

BOOK REVIEWS

Vic Baker, BOOK REVIEW EDITOR

THE NEW SCIENCE OF GEOLOGY: STUDIES IN THE EARTH SCIENCES IN AN AGE OF REVOLUTION. *Martin J.S. Rudwick, 2004. Ashgate variorum, Aldershot, Hampshire, UK, and Burlington, VT, USA, xviii + 316 p. Hardcover, £59.50.*

The Variorum Collected Studies Series provides two great services to scholars. First, it gathers in one place articles from many years of diverse periodicals by a single author. These articles often would be impossible to find in a single library. Secondly, the series offers the author a chance to place previously unpublished work (or work published originally in a different language) in the context of many years of scholarship.

The New Science of Geology assembles fourteen articles by noted historian of earth science Martin J.S. Rudwick between two covers. Of these, one appears for the first time, one for the first time in English, seven first appeared in edited books, and six in journals. All share a focus on the late eighteenth and early nineteenth centuries, on sciences related to geology, and all have “stood the test of time.”

A variorum edition provides Rudwick the opportunity to consider and emphasize the threads that have held his researches together. He divides the articles into three broad themes: Earth-history and the history of geology; Cuvier and earth-history; and geology in the age of Lyell. The first section considers “general issues and syntheses”: the historicizing of knowledge of the Earth (in three articles), relations between science and religion, and the “emergence of a visual language” for geology. In all of these, the author counters “modern mythmaking.” He argues that Bishop Ussher provides no pre-modern foil to geochronology but rather was part of the enterprise. He argues that the now commonly assumed divide between secular science and religious fundamentalism blinds us to understanding the varieties of relations between science and religion in earth-history.

The rest of the book allows Rudwick to delve deeply into the research practices of Cuvier, Lyell, and their contemporaries. Rudwick places Cuvier against the earlier efforts of Jean André de Luc to calibrate evidences of Earth’s history. He examines Cuvier and his collaborator Alexandre Brongniart’s reading of the stratigraphic “documents” of this history and on Cuvier’s cultivation of distant collaborators and his use of engravings of fossil bones as “proxies” in his publications.

The section “Age of Lyell” devotes more space to Lyell’s contexts than to his own researches. Without examining each of these in turn, suffice it to say that examined issues include: (1) how it became accepted in geology to employ artistic renderings of past life-forms, (2) field and institutional practices of geologists in the 1830s, and (3) how debates among geologists related to their field experiences and to the production of scientific knowledge.

Readers who have kept up with Martin Rudwick’s books since *The Meaning of*

Fossils (1972) will certainly recognize the continuities of his themes in these articles with those explored at great depth in his books. We've all been challenged in these books to re-examine our historiographic assumptions by his ways of approaching subjects we thought we understood. The articles in this book, which most of us have probably read in a scattered way, help us to refocus our appreciation of a most influential historian of science.

It is, however, absolutely incorrect to see this variorum edition as a swan song. Martin Rudwick has two more volumes immediately in the wings. So stay alert.

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INTERESTING PUBLICATIONS

Gerald M. Friedman, CONTRIBUTING EDITOR

Since the start of this journal, Founding Editor Gerald M. Friedman has prepared this column. Contributors wishing to list recent books and papers of interest to our membership are requested to send them to Professor Gerald M. Friedman, Northeastern Science Foundation, Rensselaer Center of Applied Geology, P.O. Box 746, Troy, NY 12181-0746, U.S.A.; Fax: 518-273-3249; E-mail: gmfriedman@juno.com

