HISC 166/266, UCSD, SPRING 2012

The Galileo Affair

William Clark / wiclark@ucsd.edu / Class: Friday 12:00-2:50 PM, HSS 6008

Office: 2302 HSS, East Wing / Hours: Friday 4:00-7:00 PM

Grading: This will be based on a final paper (70%) and class participation (30%), the latter including attendance and giving one or more of the reports, as detailed in the syllabus below.

Readings: Many or most of the readings below are optional. The only required readings or videos are indicated under each session by "read" or "watch"; readings or videos indicated as "suggested" or "background" are not required; those indicated as "reports" will only read by the person doing the relevant report.

Class website: https://ted.ucsd.edu

Readings (at UCSD Bookstore):

Blackwell, Richard. 1991. *Galileo, Bellarmine, and the Bible*. University of Notre Dame Press. Finocchiaro, Maurice, ed. 1989. *The Galileo Affair: A Documentary History*. University of California Press.

Readings (articles or selected chapters as pdfs on class website):

Artigas, Mariano and Rafel Martinez and William Shea. 2005. "New Light on the Galileo Affair?" In McMullin 2005, 213-33.

Beretta, Francesco. 2005a. "The Documents of Galileo's Trial: Recent Hypothesis and Historical Criticism. In McMullin 2005,191-212.

Beretta, Francesco. 2005b. "Galileo, Urban VIII, and the Prosecution of Natural Philosophers." In McMullin 2005, 234-61.

Biagioli, Mario. 1994. Galileo, Courtier University of Chicago Press.

Biagioli, Mario. 1996. "Playing with the Evidence." Early Science and Medicine, 1/1: 70-105.

Blackwell, Richard. 1998. "Could There be Another Galileo Case?" In Machamer 1998, 348-66.

Blackwell, Richard. 2006. Behind the Scenes at Galileo's Trial. University of Notre Dame Press.

Brewster, David. 1841. The Martyrs of Science ... Harper & Brothers.

Coyne, George. 2005. "The Church's Most Recent Attempt to Dispel the Galileo Myth." In McMullin 2005, 340-59.

Fantoli, Annibale. 2002. "Galileo and the Catholic Church" A Critique of the 'Closure' of the Galileo Commission's Work." Vatican Observatory Publications, Special Series. *Studi Galileiani*, 4/1: 1-35.

Fantoli, Annibale. 2005. "The Disputed Injunction and Its Role in Galileo's Trial." In McMullin 2005, 117-49.

Finocchiaro, Maurice. 2001. "Science, Religion, and the Historiography of the Galileo Affair: On the Undesirability of Oversimplification." *Osiris*, 2nd series, 16: 114-32.

Finocchiaro, Maurice. 2005. Retrying Galileo, 1633-1992. University of Chicago Press.

Galluzzi, Paolo. 1998. "The Sepulchers of Galileo: The 'Living' Remains of a Hero of Science?" In Machamer 1998, 417-47.

John Paul, II, Pope. 1992. "Speech of His Holiness Pope John Paul II to the Pontifical Academy of Sciences, 31 October 1992."

Kelter, Irving. 2005. "The Refusal to Accommodate: Jesuit Exegetes and the Copernican System." In McMullin 2005, 38-53.

Langford, Jerome. 1976. Galileo, Science and the Church. University of Michigan Press.

Lerner, Michel-Pierre. 2005. "The Heliocentric 'Heresy: From Suspicion to Condemnation." In McMullin 2005, 11-37.

McMullin, Ernan. 2005a. "Galileo's Theological Venture." In McMullin 2005, 99-116.

McMullin, Ernan. 2005b. "The Church's Ban on Copernicanism, 1616." In McMullin 2005, 150-90.

Redondi, Pietro. 1987. Galileo Heretic. Princeton University Press.

Segre, Michael. 1991. In the Wake of Galileo. Rutgers University Press

Segre, Michael. 1998. "The Never-Ending Galileo Story." In Machamer, 1998, 388-416.

Shank, Michael.1994. "Galileo's Day in Court: Essay Review of Galileo, Courtier by Mario Biagioli." *Journal for the History of Astronomy*, 24: 236-243.

Shank, Michael. 1996. "How Shall We Practice History?: The Case of Mario Biagioli's *Galileo Courtier*." *Early Science and Medicine*, 1/1: 106-50.

Westman, Robert. 1986. "The Copernicans and the Churches." In Lindberg and Numbers 1986, 76-113.

Videos (as mp4s on class website):

Galileo. A Play by Bertolt Brecht. English Version by Charles Laughton. 1974.

Galileo's Battle for the Heavens. PBS Nova. 2002.

Monkey Trial. PBS American Experience (2002)

The Starry Messenger. Episode 6 in The Ascent of Man by Jacob Bronowski. 1973.

The Trials of Oppenheimer. PBS American Experience (2009).

Readings (on reserve at Geisel Library):

Biagioli, Mario. 1994. Galileo, Courtier University of Chicago Press.

Blackwell, Richard. 1991. Galileo, Bellarmine, and the Bible. University of Notre Dame Press.

