

The Manhattan Project : a selected and annotated bibliography

Sylvain Lenfle – March 2018

(in alphabetical order)

- Bird K, Sherwin M. 2005. *American Prometheus. The Triumph and Tragedy of J. Robert Oppenheimer*. Alfred A. Knopf: New-York

The incontrovertible biography of Oppenheimer. A masterful account of his life. The Los Alamos story is mainly in part three. An incredible testimony on the cold war and the Mc Carthyism. Fascinating.

- Conant J. 2005. *109 East Palace. Robert Oppenheimer and the secret city of Los Alamos*. Simon & Schuster: New-York

A history of Los Alamos seen from the eyes of Dorothy Mc Kibbin who was responsible from the reception desk of Los Alamos at 109 East Palace in Santa Fe. Describes the "plumbing" and the social life in Los Alamos. Very interesting... and funny.

- Gosling F. 1999. The Manhattan Project. US Department of Energy (DOE/MA-0001 - 01/99)

A good summary of the project by an historian of the Department of Energy. Contains an interesting bibliography. Available online.

- Groves L. 1962. *Now It Can Be Told. The Story of the Manhattan Project*. Da Capo Press: New-York

The memoirs of the project director. A must read for anyone interested in project management. Gives an idea of the magnitude and the incredible difficulty of the task.

- Hales P. 1997. *Atomic Spaces. Living on the Manhattan Project*. University of Illinois Press: Urbana and Chicago

A very personal view of the Manhattan Project and how it transformed american spaces by creating its own organization, architecture, language, social life... The best presentation of Groves "compartmentalization" policy". Very detailed on the social dimension of the project (e.g labor relations).

- Hawkins D. 1946. Manhattan District History. Project Y, the Los Alamos Project. Vol. I: Inception until August 1945. Declassified version released December 1, 1961. LAMS-2532. Los Alamos National Laboratory

Hawkins was a close collaborator of Oppenheimer at Los Alamos. This is the official history of the lab during the war. Very very detailed on all organizational changes. Available online.

- Hewlett R, Anderson O. 1962. *The New World, 1939-1946. Volume I of a History of the United States Atomic Energy Commission*. The Pennsylvania State University Press: University Park, PA

The second official history of the project (after Smyth, 1945). A must read for anyone interested by the case. Very very complete. All the accounts of the projects are based on it (i.e. most of the graphs in Rhodes, 1986 comes from here). Unfortunately out of print (but available on amazon).

- Hoddeson L, Henriksen P, Meade R, Westfall C. 1993. *Critical Assembly. A Technical History of Los Alamos during the Oppenheimer Years, 1943-1945*. Cambridge University Press: New-York

A comprehensive technical history of the design of the bombs at Los Alamos. The most complete description of the "implosion" crisis during the spring of 1944. Very very interesting. A must read on the case.

- Hounshell D, Smith J. 1988. *Science and Corporate Strategy. Du Pont R&D, 1902-1980*. Cambridge University Press: New-York

The official history of DuPont R&D. The Manhattan Project is treated in chapter 16 p. 338-346. Not essential.

- Hughes J. 2002. *The Manhattan Project. Big Science and the Atom Bomb*. Columbia University Press: New-York

Tries to demonstrate that the project continues old trends in Big Science. Not completely convincing. No new materials.

- Jones V. 1985. *Manhattan: the Army and the Bomb*. Center of Military History: Washington, D.C.

The third official history. Focused on the Army role via the Corps of Engineers. Very complete for those interested by this question. Unfortunately out of print (but available on amazon).

- Kelly C. 2007. *The Manhattan Project*. Black Dog & Leventhal: New-York

A collection of papers and abstracts of books on the Manhattan Project. Gives an overview. Contains a timeline of the project. Not essential.

- Lenfle S. 2008. Proceeding in the dark. Innovation, project management and the making of the atomic bomb. *CRG Working Paper*(08-001)

My synthesis. Discussed the case in the light of the literature on project management. Available online.

- MacKenzie D, Spinardi G. 1995. Tacit Knowledge, Weapons Design, and the Uninvention of Nuclear Weapons. *The American Journal of Sociology* **101**(1): pp. 44-99

A must read for anyone interested by nuclear weapons design. Contains an insightful section on Los Alamos.