- AALTO, K.R., 2005, Pioneering geologic studies of the Black Hills, Dakota territory, USA: *Earth Sciences History*, v. 24, no. 2, p. 175-196.
- ANONYMOUS, 2006, Colin Farmer (1920-2006): *Clay Minerals*, v. 41, p. 693-695.
- ANONYMOUS, 2006, This month in history...August 10, 1846: Smithsonian Institution founded: *Geotimes*, v. 51, no. 8, p. 53.
- ANONYMOUS, 2004, Trenton-Black River Formations Reservoirs and Source Rock. AAPG/Datapages Re-Discovery, no. 10, Product code 129, CD-Rom, www. bookstore.aapg.org
- ANONYMOUS, 2006, William Buckland 150th anniversary symposium: *HOGG*, no. 28, p. 8.
- ANONYMOUS, 2006, This month in history...September 23, 1806: Lewis and Clark return home: *Geotimes*, September, p. 49.
- ANONYMOUS, 2006, Lost and found - the "lost work" of William Smith: *Geoscientist*, v. 16, no. 3, p. 22-23.
- ANONYMOUS, 2006, This month in history...Feb. 18, 1930: Pluto discovered: from an obituary in the April 1997 *Geotimes*: *Geotimes*, February, p. 51.
- ARNOLD, KEN, 2006, Cabinets For the Curious. Looking Back at Early English Museums. Ashgate, Aldershot, Hampshire, UK, 297 p.
- ARSUAGA, J.L. and MARTINEZ, IGNACIO, 2005, The Chosen Species - The Long March of Human Evolution. Blackwell Publishing, 284 p.
- ARTIGAS, MARIANO, GLICK, T.F., and MARTINEZ, R.A., 2006, Negotiating Darwin: The Vatican Confronts Evolution, 1877-1902. The Johns Hopkins University Press.
- ASHWORTH, W.B., 2004, Vulcan's Forge and Fingal's Cave: Volcanoes, Basalt, and the Discovery of Geological Time. Linda Hall Library, Kansas City, Miss.
- AYDON, C., 2003, Charles Darwin. Robinson, London, 326 p.
- BARTHOLOMAUS, W.A., 2000, Die Geschichte in der Geologischen Sammlung der Universität Bremen: *Geohist. Blätter*, v. 3, p. 149-158.
- BASALLA, GEORGE, 2005, Civilized Life in the Universe. Oxford University Press, 224 p.
- BENDER, BERT, 2004, Evolution and "the sex Problem": American Narratives During the Eclipse of Darwinism. Kent State University Press, Kent, Ohio/London, 389 p.
- BENTON, M.J., 2003, When Life Nearly Died: The Greatest Mass Extinction of All Time. Thames & Hudson, London, 336 p.
- BERNSTEIN, JEREMY, 2006, Secrets of the Old One: Einstein. Copernicus Books, 200 p.
- BIDDLE, JENNIFER, 2006, Microbial Populations at Deeply Buried Methane/Sulfate Transition Zones: *JOI News*, Summer.
- BLACKWELL, ALAN and MACKAY, DAVID, eds., 2005, Power (The Darwin College Lectures). Cambridge University Press, Cambridge, 139 p.
- BLUNDELL, D., ARNDT, N., COBBOLD, P.R., and HEINRICH, C., eds., 2005, Geodynamics and Ore Deposit Evolution in Europe. Special Issue of Ore Geology Reviews. Elsevier B.V., Amsterdam, v. 27, 349 p.
- BORK, K.B., 2005, Liberal Arts colleges as launching pads for geologically trained educators and administrators: The case of Denison University, 1885-1925: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 5-13.

