star?

Hast thou not torn the Naiad from her flood,

The Elfin from the green grass, and from me

The summer dream beneath the tamarind tree?

(1829)

Each and All

By Ralph Waldo Emerson
Little thinks, in the field, yon red-cloaked clown,
Of thee from the hill-top looking down;
The heifer that lows in the upland farm,
Far-heard, lows not thine ear to charm;
The sexton, tolling his bell at noon,
Deems not that great Napoleon
Stops his horse, and lists with delight,
Whilst his files sweep round yon Alpine height;
Nor knowest thou what argument
Thy life to thy neighbor's creed has lent.
All are needed by each one;
Nothing is fair or good alone.
I thought the sparrow's note from heaven,
Singing at dawn on the alder bough;

I brought him home, in his nest, at even; He sings the song, but it pleases not now, For I did not bring home the river and sky; — He sang to my ear, — they sang to my eye. The delicate shells lay on the shore; The bubbles of the latest wave Fresh pearls to their enamel gave; And the bellowing of the savage sea Greeted their safe escape to me. I wiped away the weeds and foam, I fetched my sea-born treasures home; But the poor, unsightly, noisome things Had left their beauty on the shore, With the sun, and the sand, and the wild uproar. The lover watched his graceful maid, As 'mid the virgin train she stayed, Nor knew her beauty's best attire Was woven still by the snow-white choir. At last she came to his hermitage, Like the bird from the woodlands to the cage; — The gay enchantment was undone, A gentle wife, but fairy none. Then I said, "I covet truth; Beauty is unripe childhood's cheat; I leave it behind with the games of youth:"— As I spoke, beneath my feet The ground-pine curled its pretty wreath, Running over the club-moss burrs; I inhaled the violet's breath; Around me stood the oaks and firs; Pine-cones and acorns lay on the ground; Over me soared the eternal sky, Full of light and of deity; Again I saw, again I heard, The rolling river, the morning bird; — Beauty through my senses stole; I yielded myself to the perfect whole. (1839)

Faith is a fine invention

(185) by Emily Dickinson

"Faith" is a fine invention When Gentlemen can see-But Microscopes are prudent In an Emergency.