Blackwell, Richard. 2006. Behind the Scenes at Galileo's Trial. University of Notre Dame Press.

Fantoli, Annibale. 2003. Galileo: For Copernicanism and for the Church. Studi Galileiani, 6.

Finocchiaro, Maurice, ed. 1998. The Galileo Affair: A Documentary History. University of California Press.

Finocchiaro, Maurice. 2005. Retrying Galileo, 1633-1992. University of Chicago Press.

Langford, Jerome. 1976. Galileo, Science and the Church. University of Michigan Press.

Lindberg, David and Ronald Numbers, eds. 19896. *God And Nature: Historical Essays on the Encounter Between Christianity*. University of California Press.

Machamer, Peter, ed. 1998. The Cambridge Companion to Galileo. Cambridge University Press.

McMullin, Ernan, ed. 2005. The Church and Galileo. University of Notre Dame Press.

Redondi, Pietro. 1987. Galileo Heretic. Princeton University Press.

Date / Session / Topic & Sources:

April

06/01 Introduction to the Life & Trial of Galileo

Read: Finocchiaro, Galileo Affair (1989) pp. 1-43.

13 / 02 OVERVIEW OF COPERNICANISM & THE LIFE & TRIAL OF GALILEO

Watch: Galileo's Battle (2002). Read: Langford, Galileo (1976).

Background: Fantoli, Galileo (2003) intro & chaps. 1-2.

20 / 03 GALILEO & COPERNICANISM, 1610-1615

<u>Read</u>: Finocchiaro, *Galileo Affair* (1989), pp. 47-86; Blackwell, *Galileo* (1991), chaps. 1-2, + pp. 181-93, 203-16; Westman, "The Copernicans" (1986).

Suggested: Kelter, "The Refusal" (2005); Lerner, "The Heliocentric" (2005).

Reports: Galileo, *The Starry Messenger* (1610); "Foscarini's Letter" (1615).

27 / 04 GALILEO, THE BIBLE & THE BAN ON COPERNICANISM, 1615-1616

Read: Finocchiaro, Galileo Affair (1989), pp. 87-118, 134-53; Blackwell, Galileo (1991), chaps.3-4; McMullin, "The Church's Ban" (2005b).

Suggested: McMullin, "Galileo's Theological" (2005a); Fantoli "The Disputed" (2005).

Background: Fantoli, Galileo (2003) chap. 3.

Report: The Thirty Years' War (1618-1648) & the Catholic Church.

May

04 / 05 From the Ban to the Trial, 1616-1633

Read: Finocchiaro, Galileo Affair (1989), pp. 198-255; Blackwell, Galileo (1991) chap. 6.

Background: Fantoli, Galileo (2003) chaps. 4-5.

<u>Reports</u>: Galileo's "Discourse on the Tides" (1616); "Galileo's Reply to Ingoli" (1624); Galileo, *Dialogue on Two Chief World Systems* (1632); Copernicus & Jesuit Astronomy.

11 / 06 DOCUMENTING THE TRIAL, 1633

Read: Finocchiaro, Galileo Affair (1989), pp. 256-93; Blackwell, Galileo (1991), chap. 5; Blackwell, Behind Scenes (2006).

Background: Fantoli, Galileo (2003) chap. 6.

Reports: Redondi, Galileo Heretic (1987); Biagioli, Galileo, Courtier (1984).

18 / 07 Interpretations of the Trial: Redondi & Biagioli

Read: Redondi, *Galileo Heretic* (1987) pp. 3-27, 227-71, 333-35; Biagioli, *Galileo, Courtier* (1994). Report: Redondi, *Galileo Heretic* (1987) pp. 272-332; Biagioli, "Playing" (1996); Shank, "Galileo's" (1994) & "How Shall" (1996).

25 / 08 THE TRIAL OF GALILEO IN MYTH & HISTORY, 1633-1900

<u>Read</u>: Finocchiaro, *Retrying* (2005), pp. 1-125; Galluzzi, "The Sepulchers" (1998); Segre, "The Never-Ending" (1998); Brewster, *The Martyrs* (1841) pages TBA.

Background: Fantoli, Galileo (2003) chap. 7.

Reports: Galileo & the Trial in the 19th century; Brecht & his Galileos (1939-47); Bronowski & *The Ascent of Man* (1973).

June

01 / 09 REASSESSING GALILEO & THE TRIAL (I), 1900-2012

Watch: Galileo (1974); The Starry Messenger (1973).

Reports: Monkey Trial (2002); The Trials of Oppenheimer (2009).

08 / 10 Reassessing Galileo & the Trial (II), 1900-2012

<u>Watch</u>: *Galileo's Battle* (2002). <u>Read</u>: John Paul, II, "Speech" (1992); Blackwell, *Galileo* (1991) chap. 7; Finocchiaro, *Retrying* (2005), pp. 338-65; Finocchiaro, "Science, Religion" (2001). <u>Suggested</u>: Artigas et al., "New Light" (2005); Beretta, "'The Documents" (2005a); Beretta "Galileo, Urban VIII" (2005b); Coyne, The Church's" (2005); Fantoli, "Galileo" (2002).