

Robert J. Valenza

Curriculum Vitae

Mailing Address

Bauer Center
Claremont McKenna College
500 E. Ninth Street
Claremont, California 91711-6400

Campus Information

Office: 220 Marian Miner Cook Athenaeum
Phone: (909) 607-7371
Email: robert.valenza@cmc.edu

Education

Ph.D. (Mathematics), 1979, Columbia University (Adviser, H. Bass)
M.Phil., 1979, *ibid.*; M.A., 1974, *ibid.*; B.A., 1973, *ibid.*

Professional History

- 1988 – present Dengler-Dykema Professor of Mathematics and the Humanities (2005) and Director, *Questions of Civilization* Program (2001–08), Claremont McKenna College, Claremont, California; W. M. Keck Professor of Mathematics and Computer Science (1994–2004); Associate Professor of Mathematics on the Keck Fund (1988–1994).
- 1987 – 1988 Adjunct Professor of Mathematics, Harvey Mudd College, Claremont, California.
- 1984 – 1988 Senior Staff Scientist/Manager Software Development, Gould Electronics, El Monte, California.
- 1981 – 1984 Staff Engineer, Computer Resources and Analysis Group, RCA Astro-Electronics, Princeton, New Jersey.
- 1979 – 1981 Assistant Professor of Mathematics, Wichita State University, Wichita, Kansas.
- 1973 – 1979 Preceptor/Teaching Assistant in Mathematics, Columbia University, New York, New York.

Awards and Honors

Glen R. Huntoon Teaching Award, Claremont McKenna College, 2007
G. David Huntoon Senior Teaching Award, Claremont McKenna College, 2003 and 1997
Graduate Research Assistantship, Columbia University, summers 1976–77
Columbia University Faculty Fellowship, 1973–77
Alfred P. Sloan Scholar, Columbia College, 1969–70

Professional Societies

Member, Advisory Board, Center for Process Studies
Member, Advisory Board, Whitehead Research Project
Member, American Philosophical Association
Member, Sigma Xi Scientific Research Society
Member, American Association for the Advancement of Science

Publications

Variations on Dimension Subgroups, Thesis, Columbia University, 1979.

“Dimension Subgroups of Semidirect Products,” *Journal of Pure and Applied Algebra*, **18/2**, 225–30, 1980.

“Strongly Determined Subgroups,” *Communications in Algebra*, **9/6**, 669–77, 1981.

Abstract Algebra (with Gary D. Crown and Maureen H. Fenrick), Marcel Dekker Series in Pure and Applied Mathematics, Vol. 99 (403 pages), 1986.

“Elasticity of Factorization in Number Fields,” *Journal of Number Theory*, **36**, 212–18, 1990.

“Are the Thisted-Efron Tests Valid?” *Computers and the Humanities*, **25**, 27–46, 1991.

“Shakespeare: His Moods and Modes,” American Society for Information Science, Special Interest Group on Arts and Humanities, *Newsletter*, **1/3**, June/July 1990.

“Pretenders Sound Wrong Chords” (with Ward Elliott), *Los Angeles Times* Op. Ed., April 22, 1991.

“Who Was Shakespeare?” (with Ward Elliott), *Chance Magazine*, **4/3**, 1991, 8–14.

“A Touchstone for the Bard” (with Ward Elliott), *Computers and the Humanities*, **25**, 199–209, 1991.

“Was the Earl of Oxford the True Shakespeare? A Computer-Aided Analysis” (with Ward Elliott), *Notes and Queries*, **236/4**, 501–506, 1991. Reprinted in *A Groat’s Worth of Wit*, **13/1**, 2002.

“A Representation-Theoretic Approach to the DFT with Noncommutative Generalizations,” *IEEE Transactions on Acoustics, Speech, and Signal Processing*, **40/4**, 814–22, 1992.

Linear Algebra: An Introduction to Abstract Mathematics, Springer-Verlag Undergraduate Texts in Mathematics Series (237 pages), 1993.

“The Dichotomy of Idempotency in Whitehead’s Mathematics” (with Granville Henry), *Philosophia Mathematica* (3) **1**, 157–72, 1993.

“Whitehead’s Early Philosophy of Mathematics” (with Granville Henry), *Process Studies*, **22/1**, 1993.