- BOWDEN, A.J., BUREK, C.V., and WILDING, R., eds., 2005, History of Palaeobotany: Selected Essays. Geological Society of London Special Publication, no. 241, 312 p.
- BRINKMAN, P.D., 2005, Henry Fairfield Osborn and Jurassic dinosaur reconnaissance in the San Juan Basin, along the Colorado-Utah border, 1893-1900: *Earth Sciences History*, v. 24, no. 2, p. 159-174.
- BROECKER, W.S., BONANI, G., CHEN, C., CLARK, E., IVY, S., KLAS, M., and PENG, T.-H., 1993, A search for an Early Holocene CaCO₃ preservation event: *Paleoceanography*, v. 8, p. 333-339.
- BROECKER, W.S., LYNCH-STIEGLITZ, J., CLARK, E., HAJDAS, I., and BONANI, G., 2001, What caused the atmosphere's CO₂ content to rise during the last 8000 years?: *Geochemistry Geophysics Geosystems*, v. 2.
- BROWN, LOUIS, 2004, Centennial History of the Carnegie Institution of Washington, v. 2: The Department of Terrestrial Magnetism. Cambridge University Press, Cambridge, 300 p.
- BÜLOW, W. von, 2000, Kurd von Bülow als Landesgeologe und Hochschullehrer: *Geohist. Bl.*, v. 3, p. 1-9.
- BUNTEBARTH, G., 2002, Temperature measurements below the Earth's surface: A history of records: *Earth Science History*, v. 21, p. 190-198.
- CAIN, J., 2004, Missing items from published bibliographies for George Gaylord Simpson: *Archives of Natural History*, v. 31, no. 2, p. 353-355.
- CAMERON, R.L., 2005, The foundations of Antarctic glaciology: *Archives of Natural History*, v. 32, no. 2, p. 231-244.
- CAROZZI, A.V., 2005, Horace-Bénédict de Saussure (1740-1799): Un pionnier des sciences de la terre, Éditions Slatkine, Geneva, 431 p.
- CHAMBERS, PAUL, 2002, Bones of Contention: The Archaeopteryx Scandals. John Murray, London, 270 p.
- CHLUPÁČ, I., 1993, Geology of the Barrandian: A Field Trip Guide. Senckenberg Book, no. 69, 163 p.
- CLANCEY, GREGORY, 2006, Earthquake Nation. The Cultural Politics of Japanese Seismicity, 1868-1930. University of California Press, Berkeley, 331 p.
- CORFIELD, RICHARD, 2002, 2001, Architects of Eternity: The New Science of Fossils. Review, London, 352 p.
- CREESE, M.R.S. and CREESE, T.M., 2006, British women who contributed to research in the geological sciences in the nineteenth century: *Proceedings of the Geologists' Association*, v. 117, p. 53-83.
- CURTIS, A. and WOOD, R., 2005, Geological Prior Information: Informing Science and Engineering. Geological Society Publishing House, Special Publication, no. 239, 240 p.
- CUTLER, ALAN, 2006, Time out of mind: *Geotimes*, January, p. 7.
- DARWIN, CHARLES (Burkhardt, Frederick, Porter, D.M., et al., eds.), 2006, The Correspondence of Charles Darwin: Volume 15, 1867. Cambridge University Press, Cambridge/New York, 705 p.
- DAVIS, G.H., 2005, Imagined field notes of geologist turned president then provost: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 29-32.
- DE BOER, J.Z. and SANDERS, D.T., 2004, Volcanoes in Human History. The Far-Reaching Effects of Major Eruptions. Princeton University Press, Princeton, 295 p.
- DELO, D.M., 2005, A university president's educational philosophy [excerpts from "The Last Rites Never Came"]: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 38.
- DONGEN, JEROEN VAN and DE HARO, SEBASTIAN, 2004, On black hole complementarity: *Stud. Hist. Phil. Mod. Phys.*, v. 35, p. 509-525.
- DOWE, PHIL, 2005, Galileo, Darwin, and Hawking: The Interplay of Science, Reason, and Religion. William B. Eerdmans, Grand Rapids, 205 p.
- DUDICH, ENDRE, ed., 2005, Geonomy: the Synthesizing Geoscience for the 21st Century. Hungarian Academy of Sciences, Subcommission on Geonomy. UNICONSTANT, Budapest, 82 p.
- EATON, G.P., 2005, Once a geologist, always a...the path to a university presidency...and back again: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 27-28.
- EDWARDS, A.L. and POLLARD, J.E., 2006, Trace fossil collections at the University of Manchester: *Geological Curator*, v. 8, no. 5.
- ELDRIDGE, NILES, 2005, Darwin: Discovering the Tree of Life. W.W. Norton, 256 p.
- ENNEN, C.M., MARSTON, R.A., and HALIHAN, TODD, 2005, Historic River Changes in the Washita Battlefield National Historic Site. Geological Society of America Abstracts with Programs, v. 37, no. 3, p. 15 (Reprint).
- ENSOM, P.C., 2006, Dinosaur tracks from Dorset: a twenty-five year retrospective: *Geological Curator*, v. 8, no. 5.

