Curriculum Vitae
William R. Seaman

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Department of Philosophy
University of Wisconsin-Madison

Area of Specialization
Philosophy of Science

Areas of Competence
History of Modern Philosophy
Symbolic Logic

Education

2002	Ph.D. Philosophy, University of Wisconsin-Madison
1994	M.A. Philosophy, University of Wisconsin-Madison
1989	M.A. Communication Arts, University of Wisconsin-Madison
1984	B.S. Mechanical Engineering, University of California–Berkeley

Employment

1992-Present	Mechanical Design Engineer, *Hewlett-Packard Company*, Vancouver, Washington. Currently assigned to mechanical design simulation workgroup, supporting several finite element (numerical solution) structural, thermal and dynamic simulation software packages (Fall 1998 to present). Prior assignments include systems, product design and manufacturing engineering at the design center for *Hewlett-Packard*'s line of home and business ink-jet printers (1984-1987, 1992-2004).
1991-1992	Teaching Assistant, Symbolic Logic, University of Wisconsin – Madison

Graduate Honors

1987-1991	Jacob Javits Federal Graduate Fellowship

Publications
"Active Audience Theory: Pointless Populism", *Media, Culture and Society* (SAGE, London, Newbury Park and New Delhi), Commentary, Vol. 14, April 1992, 301-311.

Professional Presentations
National Communication Association Convention, Chicago, IL, November 1-4, 1990
"Active Audience Theory: Pointless Populism"
Union for Democratic Communications Annual Conference, Eugene, OR, October 1999
"The Narrativity Scene: Primary and Irreducible, or Ultimately Theoretical"
"Truth and Fairness in American Journalism: Towards a Philosophy of News Reporting and Criticism"

Papers Available
"The Completeness Argument for Indeterministic Explanation" (chapter from dissertation)
"The Garden Path to Scientific Realism" (prelim paper)

References
Ellery Eells, Professor of Philosophy, University of Wisconsin-Madison, thesis committee chair
Daniel Hausman, Professor of Philosophy, University of Wisconsin-Madison, thesis committee
Elliott Sober, Professor of Philosophy, University of Wisconsin-Madison, thesis committee
Steven Nadler, Professor of Philosophy, University of Wisconsin-Madison, (for AOC)
Michael Byrd, Professor of Philosophy, University of Wisconsin-Madison, (teaching evaluation)

Teaching Experience
Teaching Assistant (responsible for discussion sections, grading)
Symbolic Logic (Professor Michael Byrd, Instructor Janet Kelly, Fall and Spring terms, 1991-92, University of Wisconsin-Madison)
Seminar Leader
Noam Chomsky's Political Thought (Fall 1994, Red Rose School, Portland, Oregon)

Graduate Courses and Seminars

*indicates a course taken as independent study

Philosophy of Science

Philosophy of the Natural Sciences (Lila Luce)
Seminar: Philosophy of Science: Philosophical Theories of Scientific Explanation (Ellery Eells)
Seminar: Philosophy of Science: Foundations of Natural Intelligence (Malcolm Forster)
Philosophical Problems in the Biological Sciences (Elliott Sober)
Seminar: Philosophy of Science: Quantum Mechanics (Malcolm Forster)
Seminar: Philosophy of Science: Confirmation Theory (Ellery Eells)
Seminar: Philosophy of Science: Realism (Elliott Sober)

History of Modern Philosophy

Modern Political Thought* (Patrick Riley)
History of Modern Philosophy (Steven Nadler)
Seminar: Advanced History of Philosophy–Descartes (Steven Nadler)
Seminar: Advanced History of Philosophy–Leibniz (Steven Nadler)
Seminar: Kant's Political Philosophy (Werner Becker)

History of Ancient and Medieval Philosophy

Classical Rhetorical Theory (Lloyd Bitzer)
History of Ancient Philosophy* (Paula Gottlieb)
Seminar: Advanced History of Philosophy: Protagoras and his critics (Paula Gottlieb)
Ancient & Medieval Western Political Thought (Patrick Riley)