- Malloy S. 2008. *Atomic Tragedy. Henry L. Stimson and the Decision to Use the Bomb Against Japan*. Cornell University Press: New-York

A very very interesting history of the decision to use the bomb. A must read.

- Ndiaye P. 2006. *Nylon and Bombs: DuPont and the March of Modern America* (E Forster, Trans.). John Hopkins University Press: Baltimore

Chapter 5 & 6 gives a comprehensive history of DuPont involvement in the project and after. Criticize the "official" history of Hounshell and Smith.

- Norris R. 2002. *Racing for the Bomb. General Leslie R. Groves, The Manhattan Project's Indispensable Man*. Steerforth Press: South Royalton, Vermont

The biography of Leslie Groves whose role on the project was crucial and is frequently underestimated. Very interesting.

- Reed, C. 2014. *The History and Science of the Manhattan Project*. Berlin: Springer Verlag.

An excellent and recent synthesis that is both a history of the project and an undergraduate lecture on the underlying physics of the project.

- Rhodes R. 1986. *The Making of the Atomic Bomb*. Simon & Schusters: New-York

The incontrovertible reference on the making of the bomb. Pulitzer prize winner. Quoted by everybody as the reference. The first 400 pages (on 800 !!) deals with the development of nuclear physics before the project. A masterful account of the Trinity test. A brilliant reflection on the industrialization of war. Less detailed that Hewlett & Anderson on the project. Contains an extensive bibliography. A must read.

- Rhodes R. 2002. "A Great and Deep Difficulty": Niels Bohr and the Atomic Bomb, *Symposium on "The Copenhagen Interpretation: Science and History on Stage"*: National Museum of Natural History of the Smithsonian Institution, Washington D.C.

On the role of Niels Bohr before and during the project. Discuss the philosophical implications of the bomb.

- Rosenberg D. 1983. The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960. *International Security* 7(4): pp. 3-71

A brilliant discussion of the development of US nuclear strategy after the bomb. Interesting to understand how the thinking on military strategy was profoundly shaken by the development of nuclear weapons. Does not deal directly with the project.

- Serber R. 1992. *The Los Alamos Primer. The First Lectures on How to Build an Atomic Bomb*. University of California Press: Berkeley

An annotated transcription of the course given by R. Serber to newcomers at Los Alamos in 1943. Gives the state of the art in nuclear physics. Technical reading (hard to follow without a background in nuclear physics... i.e. my case). Interesting introduction by R. Rhodes.

- Smyth H. 1945. *Atomic Energy for Military Purposes*. Princeton University Press. Reprinted in *Reviews of Modern Physics*, vol. 17 n°4, pp. 351-471: Princeton

The official report on the foundations and unfolding of the project. released just after Hiroshima. A must read. Very clear.

- Stimson H. 1947. The decision to use the atomic bomb. *Harper's Magazine*(February)

The "official" story on the decision to use the bomb. A historical document.

- Thayer H. 1996. *Management of the Hanford Engineer Works in World War II. How the Corps, DuPont and the Metallurgical Laboratory fast tracked the original plutonium works*. American Society of Civil Engineers Press: New-York

One of the very few comprehensive analysis of the management of the Manhattan project. Focused on the Hanford part of the project (i.e plutonium production) that was managed by DuPont, the army corps of engineers and Chicago University MET Lab. Written by a civil engineer. Very rich; sometimes (too) technical

- Thorpe C, Shapin S. 2000. Who Was J. Robert Oppenheimer? Charisma and Complex Organization. *Social Studies of Science* **30**(4): pp. 545-590

A brilliant analysis of the functioning of Los Alamos and of the central role played by Oppenheimer. Written by two sociologist of science.

- Thorpe C. 2004. Against Time: Scheduling, Momentum, and Moral Order at Wartime Los Alamos. *Journal of Historical Sociology* **17**(1): 31–55.

Very interesting reflexion on the role of scheduling and the management of time in the last year of the project, and on its incredible speed and momentum as it moves on.