

Robert Rosenberger

5638 Avenue du Parc #206
Montreal, QC H2V 4H1
514-303-2899
estragon10@yahoo.com

Stony Brook University
213 Harriman Hall
Stony Brook, NY 11794
631-632-7570

CURRENT AFFILIATION

Visiting Scholar, McGill University

AREAS OF SPECIALIZATION

Philosophy of Science, Philosophy of Technology

AREAS OF COMPETENCE

Continental Philosophy, Science Studies, Philosophy of Mind

EDUCATION

Ph.D. Candidate Philosophy (A.B.D.)

Stony Brook University 2001-present

Expected completion: January 2008

Committee: Don Ihde (director), Patrick Grim, Donn Welton, Harriet Waters

Dissertation Title: The Philosophy of Scientific Debate Traditions

M.A. Philosophy

Stony Brook University

December 2004

B.A. Philosophy and Psychology (double major)

Pennsylvania State University 2000

BOOK PROJECT

Editor. *5 Questions in Philosophy of Science*. Automatic Press/VIP.

-scheduled to be published summer 2008

-consists of interviews with a number of prominent figures in this field

SINGLE-AUTHORED PUBLICATIONS (Articles and Book Chapters)

Accepted with revisions pending. "A Case Study in the Applied Philosophy of Imaging: The Synaptic Vesicle Debate." *Science, Technology, & Human Values*.

Forthcoming. "Perceiving Other Planets: Bodily Experience, Interpretation, and The Mars Orbiter Camera." *Human Studies*.

Forthcoming. "Quick-Freezing Philosophy: An Analysis of Imaging Technologies in Neurobiology." In J. Olsen, E. Selinger, and S. Riis (eds.) *New Waves in Philosophy of Technology*. Palgrave Macmillan.

2005. "Bridging Philosophy of Technology and Neurobiological Research: Interpreting Images From the "Slam Freezer."" *Bulletin of Science, Technology, and Society*. 25(6): 469-474.

MULTIPLE-AUTHORED PUBLICATIONS (Articles and Book Chapters)

Forthcoming. "A Graphic Measure for Game-Theoretic Robustness" (with Patrick Grim, Randy Au, Nancy Louie, Will Braynen, Evan Selinger, and Robb E. Eason). *Synthese*.

2007. "What Kind of Science is Simulation?" (with Robb Eason, Trina Kokalis, Evan Selinger, and Patrick Grim). *Journal of Experimental and Theoretical Artificial Intelligence*. 19(1): 19-28.

2006. "Game-Theoretic Robustness in Cooperation and Prejudice Reduction: A Graphic Measure" (with Patrick Grim, Randy Au, Nancy Louie, William Braynen, Evan Selinger, and Robb E. Eason). In L. M. Rocha, L. S. Yaeger, M. A. Bedau, D. Floreano, R. L. Goldstone, and A. Vespignani (eds.) *Artificial Life X*. Cambridge: MIT Press. pp. 445-451.

2005. "Modeling Prejudice Reduction: Spatialized Game Theory and the Contact Hypothesis." (with Patrick Grim, Evan Selinger, William Braynen, Randy Au, Nancy Louie, and John Connolly). *Public Affairs Quarterly*. 19(2): 95-125.

2004. "Reducing Prejudice: A Spatialized Game-Theoretic Model for the Contact Hypothesis." (with Patrick Grim, Evan Selinger, William Braynen, Randy Au, Nancy Louie, and John Connolly). In J. Pollack, M. Bedau, P. Husbands, T. Ikegami, and R. A. Watson (eds.) *Artificial Life IX*. Cambridge: MIT Press. pp. 244-249.

BOOK REVIEWS and COMMENTARIES

Forthcoming. "What Does Technology Do?" Review of *What Things Do: Philosophical Reflections on Technology, Agency, and Design* by Peter-Paul Verbeek. *Janus Head*.

Forthcoming. "Seeing the World Through Technology and Art." Review *Mediated Vision* edited by Petran Kockelkoren. *Techné: Research in Philosophy and Technology*. 11(2).

2007. "The Phenomenology of Slowly-Loading Webpages." *Ubiquity*. 8(15)

2006. "Catching Up With Technoscience Studies." Review of *Chasing Technoscience: Matrix for Materiality* edited by Don Ihde and Evan Selinger. *Human Studies*. 29: 399-403.