Philosophy of Mind and Language

Philosophy of Mind (Gabriel Segal)
Language and Meaning (Leora Weitzman)
Seminar: Philosophy of Language: Knowledge and Reference (Leora Weitzman)
Seminar: Metaphysics: Representation and the Will (Dennis Stampe)
Seminar: Philosophy of Mind: Units of Behavior in Psychological Explanation (Berent Enç)

Additional Social and Political Philosophy

Contemporary Political Thought (Patrick Riley)
Seminar: Philosophy of the History of Philosophy (Haskell Fain)
Journalism Topics: Government & Mass Media (Robert McChesney)

Logic

Symbolic Logic (Michael Byrd)
Symbolic Logic (intermediate) (Ellery Eells)

Dissertation Abstract

"Indeterministic Explanation: Visited, Revisited, and Again Revisited"

Ellery Eells (chair), Daniel Hausman, Elliott Sober

Of the hundreds of U.S. soldiers exposed to radiation from atomic bomb tests in the 1950s, a small number developed leukemia. Contemporary science tells us that the development of leukemia from exposure to radioactive fallout may be irreducibly probabilistic. If the leukemia in such cases results from a stochastic process, can we provide a scientific explanation for a particular soldier developing the disease? It is widely accepted within philosophy of science that indeterministic explanation is possible. In this dissertation I attempt to show that the arguments supporting indeterministic explanation do not warrant this view. The arguments play out across two broad areas of contention.

The first area of contention centers on meta-theoretical principles that at one time commanded general acceptance as conditions of adequacy for any proposed model of scientific explanation. These conditions of adequacy include *Principle P*, which states that if *A* explains *B*, then *A* cannot also explain *–B*, and the contrast class condition, which requires (within the context of interest for this dissertation) that for *A* to explain *B*, *A* must explain why *B* occurred rather than *–B*. While explanatory deductivist models of explanation satisfy these conditions, there are non-deductivist interpretations of these adequacy conditions that are compatible with indeterministic explanation.

I begin with a treatment of Wolfgang Stegmüller's argument against indeterministic explanation. Criticisms offered by Lorenz Krüger reveal weaknesses in Stegmüller's argument and introduce alternative models of explanation which compete with explanatory deductivism. These competing models comprise the second broad area of disagreement in the debate. As part of the support for probabilistic causal models that accommodate indeterministic explanation, Wesley Salmon championed a set of four arguments directed against explanatory deductivism. First, there is an effort to discredit the deductive implication requirement for explanation. Second, it is alleged that explanatory deductivism implies an untenable commitment to determinism. Third, it is proposed that an exhaustive list of the causes (or explanatorily relevant factors) for the occurrence of an event ought to be recognized as a "complete" (and therefore adequate) explanation of that occurrence; for indeterministic events, this "completeness" thesis also challenges the deductive implication requirement. Fourth, it is argued that explanatory deductivism cannot account for the explanation of a population-level outcome of stochastic processes when that outcome is limited to a finite population. I attempt to show that these arguments do not succeed in undermining the deductivist principles that block indeterministic explanation.

Having defended the deductivist principles governing scientific explanation, I return to arguments directed specifically against the conditions of adequacy cited earlier. In the first of these arguments, Salmon contends that many scientific theories provide equivalent understanding regardless of the particular outcome of the stochastic process in question. This understanding appears to establish that we can explain any particular outcome from such a stochastic process, and consequently that indeterministic explanation is possible. I argue that Salmon's reasoning trades on an ambiguity in the identification of explananda in such cases; once this ambiguity is removed, the inference does not hold. Finally, I turn to a series of arguments advanced within the context of defending four theories of scientific explanation that accommodate indeterministic explanation. I attempt to show that the motivations cited for accepting indeterministic explanation can be addressed without abandoning explanatory deductivist principles.