Religion and Genetics in Popular Culture

There is no doubt that contemporary work involving the human genome is changing the way we think about who and what we are. In so doing, it inevitably intersects with the religious questions and beliefs that permeate even the most apparently secular discussions about personal responsibility and collective identity. This course is structured around two primary questions: how is genetics changing, challenging and complicating our collective sense of what it means to be human? And how is religion shaping the way that we understand and respond to current work on the human genome? We will explore these questions through a study of popular culture— including mainstream science writing and journalism, popular fiction and film, and, in a few instances, prominent legal cases— because such works at once register and shape the public's understanding of and anxieties about profound social and cultural change. While considering contemporary debates about the implications of the human genome project, we will investigate as well the ways in which religion has permeated apparently secular arenas and is, in the process, partly shaping how individuals and communities respond to genetic hypotheses, discoveries and research.

Our values and beliefs inhere in the verbal and visual images through which we communicate: the language we use (e.g. metaphors, grammatical constructions), the stories we tell, the pictures and visual technologies that are a part of our daily lives. We rarely notice those devices, yet they structure our most basic thoughts. In this class we will attend to them and, in so doing, work to become increasingly conscious of the rhetorical and visual strategies that influence us. In particular, we will be concerned in this class with the visual and textual representations of religion—the strategies, that is, by which religious beliefs and values shape our individual and collective responses specifically to human genetics. We will attend as well to how the language, narratives and images that are emerging from human genetics influence the way we imagine our bodies, our selves and our social responsibilities. In this class we will read or view all texts not only for their content, but also for what the language, images and/or narratives can tell us about the assumptions registered in and promoted by these works.

The course is divided into four sections. In the first we will discuss how religion structures even the most secular areas of our lives in the U.S., especially popular culture. The subsequent three sections will each focus on one issue within human genetics that has been debated publicly and depicted in popular culture. Each will allow us to think through particular questions about the nature of human existence that research in human genetics has raised and the cultural anxieties that those questions have fueled. There will
be a written assignment in conjunction with each section. You will have the opportunity to meet with people working in these fields both in class (guest speakers) and through a conference that is being planned in conjunction with this course (to be held in the second to last week of classes) and that you will be required to attend. You may choose to help organize and/or to present work at the conference if you would like (see option 1 under fourth assignment).

**Introduction: What is Human Genetics?**

**Aug. 27** Introduction

**Aug. 29** Nelkin and Lindee, "The DNA Mystique"* and van Dijk, "Popular Images of Genetics" and "Biofears and Biofantasies"* (*Imagenation*, chaps. 1 and 2)

**Sept. 3** Gattaca

**Sept. 5** Gattaca

**I. Religion in Lived Experience and Popular Culture**

In this section we will discuss the ways in which religion permeates popular culture and shapes our individual and collective experiences. This section does not consider people's conscious religious beliefs or practices. Rather, our investigation in this section focuses on how some of those beliefs and practices have become part of the fabric of our lives, how they shape our perceptions and responses to a variety of concerns. We will spend most of the class periods of this section discussing essays about religion and the quotidian, but we will end by applying what we have read in these essays to an investigation of the readings from week one (the bioethics text sand Gattaca). We will consider how an attention to the ways in which religion shapes our daily existence offers new insight into a discussion of bioethics, popular culture and a popular film.

**Sept. 10** Orsi, "Everyday Miracles"*; McDannell, "Interpreting Things"* and Ammerman, "Golden Rule Christianity"*

**Sept. 12** Mizruchi, "The Place of Ritual in Our Time"* and Lawrence, "God On Line"*


**First Assignment Due Sept. 13 (3-5 pp. typed):**

**Choose one from among the following essay topics:**

1. Choose an encounter or experience that you have had recently in which you now understand that religion played a significant part. The encounter or experience should not be obviously connected to religion. Rather, I would like you to think about the unconscious role of religious beliefs or values in your life. Note that those beliefs or values might not be those that you explicitly profess (or even those of your own faith).
2. Choose a popular text of some kind (e.g. book, film, work of art, advertisement) that is not explicitly about religion and discuss how religious beliefs or values permeate the text. How do they influence the message of the text?

3. Drawing on Susan Mizruchi's definition of ritual from "The Place of Ritual in Our Time," discuss how the cyberspace that Bruce Lawrence describes in "God on Line: Locating the Pagan/Asian Soul of America in Cyberspace" is either (a) structured by ritual, or (b) a space that will transform ritual as Mizruchi understands it. In other words, use these two essays to discuss either how you think cyberspace may change the religious dimensions of our everyday experience or how it conforms to (and is shaped by) them. Be sure to support your argument with specific examples.

II. Cloning and the Paradoxes of Identity

We will begin the second section by looking at the response to the issue of cloning by scientists and by some members of the clergy in the U.S. We will then consider debates in the mainstream press about cloning followed by several popular culture representations of cloning. We will attempt to understand the process of cloning, the nature of the various positions concerning this process, and the cultural anxieties that the topic has produced. In what ways, for example, does cloning challenge religious and other assumptions about the integrity of personhood and the nature of identity? A comparison of Ira Levin's novel, The Boys from Brazil, with its film adaptation of the same title will allow us to talk about the visual as well as narrative treatment of the subject.