“The Principle of Affinity in Whiteheadian Metaphysics” (with Granville Henry), *Process Studies*, **23/1**, 1994.

“Process, Projection, and Consciousness” (with Granville Henry), presented at the Conference on Consciousness in Humans, Animals, and Computers (October, 1994).

“The Preprojective and the Postprojective: A New Perspective on Causal Efficacy and Presentational Immediacy” (with Granville Henry), *Process Studies*, **26/1–2**, 1997.

- “And Then There Were None” (with Ward Elliott), *Computers and the Humanities*, **30**, 191–245, 1996.
- “Glass Slippers and Seven League Boots” (with Ward Elliott), *Shakespeare Quarterly*, **48/2**, 1997.
- Review: *The Becoming of Time*, by Lawrence W. Fagg, *Process Studies*, **27/3–4**, 1998.
- “The Concept of Mass in Process Theory” (with Granville Henry), *Process Studies*, **27/3–4**, 1998.
- Fourier Analysis on Number Fields* (with Dinakar Ramakrishnan of the California Institute of Technology), Springer-Verlag Graduate Texts in Mathematics 186, 1999. Republished by Tsinghua University Press in Beijing, 2005.
- “The Professor Doth Protest Too Much, Methinks: Problems with the Foster Response” (with Ward Elliott), *Computers and the Humanities*, **32**, 425–46, 1999.
- “Revised Appendices to ‘And Then There Were None’” (with Ward Elliott), *Computers and the Humanities* **32**, 446–490, 1999.
- “Can the Oxford Candidacy Be Saved? A Response to W. Ron Hess, ‘Shakespeare’s Dates: Their Effect on Stylistic Analysis’” (with Ward Elliott), *The Oxfordian*, Volume **3** 2000, 71-98).
- Review: *Whitehead und Einstein* (in German), by Joachim Stolz, *Process Studies*, **29/2**, 2001.
- “Eternal Objects at Sea” (with Granville Henry), presented at the International Silver Anniversary Whitehead Conference, Claremont, California (August, 1998); *Process Studies*, **30/2** 2001, 55–77.
- “Smoking Guns and Silver Bullets: Could John Ford Have Written the Funeral Elegy?” (with Ward Elliott), *Journal of Literary and Linguistic Computing*, **16/3**, 2001.
- “So Many Hardballs, So Few over the Plate” (with Ward Elliott), *Computers and the Humanities* **36**, 455-460, 2002.
- “Aesthetic Priority in Science and Religion,” delivered at the Claremont School of Theology, April, 2000; revised version in *Process Studies* **31/1** (2002).
- “Sleuthing for Shakespeare by Computer” (with Ward Elliott), UPI, 6/25/2002.
- Letter: with Ward Elliott, in *The Oxfordian*, **VI**, 2003. (Response to John Shahan’s critique of our work on the Shakespeare Authorship Question.)
- Contributor: *Physics and Whitehead*, Timothy E. Eastman, ed., SUNY Press, 2003. (Participant in two dialogs on process theory and physics transcribed from the 1998 Claremont International Whitehead Conference)
- “Did Shakespeare Write *A Lover’s Complaint*? The Jackson Ascription Revisited” (with Ward Elliott), in *Words That Count: Essays on Early Modern Authorship in Honor of MacDonald P. Jackson*, Brian Body, ed., University of Delaware Press, 2004.
- “On the Structure of Certain Counting Polynomials,” *Notes on Number Theory and Discrete Mathematics*, **11/1**, 2005.

