History of Technology Reading List – General Exam reading list – Updated 02/22/06
Kieran Downes

General and Theoretical

1. Bijker, Weibe, Thomas P. Hughes, and Trevor Pinch, eds. *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*. Cambridge: MIT Press, 1987.

2. Bijker, Wiebe B., and John Law, eds. *Shaping Technology/Building Society: Studies in Sociotechnical Change*. Cambridge, MA: MIT Press, 1992.

3. Bijker, Wiebe E. *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change*. Cambridge, MA: MIT Press, 1995.

4. Buchanan, R.A. "Theory and Narrative in the History of Technology." *Technology and Culture*, 32 (1991): 365–376.

5. Cutcliffe, Stephen H. and Robert C. Post, eds. *In Context: History and the History of Technology*. Bethlehem: Lehigh University Press, 1989.

6. Hughes, Thomas. *Networks of Power: Electrification in Western Society, 1880-1930*. Baltimore: Johns Hopkins University Press, 1993.

7. -----------------------. *Rescuing Prometheus: Four Monumental Projects that Changed the Modern World*, New York: Vintage Books, 1998.

8. Kasson, John F. *Civilizing the Machine: Technology and Republican Values in America, 1776-1900* (NY: Penguin Books, 1976).

9. Kranzberg, Melvin, ed. *Technology in World Civilisation*, New York, Oxford University Press, 1967. ==(read only chapters that seem relevant/interesting)==

10. Landes, David S. *The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present*. Cambridge: Cambridge University Press, 1969. ==(read in pieces)==

11. Latour, Bruno. *Science in Action: How To Follow Scientists and Engineers Through Society*. Cambridge: Harvard University Press, 1987.

12. Marx, Leo and Merritt Roe Smith, eds. *Does Technology Drive History? The Dilemma of Technological Determinism*. Cambridge: MIT Press, 1994.

13. Marx, Leo. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. New York, Oxford University Press, 1964.

14. Mindell, David. *Between Human and Machine: Feedback, Control, and Computing before Cybernetics.* Baltimore: Johns Hopkins University Press: 2002.

15. Misa, Thomas. "How Machines Make History and How Historians Help Them to Do So." *Science, Technology and Human Values* 13 (1988): 308-331.

16. -----------------. *Leonardo to the Internet : Technology and Culture from the Renaissance to the Present (Johns Hopkins Studies in the History of Technology).* Baltimore: Johns Hopkins University Press, 2004.

17. Mumford, Lewis. *Technics and Civilization.* New York: Harcourt, 1963 [1934].

18. Rosenband, Leonard. "Never Just Business: David Landes *The Unbound Prometheus.*" *Technology and Culture* 29 (1988): 168-176.

19. Scranton, Philip. "None-Too-Porous Boundaries: Labor History and the History of Technology." *Technology and Culture* 46 (2005): 722-43.

20. Smith, Merritt Roe, and Gregory Clancey, eds. *Major Problems in the History of Technology: Documents and Essays.* Boston: Houghton Mifflin, 1998.

21. Staudenmaier, John M. "Recent Trends in the History of Technology." *American Historical Review* 95 (1990): 715–725.

22. Staudenmaier, John M. *Technology's Storytellers: Reweaving the Human Fabric.* Cambridge, MA: MIT Press, 1985.

23. Winner, Langdon. "Upon Opening the Black Box and Finding It Empty." *Science, Technology, and Human Values* 18 (1993): 362-378.

24. Winner, Langdon. *The whale and the reactor: a search for limits in an age of high technology.* Chicago: University of Chicago Press, 1986.

25. White, Lynn. *Medieval Technology and Social Change.* Oxford: Oxford University Press, 1964.

Technology, Society and Culture

26. Adas, Michael. *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance.* Ithaca: Cornell University Press, 1989.

27. Alder, Ken. *The Measure of All Things : The Seven-Year Odyssey and Hidden Error That Transformed the World.* New York: Free Press, 2002.

28. Cowan, Ruth Schwartz. *More work for mother : the ironies of household*

technology from the open hearth to the microwave, New York : Basic Books, c1983.

29. --------------------------. *A Social History of American Technology*. New York: Oxford University Press, 1997.

30. Graham, Loren R. *The Ghost of the Executed Engineer: Technology and the Fall of the Soviet Union*. Cambridge, MA: Harvard University Press, 1993.

31. Hecht, Gabrielle. *The Radiance of France: Nuclear Power and National Identity after World War II*. Cambridge, MA: The MIT Press, 1998.

32. Horowitz, Roger. *Boys and Their Toys?: Masculinity, Technology, and Class in America*. New York: Routledge, 2001.

33. Hughes, Thomas P. *American Genesis: A Century of Invention and Technological Enthusiasm*, 1870-1970. New York: Viking, 1989.