Sept. 17 Selections from Klotzko, The Cloning Sourcebook
Sept. 19 Selections from Klotzko, The Cloning Sourcebook
Sept. 24 The Boys from Brazil
Sept. 26 The Boys from Brazil, cont.

Recommended Reading and Viewing: Lori B. Andrews, The Clone Age: Adventures in the New World of Reproductive Technology; Gina Bari Kolata, Clone: The Road to Dolly, and the Path Ahead; Richard Cowper, Clone (1972); dir. Harold Ramis, Multiplicity (1996); dir. John Frankenheimer, The Island of Dr. Moreau (1996); Sigmund Freud, "The Uncanny"

Second Assignment Due Sept. 27 (5-7 pp. typed):
  Choose among the following essay topics or alternatives:

1. From among the recommended readings, choose one essay or book chapter and, with particular attention to the language and images of the text, identify the nature of the author's response to cloning. What do you think concerns this particular author, and why? To what extent do you think that response is influenced (explicitly or implicitly) by religious concerns? Do you share the author's concerns? Why or why not? Be sure
to include specific examples from and analyses of the author's language to support your argument.

2. Watch the film *Multiplicity* and discuss how you understand the difference between a serious and a humorous treatment of the subject of cloning. How does the humorous nature of the treatment affect the presentation of the issue? Can you identify anxieties about cloning in the film, and, if so, how do they emerge? What effect does the humor have on the anxieties? Do you think we emerge from the film more or less concerned about the religious and ethical issues raised by cloning, and why? Do you think this treatment of cloning prepares the public in any way to participate in or understand a public debate on the topic? Why or why not?

3. Read Sigmund Freud's essay on the uncanny. Consider how Freud's explanation of the uncanny might help us understand the anxious response to cloning. What aspects of cloning do you think can not be explained by the uncanny, and why?

4. Describe a situation in which you would argue for cloning. Imagine that a group of religious leaders have approached you not to make that argument. Explain to them why you hold the position that you do. OR: Imagine that you are part of a delegation that includes but need not be limited to religious leaders in your community. You have been asked to draft a document for your group explaining the reasons your group considers cloning objectionable. Be sure, for either essay, that you support your claims with specific examples (from the assigned readings or from other sources). OR: Working in collaboration with several of your classmates, present a debate on the topic to the class. I will expect each side of the debate (which can consist of one or two members) to present a written statement of your argument as well.

### III. Stem Cells, Cell Lines and the Crisis of Personhood

In this section we will consider how human genetic research is forcing both the medical and scientific communities and the general public to think in new ways about the nature of human being and the value of human life. Because it characteristically involves the use of embryonic tissue, stem cell research touches on some of our deepest and most unresolved cultural dilemmas. While the creation of cell lines from the cells of individuals seems less ethically charged, the process of doing so has at times set ideas about fundamental rights (the inviolability of the person) in conflict with those of social responsibility. We will consider in particular the cases of John Moore and Henrietta Lacks, two people discovered (during the course of medical treatment) to have cells with unusual properties and from which researchers developed cell lines. The debates surrounding these cases have involved religious leaders, secular ethicists, scientists and legal experts. They reveal how research in human genetics is further destabilizing our already unstable ideas about who and what we are as human beings. This section will consider the language, narratives and images of human life that have put both stem cells and cell lines at the center of public debate and our evolving understanding of religious, ethical, legal and biological personhood. We will investigate the ways in which debates
surrounding stem cell research and cell lines register challenges to and changes in our understanding of what constitutes a biological human being and a legal person.

**Oct. 1** Warnock, "Do Human Cells Have Rights"* and Harris, "Origins and Terminuses and "The Wrong of Wrongful Life"* (Clones, Genes and Immortality, chaps. 3 and 4)

**Oct. 3** "Ethical Issues in Human Stem Cell Research" and Andrews, "State Regulation of Embryo Stem Cell Research" (web links through blackboard site)

**Recommended Reading:** Ronald M. Green, The Human Embryo Debates: Bioethics in the Vortex of Controversy (selected chapters*)

**Oct. 8** Tess Gerritsen, Life Support
**Oct. 10** Gerritsen, cont.

**Oct. 15** FALL BREAK
**Oct. 17** Henrietta Lacks (handouts and web links)

**Oct. 22** John Moore (handouts and web links)
**Oct. 24** John Moore cont.

**Oct. 29** Robin Cook, Chromosome 6
**Oct. 31** Robin Cook, Chromosome 6

**Nov. 5** Planet of the Apes and McGee, "Playing God?: Fears About Genetic Engineering"
**Nov. 7** Planet of the Apes

**Third Assignment Due Nov. 8 (5-7 typed pages):**

1. Imagine that Henrietta Lacks' descendants have approached you to offer an ethical opinion as part of a legal case that are filing on the lack of consent and other rights violations involving in her case. Using specific examples and arguments from the readings, draft your response to their request.

