ST5 3163: Science and Technology in the Literary Sphere
9:30 to 10:50 am, Tuesdays and Thursdays, Rogers Hall 204
Department of Humanities and Social Sciences
Polytechnic Institute of New York University
Spring 2011

Instructor
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Rogers Hall 213h
Office hours: 2 to 3 pm, Tuesdays & Thursdays, or by appointment

Prerequisites
Students must have completed HuSS 1023W (or the equivalent) and one Level 2 STS elective before taking this course.

Course Description
Thomas Kuhn famously uses the phrase “paradigm shift” to describe the transition from one scientific worldview to another. One such shift occurs during the time of the second industrial revolution, when biological determinism falls out of favor and culture becomes a viable concept. Our concern this semester shall be how literature accompanies this transition. As Kuhn notes, the earliest adherents to a new paradigm have little objective fact to work with, and so they must proceed by faith. Although we shall look at some of the nonfiction that represents the new and the old paradigms, our main concern shall be the fictional literature that makes an early effort to challenge biological determinism and emphasize culture over biology.

Objectives
This semester you will learn to:
• Explain concepts such as public sphere, paradigm shift, and second industrial revolution
• Distinguish between biological determinism and the culture concept, polygenism and monogenism, Darwinian and teleological evolution, and realism and naturalism
• Recognize important writers and analyze their work in the context of its scientific worldview and its medium

Structure
Most class time is devoted to lectures about course topics and discussion of the reading material. We shall practice the kind of analysis you will do for the exams.

Readings
The required texts for the course are:
• Charles W. Chesnutt, *The House Behind the Cedars* (Dover 2007)

These are at the college bookstore and, when possible, on reserve in Dibner library.

In addition to the required books, there are assignments you will find online and PDFs that you will find on Blackboard. Please let me know before class if you have any trouble locating a required reading assignment.
Requirements

Attendance: On-time attendance for the entire class period is mandatory. Students who miss four or more classes automatically fail the course. For the purposes of attendance, missing fewer than twenty minutes counts as one-third of an absence (arriving late, departing early, leaving the room). Missing more than twenty minutes counts as an absence. Doctor’s notes are not necessary.

Attentiveness: Please pay attention during class and avoid behaviors that distract others. Do not eat, drink, or sleep during class. You should not use electronic devices, such as cell phones or laptops, at all. Do not hold side conversations; if someone tries to talk to you during class, tell him or her to speak to you after class. Do not bring visitors without advance permission.

Examinations: There are three examinations in this class, two during our regular class period and one during the final exam period at a date and time the Registrar sets. The exams are closed-book and consist of short answer and essay questions.

Honesty: Please be advised that I take the University policy about academic dishonesty seriously and will punish cheating or plagiarism by awarding a grade of “F” for the course and by referring cases to Student Affairs for further action.

Preparation: According to New York State guidelines, a student should spend at least two hours to prepare for each hour in class. Thus, for this course, you can expect to spend about six hours per week getting ready for class. Please plan accordingly so that you can read thoroughly, write carefully, and comment thoughtfully.

Response Papers: You will write three short papers of about 750 words for this class; each must be uploaded to Blackboard and scanned by SafeAssign before the deadline.

Quizzes: There will be unannounced quizzes on the reading assignments and course lessons. You may consult your own handwritten notes, but not books or printouts, for these quizzes. If you miss a quiz due to lateness or absence, you shall receive a zero.

Grading

I shall calculate your semester grade as follows:

- Quizzes 20%
- Response papers 30% (10% each)
- Exams 50% (10%, 20%, 20%)

Bibliography


How to Do Well

1. Be on time. At the start of class, you will notice that I provide a preview of what is coming up and also answer questions. If you regularly miss these first minutes, you will start to feel the
uncomfortable sensation that you do not know what is going on. Keep in mind that trains, subways and busses usually take much longer than they “should,” so plan accordingly. Being late once is ok; it happens to everyone. If you are always late, then you are doing something wrong.