2006. Review of *Science in Society* by Matthew David. *Quarterly Review of Biology*. 81(3): 267-268.

2004. Review of *Politics of Nature: How To Bring The Sciences Into Democracy* by Bruno Latour. *Quarterly Review of Biology*. 79(4), 404-405.

2004. Review of *Investigative Pathways: Patterns and Stages in the Careers of Experimental Scientists* by Frederic Lawrence Holmes. *Quarterly Review of Biology*. 79(4), 405-406.

PRESENTATIONS (conferences and invited lectures)

2007. "Structures of Bodily Experience and Structures of Image Interpretation in Science." Society for Phenomenology and the Human Sciences/ Society for Phenomenology and Existential Philosophy. Chicago, Illinois

2007. "Postphenomenological Imaging: The Debate Over the Eberswalde Delta on Mars." Society for Social Study of Science. Montreal, Québec

2007. "The Place of Imaging Technologies in Scientific Debate." Society for Philosophy and Technology. Charleston, South Carolina

2007. "Trusting the Experts: The Problem of Technical Expertise and Public Dilemmas." Templeton Research Lecture Series. Stony Brook, New York.

2006. "What Kind of Science is Simulation?" (with Robb E. Eason, Trina Kokalis, Evan Selinger, and Patrick Grim) Computing and Philosophy, North American Conference. Rensselaer Polytechnic Institute, New York

2006. "Game-Theoretic Robustness in Cooperation and Prejudice Reduction: A Graphic Measure." (with Patrick Grim, Nancy Louie, William Braynen, and Evan Selinger) pitch and poster presentation. Artificial Life X: International Conference on the Simulation and Synthesis of Living Systems. Bloomington, Indiana

2006. "An Analysis of the Conflict Metaphor in the Study of Scientific Debate." New Jersey Regional Philosophical Association/Long Island Philosophical Society. Long Island University

2006. "Combative and Collaborative Models of Scientific Practice." International Association for Science, Technology, and Society. Baltimore, Maryland

2006. "Alternatives for the Combat Model of Scientific Practice." Rochester Institute of Technology, invitation by the philosophy department, Rochester, New York

2005. "Applied Philosophy of Imaging: Using Ihde's Philosophy for Neurobiological Research." Society for Social Studies of Science. Pasadena, California

2005. "A Computer-Instantiated Model of Social Psychological Research in Prejudice Reduction." Computing and Philosophy, North American Conference. Oregon State University

2005. "The Political Aspect of the Scientist's Role in Community Decisions." Philosophy, Interpretation, and Culture. Binghamton University, New York

2005. "Redrawing the Line Between Experts and Non-Experts in Public Discourse." STS (R)evolutions. Virginia Tech

2005. "Bridging Philosophy of Technology and Neurobiological Research: Interpreting Images From the "Slam Freezer." International Association for Science, Technology, and Society. Baltimore, Maryland

*One of three awarded in the Graduate Student Writing Competition at IASTS

2004. "Reducing Prejudice: A Spatialized Game-Theoretic Model for the Contact Hypothesis" (with Patrick Grim, Evan Selinger, William Braynen, Randy Au, Nancy Louie, and John Connolly) Artificial Life IX: International Conference on the Simulation and Synthesis of Living Systems. Boston, Massachusetts

2004. "A More Productive Counter Myth for Social Psychology: An Analysis of Kendall and Michael's Moebius Strip Theory" Society for Social Studies of Science. Paris, France

2004. "Monitoring the Subtle Strategies of the Science Wars, Or How to Do Philosophy With a Shoehorn." Science and Technology in Context. Washington D.C.

2003. "Prejudice Reduction in Artificial Societies: A Computational Model for the Contact Hypothesis" (with Evan Selinger, Patrick Grim, William Braynen, Randy Au, Nancy Louie, and John Connolly) American Philosophical Association Eastern Division/ Society for Machines and Mentality. Washington D.C.