- ERWIN, D.H., 2006, Extinction. How Life on Earth Nearly Ended 250 Million Years Ago. Princeton University Press, Princeton/Oxford, 296 p.
- EVANS, B.G., 2005, Geoparks, coalfields, and South Wales - a sustainable combination?: *Z. dt. Ges. Geowiss.*, v. 156, no. 3, p. 373-379.
- FASTOVSKY, DAVID, 2006, Dinosaur virtuoso: *Geotimes*, v. 51, no. 10, p. 52.
- FERNANDA, SILVIA and FIGUEIRÔA, MENDONÇA, 1997, As ciências geológicas no Brasil: Uma história social e institucional, 1875-1934. Série História da Ciência e da Tecnologia. Editora Hucitec, Sao Paulo, 270 p.
- FISCHER, GERHARD, 2005, Eine Expedition durch die Erdgeschichte Marokkos: *GMIT*, no. 22, p. 108-109.
- FISCHER, I.K., 2005, Geodesy? What's That? My Personal Involvement in the Age-Old Quest for the Size and Shape of the Earth, with a Running Commentary on Life in a Government Research Office. iUniverse, New York, 376 p.
- FLAWN, P.T., 2005, Geology and the university presidency: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 19.
- FLETCHER, C. and DA MOSTO, J., 2004, The Science of Saving Venice. Umberto Allemandi; distributed by University of Washington Press, Torino, 91 p.
- FLÜGEL, E., 2004, Microfacies of Carbonate Rocks. Analysis, Interpretation, and Application. Springer-Verlag, Berlin, Heidelberg, New York, 976 p.
- FOGG, G.E., 2005, A century of Antarctic science; planning and serendipity: *Archives of Natural History*, v. 32, no. 2, p. 129-143.
- FOX, W.L., 2005, Terra Antarctica: a history of cognition and landscape: *Archives of Natural History*, v. 32, no. 2, p. 192-206.
- FRIEDMAN, G.M., 2004, The first half-century of the International Association of Sedimentologists (IAS) 1952-2002: *Earth Sciences History*, v. 23, p. 257-277.
- FROSSARD, E., BLUM, W.E.H., and WARKENTIN, B.P., eds., 2006, Function of Soils for Human Societies and the Environment. Geological Society (London) Special Publication, no. 266, in press.
- FULLER, J.G.C.M., 2005, Stratigraphic stand-off at the 49th parallel: *Earth Sciences History*, v. 24, no. 2, p. 247-264.
- FYFE, AILEEN, 2004, Science and Salvation: Evangelical Popular Science Publishing in Victorian Britain. University of Chicago Press, Chicago, 325 p.
- GREGORY, JANE, 2005, Fred Hoyle's Universe. Oxford University Press, 416 p.
- GRIMOULT, C., 2000, Le développement de la paléontologie contemporaine. Travaux de sciences sociales, no. 190, Droz, Genève, 237 p.
- GUNDLING, TOM, 2005, First in Line: Tracing our Ape Ancestry. Yale University Press, New Haven, CT, 204 p.
- HALFORD, P., 2004, Storm Warning: The Origins of the Weather Forecast. Sutton Publishing, Stroud, 285 p.
- HALLAM, T., 2004, Catastrophies and Lesser Calamities. The Causes of Mass Extinctions. Oxford University Press, Oxford, 274 p.
- HAMBLIN, J.D., 2005, Oceanographers and the Cold War: Disciples of Marine Sciences. University of Washington Press, Seattle, 346 p.
- HANDLEY, J.R.F., 2004, Historic Overview of the Witwatersrand Goldfields. Geological Society of South Africa, 224 p.
- HANNIBAL, J.T. and LUCAS, S.G., 2006, Trace fossils in two North American museums: the Cleveland Museum of Natural History and the New Mexico Museum of Natural History and Science: *Geological Curator*, v. 8, no. 5.
- HATHEWAY, A.W., 2006, "Landslides" – may we not forget the fundamental works of C.F. Stewart Sharpe and David J. Varnes: *The Professional Geologist*, September/October, p. 24.
- HEADLAND, R.K., 2005, The poles: information for exploration: *Archives of Natural History*, v. 32, no. 2, p. 207-220.
- HELMS, D, EFFLAND, A.B.W., and DURANA, P.J., eds., 2002, Profiles in the History of the US Soil Survey. Iowa State University Press.
- HERBERT, S., 2005, Charles Darwin, Geologist. Cornell University Press, Ithaca, 485 p.
- HERBERT, SANDRA, 2005, Charles Darwin, Geologist. Cornell University Press, Ithaca/London, 403 p.
- HERINGMAN, NOAH, 2004, Romantic Rocks, Aesthetic Geology. Cornell University Press, Ithaca, 326 p.
- HIRAI, HIRO, 2005, Le concept de semence dans les théories de la matière à la Renaissance: de Marsile Ficini

