S&TS 123.1: Art, Science, and Between: Exploring the Intersections of Two Cultures

Hannah Star Rogers

Hannah Rogers hsr9@cornell.edu Rockefeller Hall 172

Course Description

What is science? What is art? Are they two separate worlds? Or two cultures in the same world? Do they divide up this world? Is there anything outside of these two comprehensive realms? To get a grasp on these big issues, we will read art and science theory, as well as science and technology texts. Then we will take on specific case studies, including NASA images, art made through nanotechnology, fractals, Harvard's glass flowers, design noir, and tactical media. By focusing on liminal objects, things that appear to occupy spaces in both art and science or which seem to move between these two worlds over time, we will look for answers to our larger questions. We will explore these issues through a series of papers which will culminate in a portfolio at the end of the term.

Objectives

This course will teach good writing. In the class we will read good writing and respond with our own writing. We will be attentive to the experience of a reading a text and getting to know other materials to provoke ideas for our own writing. Since good writing is good thinking we will spend time organizing our thoughts and trying different techniques for putting together essays and papers, as well as editing our own work and the work of other students. In order to organize our writing around a topic, we will take up the question of art and science. Through philosophical background readings we will consider what makes these two realms the same and different. Then we will proceed through a series of case studies. Students will be encouraged to use course concepts to look for examples beyond the class for writing subject ideas.

Organization

This course is a seminar which means it is dependent on good relationships between students and active discussion. We have the advantage of a small number of students so we will be able to have all kinds of participation (talking, listing, sharing, and editing) from every student. The readings will need to be completed before the date list in the syllabus since we will discuss the readings in class on the dates marked in the syllabus.

Attendance

Attendance is assumed. If for an extraordinarily good reason you must be absent from class,

inform me as soon as possible.

Requirements and Portfolio

Course Participation (50 %). Participation is essential to the seminar experience. You will receive three participation grades throughout the semester to allow you to gauge how you are doing in the course. These grades will be best on attendance, quality of participation, and depth of engagement in discussion.

Portfolio (50%). Your written work will be evaluated throughout the term via a variety of exercises. At the end of the term I will evaluate all of your writing for the term as a portfolio, taking into account general trends in your work. In order to offer you systematic feedback, portfolios will also be evaluated at two other points so that you can consider your performance in the course. Students are responsible for keeping copies of all assignments and instructor/peer review comments.

Academic Integrity

The honor of Cornell students is upheld through a code of academic integrity. Your work is your own. Outside sources will always be cited. <u>http://cuinfo.cornell.edu/Acaedmic/AIC.html</u>

To prevent inadvertent plagiarism, through a review of MLA citations see: <u>http://owl.english.purdue.edu/owl/resource/557/01/</u>

Course Schedule

Week 1: Introduction and overview

August 27th

Syllabus and overview of course.

August 29th

Introduction to the idea of overlapping scientific and artists objects . Stelarc's Third Hand: The body is obsolete. http://www.stelarc.va.com.au/third/third.html **Schedule first student conferences***

Week 2: The same?

September 3rd

Picturing science, producing art. ed. Caroline A. Jones, Peter Galison, editors, with Amy Slaton. New York: Routledge, 1998. Introduction.

September 5th

Sian Ede. Art & Science. London: I.B. Tauris, 2005. Introduction. "Ambiguities and Singularities."

Week 3: Different?

September 10th

Kuhn, Thomas. "Comment on Relations of Science and Art." Essential tension: selected studies in scientific tradition and change. Chicago: University of Chicago Press, 1977. 340-353. **September 12**th

K.C. Cole "The Universe and the Teacup: The Mathematics of Truth and Beauty." Chapter 4. ***One page response paper due***

Week 4: A space between?