34. Misa, Thomas. *A Nation of Steel : The Making of Modern America, 1865-1925 (Johns Hopkins Studies in the History of Technology)*. Baltimore: Johns Hopkins University Press, 1998.

35. Noble, David. *America by Design: Science, Technology, and the Rise of Corporate Capitalism*. New York: Knopf, 1977.

36. Nye, David. *The American Technological Sublime*, Cambridge: MIT Press, 1994.

37. -------------. *America as Second Creation: Technology and Narratives of New Beginnings*. Cambridge, MA: MIT Press, 2003.

Manufacturing and Production

38. Aitken, Hugh G. J. *Scientific Management in Action: Taylorism at Watertown Arsenal*. Princeton: Princeton University Press, 1985 [1960].

39. Chandler, Jr., Alfred D. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA: Harvard University Press, 1977.

40. Flink, James J. "Three Stages of Automobile Consciousness." *American Quarterly* (October 1972): 451-473.

41. Gordon, Robert and Patrick Malone. *The Texture of Industry: An Archaeological View of the Industrialization of North America*. Oxford: Oxford University Press, 1997.

42. Hounshell, David A. *From the American System to Mass Production, 1800–*

1932. Baltimore: Johns Hopkins University Press, 1984.

43. Hounshell, David A. (Article on Chandler and Hughes in History and Technology, around 1995)

44. Noble, David F., *Forces of Production*. New York: Oxford University Press, 1986. (replace with article reference)

45. Rosenberg, Nathan. *Perspectives on Technology*. Cambridge: Cambridge University Press, 1976. (read chapter on history of machine tools)

46. Sabel, Charles and Jonathan Zeitlin. "Historical Alternatives to Mass Production: Politics, Markets, and Technology in Nineteenth Century Industrialization," *Past and Present* 108 (August 1985): 137–177.

47. Scranton, Philip. *Endless Novelty: Specialty Production and American Industrialization, 1865-1925*. Princeton: Princeton University Press, 1997.

48. Smith, Merritt Roe. "Eli Whitney and the American System of Manufacturing." in Carroll W. Pursell, ed. *Technology in America*. Cambridge: MIT Press, 1982: 45-61.

49. Taylor, Frederick W. *The Principles of Scientific Management* New York: W.W. Norton & Co., 1967 [1911].

50. Thompson, E.P. "Time, Work-Discipline, and Industrial Capitalism." 1963.

Technology and the Military

51. Alder, Ken. "Innovation and amnesia: Engineering rationality and the fate of interchangeable parts manufacturing in France," *Technology and Culture* 38 (April 1997): 273-312.

52. Edwards, Paul. *The Closed World. Computers and the Politics of Discourse in Cold War America*. Cambridge: MIT Press, 1996. (skim – see Smith & Clancey article)

53. Koistinen, Paul A. C., *Mobilizing for modern war : the political economy of American warfare, 1865-1919*   (Lawrence, Kan. : University Press of Kansas, c1997.) (choose most applicable volume)

54. Leslie, Stuart, *The Cold War and American Science: The Military-Industrial Complex at MIT and Stanford* (NY: Columbia University Press, 1993). (skim)

55. MacKenzie, Donald. *Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance* (Cambridge, MA: MIT Press, 1990).

56. McNeill, William Hardy. *The Pursuit of Power: Technology, Armed Force, and Society Since A.D. 1000.* Oxford: Basil Blackwell, 1983.

57. Mindell, David A. *War, Technology, and Experience Aboard the USS Monitor.* Baltimore: Johns Hopkins University Press, 2000.

58. Smith, Merritt Roe, eds., *Military Enterprise and Technological Change: Perspectives on the American Experience* (Cambridge, MA: MIT Press, 1985). (skim – read 2 or 3 essays)

59. Smith, Merritt Roe. *Harper's Ferry Armory and the New Technology.* Ithaca: Cornell University Press, 1977.

60. Van Creveld, Martin L, *Technology and war : from 2000 B.C. to the present* (New York : Free Press ; London : Collier Macmillan, c1989.) (skim)

Technology and Consumption

61. Stephens, Carlene E. *On Time: How American Has Learned to Live Life by the Clock.* Washington D.C.: Smithsonian Intitution, 2002.

62. Kline, Ronald R. *Consumers in the Country: Technology and Social Change in Rural America.* Baltimore: Johns Hopkins University Press, 2000.