- “Oxford by the Numbers: What Are the Odds That the Earl of Oxford Could Have Written Shakespeare’s Poems and Plays?” (with Ward Elliott), *Tennessee Law Review* **72**, 2005.
- June Rain* (a philosophical romance, under the pseudonym Brandon Knightley), Inkwater Press (Portland, Oregon), 2005.
- “Breakfast with Plato,” (a short story, under the pseudonym Brandon Knightley) in the anthology *Inkwater Ink*, Inkwater Press, 2006.
- Editor, *The Best of Civilization: An Anthology from the Questions of Civilization Program at Claremont McKenna College*, Inkwater Press, 2007.
- “Introduction to ‘The Metaphysics of Consciousness and Evolution,’ ” to appear in *Back to Darwin: A Richer Account of Evolution*, John B. Cobb, ed., Eerdmans Publishing Company, 2008.
- “The Metaphysics of Consciousness and Evolution,” to appear in *Back to Darwin: A Richer Account of Evolution*, John B. Cobb, ed., Eerdmans Publishing Company, 2008.
- “Possibility, Actuality and Freewill,” in a special issue of *World Futures Journal*, Franz Riffert and Tim Eastman, eds., 2008.
- “Cosmos, Logos and the Limits of Science,” presented at the Conference on Cosmology and Process Philosophy in Dialogue: Fundamental Philosophical Issues in Recent Cosmology and Their Religious Significance. Claremont Graduate University, Claremont, California, October 2006. *Process Studies*, **37**, 2008.
- “Einstein: The Covariant Universe,” in *A Handbook of Whiteheadian Process Thought*, Michel Weber and Will Desmond, eds., Ontos Verlag, Frankfurt, 2008.
- “Computer Science: Form without Content,” (with Granville Henry), in *A Handbook of Whiteheadian Process Thought*, Michel Weber and Will Desmond, eds., Ontos-Verlag, Frankfurt, 2008.
- “Vector Mathematics: Symbol versus Form,” in *A Handbook of Whiteheadian Process Thought*, Michel Weber and Will Desmond, eds., Ontos Verlag, Frankfurt, 2008.
- “Metaphysical Models,” presented in the Mathematics Sections at the Sixth International Whitehead Conference, Salzburg, Austria, July, 2006; under revision for submission.
- “Covariance and Evolution,” presented in the Biophilosophy Section at the Sixth International Whitehead Conference, Salzburg, Austria, July, 2006. Revised and expanded version to appear in *Life and Process: Towards a Whiteheadian View of Living Beings*, Spyridon Koutrafinis, ed., Ontos-Verlag, Frankfurt.
- “My Other Car Is a Shakespeare: A Response to Shahan and Whalen’s ‘Apples to Oranges in Bard Styometrics’ ” (with Ward Elliott), *The Oxfordian* **10**, 2007.
- “Shakespeare by Ear: What Can Intuition Tell Us about What He Wrote?” (with Ward Elliott), *The Shakespeare Newsletter* 57 (Winter 2007/08).
- “Two Tough Nuts to Crack: Did Shakespeare Write the ‘Shakespeare’ Portions of *Sir Thomas More* and *Edward III*?” (with Ward Elliott), to appear in *The Journal of Literary and Linguistic Computing*.

“The Organism of Forms in Later Whitehead,” to appear in *Beyond Metaphysics?* Roland C. Faber, Brian Henning, and Clinton Combs, eds.

“Meaning and Process,” to appear in *Chromatikon V, Yearbook of Philosophy in Process*, Michel Weber, ed., Presses universitaires de Louvain, 2009.

“Harmony and Science: Towards a More Inclusive Scientific Worldview,” submitted to *Creative Transformation*, 2009.

“Spectacular Exponents: A Semimodular Approach to Fast Exponentiation,” draft in progress.

Shakespeare by the Numbers (with Ward Elliott), draft in progress.

Fair Gifts Fairer: An Introduction to Object-Oriented Programming in C++, course notes, Claremont McKenna College, 181 pages.

Principal Technical Reports

“Accuracy of Orbit Determination for Geosynchronous Satellites,” RCA Astro-Electronics (ES-GST/SP-041), February, 1982.

GSTAR Mission Analyst Training Course: Orbital Mechanics and Off-line Software, RCA Astro-Electronics, October, 1983 (216 pages).

Spacecraft Orbit Control Software Detailed Design Document, RCA Astro-Electronics, May, 1984 (600 pages).

“CVSD Simulator,” Gould Technical Report EW-4056, October, 1985.

Classified technical report to U.S. Army Center for Signals Warfare, January, 1987.

Art Exhibitions

Digital Imagery, Athenaeum Art Show at Claremont McKenna College, with Christine Kim and Sarah Junker, Spring 2001.

Interstices: Prime Deserts, Kellogg University Art Gallery at The California Polytechnic University (a collaborative installation with Nancy Macko, Professor of Art, Scripps College), Spring 2003.

Prime Horizons, Pasadena Armory Center for the Arts (a collaborative installation with Nancy Macko, Professor of Art, Scripps College), Summer, 2005.