

## Beginning Reading Lists

We will have four different *types* of reading lists.

- (1) A “background reading list” that all of us should read. This will consist of very brief excerpts taken from “classical sources” that have attempted to lay the groundwork, in various domains, for what was intended to be<sup>1</sup> “convincing evidence in that domain.”
- (2) A collection of complete, contemporary, essays that focus on certain specific aspects of evidence. We may use these essays as assigned reading—as the seminar progresses—and as focuses for in depth discussion.
- (3) Sources that we have collected as possible inspirational material for themes to be pursued in individual papers.
- (4) Each of our presenters will be giving us a list of readings that are specifically geared to their presentation.

### (1) **Background Reading List:**

*(Brief excerpts of some foundational essays on the structure of empirical scientific evidence)*

- Paragraphs LXX and LXXI of Francis Bacon’s *Novum Organum*
- A very brief extract from Galileo’s *Two New Sciences*
- The introduction to Ernst Mach’s *The Science of Mechanics*
- An excerpt from Karl Popper’s *Science and Falsification*
- William James’ *Varieties of Religious Experience*
- Sections II, IV, V in Len O’Neill’s essay *Peirce and the Nature of Evidence*
- The preface to Thomas Kuhn’s *The Structure of Scientific Revolutions*
- An excerpt from Clifford Geertz’s *The Interpretation of Cultures*

### (2) **Some contemporary essays taken from the volume *Questions of Evidence*<sup>2</sup> in order of relevance to our seminar:**

- (a) Mary Poovey, Harry Harootunian: Figures of arithmetic, figures of speech: the discourse of statistics This is on the controversy (largely battled out in sessions of the British Association for the Advancement of Science) surrounding

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<sup>1</sup>and sometimes has indeed become

<sup>2</sup>*Questions of Evidence: Proof, Practice, and Persuasion across the Disciplines*, (Eds.: James Chandler, Arnold I. Davidson, Harry D. Harootunian) University of Chicago Press.

the nature of Statistics, whether it is or is not a science. Whenafter pressure from Charles Babbagea statistical section was admitted into the BAAS (1833), the question became: what is its role and what are its limitations? Among other issues: the nature of “fact,” and whether numerical figures are meaningless without a theory in which they are embedded (and with respect to which they can be interpreted as evidence of something; and symmetrically, whether “theory” is meaningless and merely anecdote-driven without tables of data.

- (b) R. Lewontin, William Wimsatt: Facts and the factitious in the natural sciences. This gets to the heart of fact and evidence in biology: an essay on the nature of biological assertions; and biological laws.
  - (c) Carlo Ginzburg, Arnold Davidson: Checking the evidence: the judge and the historian This is an essay on, essentially, the philosophy of historiography, with focus on the issue of moral judgments within historical writings. It is very much “on topic” for our seminar.
  - (d) Lorraine Daston, James Chandler: Facts and Evidence The over-riding topic here is, as the title hints, neutral fact versus ‘enlisted’ evidence. The specific arena in which this topic is considered is the context of *The Miraculous*. One side-question is what constitutes miracle as opposed to marvel (specifically, in the writings of Augustine and Aquinas).
- (3) **Some possible sources that might suggest themes to be explored individual papers:**
- The various modes of inferring genealogical trees, and what can be deduced from them:
    - for the evolution of language: [http://www.nytimes.com/2012/08/24/science/indo-european-languages-originated-in-anatohtml?\\_r=1&hp](http://www.nytimes.com/2012/08/24/science/indo-european-languages-originated-in-anatohtml?_r=1&hp)
    - for the evolution of genes: Eugene Koonin’s book, *The Logic of Chance: The Nature and Origin of Biological Evolution* which makes analogous genealogical trees based on DNA.
  - Specific topics of interest in terms of the nature of evidence used to draw conclusions:
    - Evidence gleaned from photographs: Errol Morris’s various series of NYT opinionator articles; see also his book *Believing is seeing (Observations on the mysteries of photography)*, Penguin Press.

- Drug-testing and, specifically, the placebo effect: Marcia Angell (e.g., as in her book *The Truth About the Drug Companies: How They Deceive Us and What to Do About It*).
- (more to be added) ...