2. Choosing one fictional and one non-fictional work from this section, compare their engagements with religious and ethical implications of genetics. Consider the different audiences reached by each work, and the different (implicit or explicit) arguments that each makes. What issues seem to emerge in both works as the most pressing concerns and/or changes introduced by recent developments in human genetics? Do you think one of the genres is more effective than the other at promoting public discussion and/or awareness of genetic issues, or at representing the dilemmas introduced by genetics, than the other, and why?
3. What do you think are the most pressing concerns/issues raised in this section? Write your own essay, story or newspaper editorial that addresses those issues.

IV. Genetics, Populations, and Evolution

The readings in this section address the revisions of human history that population geneticists are claiming on the basis of genetic research. We will consider how the theories introduced by these scientists are creating new mythologies, and how they are in the process interacting with our most salient religious narratives of human origin. Discussions concerning an "African Eve," for example, powerfully illustrate the superimposition of scientific hypotheses onto the Biblical creation myth. We will discuss the nature of this superimposition, and its relevance for the redefinition of the concepts of population, kinship, and relatedness. In the process of doing so, we will also investigate the nature of the claims made by the scientists that these discoveries once and for all prove the illogic of the concept of race. Ending with two fictional works, we will consider how two of our best contemporary science fiction writers imagine ideas about human being and relatedness and how and why genetic research is forcing us to revisit conventional ideas about human evolution.


Nov. 19 Greg Bear, Darwin's Radio
Nov. 21 Bear, cont.

NOV. 21 BEAR READING (ATTENDANCE REQUIRED)
NOV. 22-23 CONFERENCE (ATTENDANCE REQUIRED)

Nov. 26 Bear, cont.
Nov. 28 THANKSGIVING RECESS

Dec. 3 Octavia Butler, Dawn
Dec. 5 Butler, cont.

Recommended: Owens and King, "Genomic Views of Human History"

Fourth Assignment Due Dec. 9 (8-10 pages typed):
Choose from among the following possibilities (note that the first option requires commitment and planning from the beginning of the course):
1. Revise your second or third essay for presentation at the conference. If you plan to choose this option, you should let me know and work with me during the weeks of this final section so that you will be ready for the conference.

2. Consider and evaluate the revisions of history offered in the readings for this section. You may choose to concentrate on one theory or to compare two different theories (e.g. the "out of Africa" thesis vs. multi-regional evolution). How persuaded are you by the thesis (or theses) and why? Be sure to address specific examples in your essay.

3. Write a conversation among any three authors and/or characters (from different works) studied in this section on one of the topics covered in these works (e.g. genetics and evolution; genetics and the revision of human history; the multi-regional theory of evolution). Be sure to offer arguments that are consistent with the outlook and voice of the author and character, although you may remove the author/character from his/her historical circumstances in order to have him/her participate in the conversation. In other words, Octavia Butler, a character from *Darwin's Radio* and Luigi Luca Cavalli-Sforza might all meet each other and discuss Thorne and Wolpoff's thesis or the "discovery" of "African Eve" or Herod's flu, but you must be careful to preserve both the logic and the voice of the particular speaker. It is a good idea to draw on specific examples from the works; for example, Octavia Butler might say, "As I noted in *Dawn...*" or one of her or Bear's characters might refer to something he or she said in the novel. That will help you illustrate how you are extending the logic of that author or character.

4. You may choose to respond broadly to the issues of this course in your final essay. Drawing on readings you have done for this course to support your claims, explain how you think research in human genetics is interacting with religious beliefs and values about the nature of humanity. This is a very broad topic, so you should begin by narrowing your focus to a particular question that the course has raised for you. You may write this essay as a traditional essay (or editorial) or you may choose to write it as a more personal essay, but in either case, be sure to draw on the readings to illustrate your points.

*Course Requirements:* You will be required to come to class prepared to discuss the readings or viewings. In addition, you will have four written assignments, out of which you will be required to complete three as follows: everyone must complete the first and last assignments; you may choose to complete either assignment two or assignment three (you may, if you wish, complete both for extra credit). I will accept electronic submissions (to my email account) or hard copies, but assignments must be submitted by 5 PM on the due date. Note that the first three essays are due on the Friday following the completion of that unit, and the fourth essay is due on the Monday following the end of class. No extensions without a dean's excuse.

All students must, if possible, attend Greg Bear's reading and the conference on the following Friday and Saturday. If there is a conflict, please let me know in advance.
Grading: Final grades will be based on the following:
First essay........ 20%
Second essay...  30%
Final essay....... 30%
Participation.... 20%

Readings: Readings are available in a variety of formats. Books required for the class are available for purchase at the Duke University Bookstore. Essays are available through e-reserves (starred essays)*, through links on the blackboard site, or as handouts (as noted). Please let us know if you are having trouble locating or accessing any of the readings. Some recommended readings are also available on e-reserves or web links. You are not responsible for the recommended readings; they are for those who wish to do extra reading or viewing.

Films: Films will be shown at a pre-arranged time prior to the first class in which we will be discussing it. For those who cannot make that time, films will on reserve at Lilly. Please be sure to view the film before class discussion.