2. **Ask questions.** Please raise your hand at the beginning of class or during a presentation. It does little good to whisper to the person next to you; instead, feel free to ask me for clarification. Also, use office hours or write an e-mail message for additional information.

3. **Take notes,** even if I am not writing on the board. Taking notes helps you stay focused on the material we are studying. Note taking also serves another purpose: it helps you to get used to writing about the course materials in your own words. Since the evaluation in this course is written, taking notes is valuable practice (and good exercise for your writing muscles!). There is no need to write down everything I say, but make sure you take down interesting ideas and connections to the course themes. Go over your notes after class to fill in the gaps.

4. **Read actively.** Prepare by reading the assignment for the day carefully before class. Mark key phrases and passages that have to do with the ideas in the course. Take notes like you are preparing a laboratory notebook – write down what you think is important, with examples, and prepare questions you want to ask.

**Tentative Schedule (revised 29 January 2011)**

Jan. 25 Introduction

**Part 1: Whitman, Darwin, and Wells**

Feb. 1 Whitman First *Leaves of Grass*
   - Schmidgall, pp. 1–44 (to line 796)

Feb. 3 Whitman’s Anti-Typology
   - Schmidgall, pp. 45–118 (from line 797 to end and two articles)
   - J. C. Nott, excerpt from *Types of Mankind* (1854)

Feb. 8 Early Darwin (1845, 1959)
   - Ridley, pp. 52–135

Feb. 10 Whitman 1856
   - Schmidgall, pp. 121–165

Feb. 15 Whitman 1860
   - Schmidgall, pp. 177–253

Feb. 17 Darwin on Inheritance (1868, 1871)
   - Ridley, pp. 136–204
   - Response Paper 1 due at 8 pm

Feb. 22 Late Whitman (1871, 1888, 1891)
   - Sanford Hunt, “The Negro as Soldier” (1869)

Feb. 24 Darwin on Behavior and Habits (1872, 1880, 1881)
   - Ridley, pp. 205–298

Mar. 1 The Survival of the Fittest
   - H. G. Wells, *War of the Worlds* (1898), Book 1 (i.e., chapters 1–17)

Mar. 3 The Revenge of Environment
   - H. G. Wells, *War of the Worlds*, Book 2 (i.e., chapters 1–10)

Mar. 8 Exam 1
Part 2: Chesnutt and Du Bois
Mar. 10 American Polygenism
   • J. W. Powell, “From Barbarism to Civilization” (1888)
Mar. 22 A Disruption
   • Charles Chesnutt, House Behind the Cedars (1900), chapters 1–6
Mar. 24 Chesnutt, continued
   • Chapters 7–22
Mar. 29 Chesnutt, continued
   • Chapters 23–end
Mar. 31 Scientific Racism
   • W. G. McGee, “The Trend of Human Progress” (1899)
   • Response Paper 2 due at 8 pm
Apr. 5 Chesnutt Nonfiction
   • “What Is a White Man?” (1889) and “The Future American” (1900)
Apr. 7 Du Bois, Souls of Black Folk (1903)
   • “Of the Dawn of Freedom” and “Of the Sons of Master and Man”
Apr. 12 Exam 2

Part 3: Stein, Boas, Hurston, and Smith
Apr. 14 American Eugenics
   • Charles Davenport, “Eugenics: The Science of Human Improvement by Better Breeding” (1910); “Race Crossing in Jamaica” (1928)
Apr. 19 Stein’s Eugenic Narrator
Apr. 21 Franz Boas
   • “Some Recent Criticism of Physical Anthropology” (1899), “Modern Populations of America” (1915), and “Evolution or Diffusion” (1924)
Apr. 26 Melanctha in Multiple
   • 3 Lives, “Melanctha”
Apr. 28 Ethical Anthropology
   • Zora Neale Hurston, excerpt from Mules and Men (1935)
   • Response Paper 3 due at 8 pm
TBA Alien Species (snow makeup day)
   • E. E. Smith, excerpt from Skylark of Space (1915, 1928)
TBA Final Exam: The Registrar’s Office schedules our final exam sometime in May. Do not make travel plans until the date and time have been announced.