63. McShane, Clay. *Down the Asphalt Path.* New York: Columbia University Press, 1995.

64. Meikle, Jeffrey L. *American Plastic: A Cultural History.* New Brunswick: Rutgers University Press, 1995.

65. Nye, David E. *Consuming Power: A Social History of American Energies.* Cambridge, MA: MIT Press, 1998.

66. ———. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA: 7+MIT Press, 1990.

67. Philip, Robert. *Performing Music in the Age of Recording.* New Haven: Yale University Press, 2004.

68. Schivelbusch, Wolfgang. *Disenchanted Night: The Industrialization of Light in the Nineteenth Century.* Berkeley: University of California Press, 1988.

69. Smulyan, Susan. *Selling Radio: The Commercialization of American Broadcasting, 1920-1934.* Washington: Smithsonian Institution Press, 1994.

70. Symes, Colin. *Setting the Record Straight: A Material History of Classical Recording.* Middletown: Wesleyan University Press, 2004.

71. Thompson, Emily. *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933*. Cambridge, MA: MIT Press, 2002.

72. Sterne, Jonathan. *The Audible Past: Cultural Origins of Sound Reproduction*. Washington: Duke University Press, 2003.

Technological Enthusiasm and the User

73. Aitken, Hugh. *The Continuous Wave: Technology and American Radio 1900-1932*. Princeton: Princeton University Press, 1985.

74. Bright, Brenda Jo, *Style and Identity: Houston Low Riders* (M. A. Thesis, Rice University, 1986).

75. Bright, Brenda Jo, *Mexican American Low Riders* (Ph.D. Thesis, Rice University, 1994).

76. Corn, Joseph J., *The Winged Gospel: America's Romance with Aviation, 1900-1950* (NY, NY: Oxford University Press, 1983).

77. Cowan, Ruth Schwartz. "The 'Industrial Revolution' in the Home: Household Technology and Social Change in the 20th Century." *Technology and Culture* 17 (1976): 1-23.

78. Ferguson, Eugene, "Toward a Discipline of the History of Technology," *Technology and Culture* 15 (1974): 13-30.

79. Ferguson, Eugene, "Presidential Address—Elegant Inventions: The Artistic Component of Technology," *Technology and Culture* 19 (1978): 450-460.

80. Ferguson, Eugene, "Enthusiasm and Objectivity in Technological Development" (Unpublished Manuscript, 1970).

81. Ferguson, Eugene, "The American-ness of American Technology," *Technology and Culture* 20 (1979): 3-24.

82. Ferguson, Eugene, *Engineering and the Mind's Eye* (Cambridge, MA: MIT Press, 1992).

83. Franz, Kathleen, *Narrating Automobility: Travelers, Tinkerers, and Technological Authority in the Twentieth Century* (Ph.D. Thesis, Brown University, 1999).

84. Hindle, Brooke, *Emulation and Invention* (NY, NY: New York University Press, 1981).

85. Katz, Mark. *Capturing Sound: How Technology has Changed Music*. Berkeley: University of California Press, 2004.

86. Kline, Ronald and Trevor Pinch, "Users as Agents of Technological Change: The Social Construction of the Automobile in the Rural United States," *Technology and Culture* 37 (1996): 763-795.

87. Lindsay, Jon. "War upon the Map: The Politics of Military User Innovation." (Unpublished paper, MIT, 2005).

88. Lucsko, David. *Manufacturing Muscle: The Hot Rod Industry and the American Fascination with Speed, 1915-1984*. (Ph.D. Thesis, MIT, 2005).

89. Maines, Rachel, *The Technology of Orgasm : "Hysteria," the Vibrator, and Women's Sexual Satisfaction* (Baltimore, Johns Hopkins University Press, 2001).

90. Pinch, Trevor and Frank Trocco. *Analog Days: The Invention and Impact of the Moog Synthesizer*. Cambridge: Harvard University Press, 2002.

91. Pinch, Trevor and Nelly Oudshoorn, *How Users Matter: The Co-Construction of Users and Technology*. Cambridge: MIT Press, 2003.

92. Post, Robert C., "'The Frailties and Beauties of Technological Creativity': An Interview with John M. Staudenmaier by Robert C. Post, *American Heritage of Invention and Technology* 8 (1993): 16-24.

93. Post, Robert C. *High Performance: The Culture and Technology of Drag Racing, 1950-2000*. Baltimore: Johns Hopkins University Press, 2001 [1994].

94. Wright, John L., Editor, *Possible Dreams: Technological Enthusiasm in Twentieth Century America* (Dearborn, MI: Henry Ford Museum, 1992).

95. Yeang, Chen-Pang. *Characterizing Radio Channels: The Science and Technology of Propagation and Interference, 1900-1935*. (Ph.D. Thesis, MIT, 2004).