A Big History of Technology [With a Little Science Too]

OLLI Boulder Fall Term, 2019
8 Week Course — Tuesday Afternoons 1-3PM (September 17 – Nov. 5)
No reading is required.

A recommended book is Ursula Franklin, The Real World of Technology (Toronto, House of Anansi 1999) [Available through online providers or can be ordered by any bookstore.*] The teacher’s notes will be available, and I can direct interested students to additional readings.

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This lecture-discussion class presents a big history of technology (and some science). As a big history, it begins with technology’s origins, travels through some cases of specific societies’ technologies, and ends focusing on the current and future world of technology, especially in the United States. For each case, three aspects of the technological systems will be described: specific technologies, the interactions of technology, societal organizations, and cultural values, and historians’ methods. Classes will include lectures, students’ comments, and discussions.

Week 1 – Tuesday, 17 September—African Origins and Dispersal
Focus: Technologies including carrying devices, stone tools, and still-used human technologies. Hominins and their technologies dispersal throughout the Old World.

Week 2 – Tuesday, 24 September—Egalitarian Forager and Ranked Horticultural Societies
Focus: The technologies of the egalitarian south African Kalahari foragers and native Americans as well as the social relations of their technological system.

Week 3 – Tuesday, 1 October—Early States and Empires
Focus: Several early states: Mesopotamia, Egypt, East Asia, and the Inka. In early states, a dramatic new technological path arose, as well as many technologies still used today.

Week 4 – Tuesday, October 8th—When Empires Fail: Technology in Heterarchies
Focus: Heterarchies are extremely creative periods. This class will include the innovative technological systems of feudal Europe and the East Asian Spring and Autumn/Warring States.

Week 5 – Tuesday, October 15th—Science (Knowledge about Nature) and their Dance with Each Other
Focus: The conceptualizations about nature in foraging societies, early empires, and modern science.

Week 6 – Tuesday, October 22nd: The Roots of Modern Science and Technology
Focus: The European Renaissance Engineers through the Industrial Revolution, within a developing world system.
Week 7—Tuesday, 29 October—*Contemporary Technology*
Focus: The current state of technology, its relationship to science, and the interactions technology with democratic institutions, cultures, and values.

Week 8—Tuesday, 5 November—*Future Directions for the Technological System*
Summary and Discussion: Summarizing the ideas about technology and its history that have been explored in the class. What does the future look like—and what should it look like.

*A podcast of Franklin’s is available through the CBC Ideas program: https://www.cbc.ca/radio/ideas/the-1989-cbc-massey-lectures-the-real-world-of-technology-1.2946845. Franklin’s book will be used to provide concepts with which to talk about different technological systems.*