2003. "The Nature of Academic Disciplines: A Case Study of Susan Carey's Citation of Thomas Kuhn." Society for Social Studies of Science. Atlanta, Georgia

TEACHING EXPERIENCE

McGill University, Montreal, Quebec, Adjunct

Philosophy of Science, to be taught Spring 2008

York College, Jamaica, Queens, Adjunct

Philosophy of Education, Summer 2007

Philosophy of Education (writing intensive), Spring 2007

Introduction to Philosophy, Spring 2007

Philosophy of Education (writing intensive), Fall 2006

Introduction to Philosophy, Fall 2006

Philosophy of Education, Summer 2006

Philosophy of Education (writing intensive), Spring 2006

Philosophy of Education (writing intensive), Fall 2005

La Guardia Community College, Long Island City, Queens, Adjunct

Introduction to Philosophy, two sections, Fall 2005

Stony Brook University, Stony Brook, NY

Moral Reasoning, Spring 2005

Logical and Critical Reasoning, Fall 2004,

Logical and Critical Reasoning, Spring 2004

Philosophy of Mind, Fall 2003,
Philosophy of Mind, Spring 2003
Logical and Critical Reasoning, Fall 2002

Teaching assistant: Moral Reasoning, Spring 2002; Politics and Society, Fall 2001

SERVICE

-Referee for *Techné: Research in Philosophy and Technology*
-Graduate Program Committee, Philosophy Department, Stony Brook University, 2004-2005
-Graduate Colloquium Director, Philosophy Department, Stony Brook University, 2002-2003
-Moderator for sessions at International Association for Science, Technology, and Society, 2006, Baltimore, MD; Luce Irigaray Circle 2006, New York City, NY

PROFESSIONAL AFFILIATIONS

American Philosophical Association
Society for the Social Study of Science
International Association for Science, Technology, and Society
North American Association for Computing and Philosophy
International Association for Artificial Life

REFERENCES

Don Ihde, Department of Philosophy, Stony Brook University,
Harriman Hall, Stony Brook, NY 11794. 631-632-7575
dihde@notes.cc.sunysb.edu

Patrick Grim, Department of Philosophy, Stony Brook University,
Harriman Hall, Stony Brook, NY 11794. 631-632-7578
pgrim@notes.cc.sunysb.edu

Howard Ruttenberg, Department of History and Philosophy, York College,
Academic Core 3E17, 94-20 Guy R. Brewer Blvd. Jamaica, NY, 11451.
718-262-2649
ruttenberg@york.cuny.edu
hrutyork@aol.com

The Philosophy of Scientific Debate Traditions
(Dissertation abstract)
Robert Rosenberger

In this dissertation, I analyze the conventions of scientific debate and develop concepts to help understand how debates in science change over time. The project begins with philosophical reflection on a line of thought in philosophy of science regarding the nature of scientific progress. I continue with two chapter-length case studies of contemporary debates in science. With this work, I hope to contribute to the practice of science by identifying patterns in the conventions of scientific debate, and by offering new ways to conceptualize changes in debate structures.

The key original concept developed in this dissertation is a notion I call the *scientific debate tradition*. Building on concepts regarding the structures of scientific practice offered by philosophers of science, such as Thomas Kuhn's 'paradigms,' Imre Lakatos's 'research programmes,' Larry Laudan's 'research traditions,' and Peter Galison's 'experimental traditions,' my analysis shifts the focus of this area of thought. The notion of the 'scientific debate tradition' refers to all of the positions within an ongoing scientific debate, and, importantly, also refers to the relationships *between* positions. Rather than concentrate on how scientific debates come to a close (as is a typical focus of philosophical and sociological reflection), I center my investigation on the changes that scientific debates undergo through the debate process. This sets a context for careful exploration of the ways that relationships between the rival nodes of a scientific debate are constituted, and how these relationships change over time. My analysis includes reflection upon 'primary' and 'branch' debates, processes of collective investigation occurring through the debate process, and the ways in which rival positions can be understood to partially constitute one another.

The project of this dissertation requires detailed review of concrete scientific investigations, both historical and contemporary. For example, a review of Lakatos's account of Bohr's contributions to quantum theory, Mara Beller's analysis of the history of debate in quantum mechanics, and an original study of the history of a debate between psychological researchers Susan Carey and Elizabeth S. Spelke over the nature of conceptual development in children, are all included. However, the *primary* examples of scientific debate explored in this dissertation are two chapter-length original case studies; the first explores a contemporary debate in the field of neurobiology over the nature of organelles responsible for neurotransmission, and the second investigates a contemporary debate in developmental psychology over the nature of children's understanding of others' minds.

Based on these in-depth explorations of scientific debate, and working within the context set by the notion of the scientific debate tradition, I offer a series of concepts regarding the changes that scientific debates may undergo. The issues explored include shifts in debate structure, adjustments to the relationships rival positions have with the data, changes in the mode of argumentation, and so on. These concepts, I claim, open up a novel space for further philosophical reflection upon the nature of scientific progress. And as well, they may offer scientists a productive new perspective from which to view their own practices of conversation.