September 17th

Hoffman, Roald. "Art in Science." Q (A Journal of Art), May 1990. <u>http://www.roaldhoffmann.com/pn/modules/Downloads/docs/Art_in_Science.pdf</u> Hoffman, Roald. "Modes of Representation." *A Quark for Mister Mark*, ed. M. Riordan and J. Turney, London: Faber and Faber, 2000. <u>http://www.roaldhoffmann.com/pn/modules/Downloads/docs/Modes_of_Representation.pdf</u>

September 19th

5 page paper due contrasting Edes, Hoffman, and Kuhn

Week 5: Making the Natural

September 24th

Corning's Glass Flowers. (Explore "Botanical Wonders: The Story of Harvard's Glass Flowers" website.) <u>http://www.cmog.org/index.asp?pageId=1554</u>

Daston, Lorraine. "Nature by Design." *Picturing science, producing art.* ed. Caroline A. Jones, Peter Galison, editors, with Amy Slaton. New York: Routledge, 1998. 232-253.

September 26th

2-3 pages on what makes Daston's paper credible or not
Prepare questions for next week's speaker based on readings

Week 6: Art, Science, and the Environment

October 1st

Green Waste Disposal http://greenmuseum.org/generic_content.php?ct_id=239#waste

October 3rd

*** First portfolio due and class participation grade*** ***Schedule second student conferences***

Week 7: Nanotechnology and art

Fall Break/No class on Monday the 8th

October 10th

Kathryn's guest lecture ***Prepare questions for next week's speaker based on readings***

Week 8: Seeing as an artist, seeing as a scientist

October 15th

Daston and Galison. The Image of Objectivity. Representations, No. 40, Special Issue: Seeing Science (Autumn 1992) 81-128.

http://www.jstor.org/view/07346018/dm990309/99p0137h/0

October 17th

Wittgenstein, Ludwig. *Philosophical Investigations*. Trans. G.E.M. Anscombe. Oxford: Blackwell Publishers, 1997. 193-200. Dean, Cornelia. "She Calls It 'Phenomena.' Everyone Else Calls It Art." The New York Times. June 12, 2007. <u>http://www.nytimes.com/2007/06/12/science/12frankel.html?_r=2&oref=slogin&oref=slogin</u> Janet's guest lecture

Week 9: Technology and Design

October 22nd Antony Dunne and Fiona Raby. *Design Noir: The Secret Life of Electronic Objects*. Berlin: Birkhauser, 2001. Kelly Dobson's Blendie. <u>http://web.media.mit.edu/~monster/</u>

October 24th ***Second portfolio feedback***

Week 10: Art and Science?

October 29th Jerminjeko, Natalie. One Tree(s). <u>http://web.mit.edu/anthropology/faculty_staff/helmreich/PDFs/onetreescloning.pdf</u> October 31st Sardar, Zahid. San Francisco Chronicle. Saturday, October 23, 2004. <u>http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2004/10/23/HOGCQ9DH301.DTL</u>

Week 11: Art, Science, and Politics

November 5th The Marching Plague. Read sections Installation, Performance, and Position Paper. <u>http://www.critical-art.net/biotech/index.html</u> New York Artist Faces Bioterrorism Charges. NPR, June 14, 2004. <u>http://www.npr.org/templates/story/story.php?storyId=1957000</u> November 7th *Strange Culture*. Directed by Lynn Hershman Leeson. 75 minutes. 2007.

Week 12: Art, Science, and Ethics

November 12th

Body Worlds. Read sections on Prelude, Plastination, and Body Donation. <u>http://www.bodyworlds.com/</u> Zwerdling, Daniel. "Ethics Murky on Human Anatomy Shows." NPR. August 10, 2006. <u>http://www.npr.org/templates/story/story.php?storyId=5635667</u> **November 14th** ***5-7 pages on your own case study topic***

Week 13: Writing Art and Science

Thanksgiving Holidays/No Class on Wednesday the 21st

November 19th & 26th

Open workshop for portfolios

November 28th Final Meeting and recap

Portfolios due