- à Pierre Gassendi [The Concept of Seed in Renaissance Matter Theories: From Marsilio Ficino to Pierre Gassendi]. Brepol Publishers, Turnhout (Belgium), 576 p.
- HODGES, KIP, 2006, Climate and the evolution of mountains: new studies of the Himalaya and the Tibetan Plateau suggest a deep relation between climate and tectonics: *Scientific American*, v. 295, no. 2, p. 72-79.
- HOUGH, S.E. and BILHAM, R.G., 2005, After the Earth Quakes: Elastic Rebound on an Urban Planet. Oxford University Press, 336 p.
- HUGGETT, J.M., 2006, Geology and wine: a review: *Proceedings of the Geologists' Association*, v. 117, p. 239-247.
- HUTTON, JAMES, 2004, Teoría de la Tierra (1785, 1788), translated into Spanish by Candido Manuel Garcia Cruz. Enseñanza de las Ciencias de la Tierra, Revista de la AEPECT, v. 12, no. 2.
- JORGENSEN, T.S. and RASMUSSEN, O., 2006, Adam Paulsen, a pioneer in auroral research: *EOS*, v. 87, no. 6, p. 61, 66.
- JUNKER, THOMAS, 2004, Die zweite Darwinische Revolution: Geschichte des Synthetischen Darwinismus in Deutschland 1924 bis 1950. Basiliken-Presse, Marburg, 635 p.
- KENNEDAY, W.J., 2006, John Michael ('Jake') Hancock (1928-2004): a personal memoir: *Proceedings of the Geologists' Association*, v. 117, p. 103-122.
- KENNEDY, W.J., 2006, C.W. Wright: a most professional amateur: *Proceedings of the Geologists' Association*, v. 117, p. 9-40.
- KERTZ, WALTER, 1999, Geschichte der Geophysik. Edited by Ruth Kertz and Karl-Heinz Glassmeier. Zur Geschichte der Wissenschaften, Olms, Hildesheim, v. 3, 376 p.
- KHAIN, V.E. and RYABUKHIN, A.G., 2004, History and Methodology of Geological Sciences. Moscow University Press, Moscow, 320 p.
- KIRSCHNER, M.W. and GERHART, J.C., 2005, The Plausibility of Life: Resolving Darwin's Dilemma. Yale University Press, 314 p.
- KNELL, S.J. and TAYLOR, M.A., 2006, Hugh Miller: fossils, landscape, and literary geology: *Proceedings of the Geologists' Association*, v. 117, p. 85-98.
- KNIGHT, P.G., 2004, Glaciers: art and history, science and uncertainty. Part of a special issue: On Ice: *Interdisciplinary Science Reviews*, p. 385-393.
- KOEBERL, CHRISTIAN and MACLEOD, K.G., eds., 2002, Catastrophic Events and Mass Extinctions: Impacts and Beyond. Geological Society of America, 729 p.
- KOKOWSKI, MICHAL, 2004, Copernicus's Originality: Towards Integration of Contemporary Copernican Studies. Wydawnictwa Iln Pan, Warsaw/Cracow, 314 p.
- KOZÁK, J.T., MOREIRA, V.S., and OLDROYD, D.R., 2005, Iconography of the 1755 Lisbon Earthquake. GIAS Czech Republic and Academia, Praha, 84 p.
- KRAGH, HELGE, 2004, Matter and Spirit in the Universe: Scientific and Religious Preludes to Modern Cosmology. (History of Modern Physical Sciences, v. 3). Imperial College Press, London, 298 p.
- KRIDER, E.P., 2006, Benjamin Franklin and lightning rods: *Physics Today*, January, p. 42.
- LANE, K.M.D., 2005, Geographers of Mars: cartographic inscription and exploration narrative in Late Victorian representations of the red planet: *Isis*, v. 96, p. 477-506.
- LAVEROV, N.P., ed., 2004, V.V. Tikhomierov - A Geologist and a Historian of Science (90th Anniversary), "Ogni". Moscow, 172 p.
- LEES, J.A., BOWN, P.R., and YOUNG, J.R., 2006, Jack Hancock: reminiscences: *Proceedings of the Geologists' Association*, v. 117, p. 125-127.
- LEIDY, J., 1856, Notices of remains of extinct reptiles and fishes, discovered by Dr. F. V. Hayden in the Bad Lands of the Judith River, Nebraska Territory: *Proceedings of the Academy of Natural Sciences*, v. 8, p. 72-73.
- LEWIS, D.N. and DONOVAN, S.K., 2006, Trace fossils - the poor relations of museum palaeontological collections?: *Geological Curator*, v. 8, no. 5.
- LIGHTMAN, B., ed., 2004, The dictionary of nineteenth century British scientists. Thoemmes Continuum, Bristol, v. 2, 256 p.
- LOPES, ROSALY, 2005, The Volcano Adventure Guide. Cambridge University Press, 362 p.
- LYONS, P.C. and MOREY, E.D., 2006, Rock stars: David White (1862-1935): pioneer in coal, petroleum, and paleobotanical studies: *GSA Today*, June, p. 54.
- MACQUEEN, R.W., ed, 2004, Proud Heritage: People and Progress in Early Canadian Geoscience. Geoscience Canada Reprint Series, no. 8, 252 p.
- MAGGETTI, M. and MESSIGA, B., eds., 2006, Geomaterials in Cultural Heritage. Geological Society Publishing House Special Publication, no. 257, 360 p.

- MAGGETTI, M. and MESSIGA, B., eds., 2006, Geomaterials in Cultural Heritage. Geological Society Publishing House Special Publication, no. 257, 360 p.
- MARRINER, NICK, MORHANGE, CHRISTOPHE, DOUMET-SERHAL, CLAUDE, and CARBONEL, PIERRE, 2006, Geoscience rediscovers Phoenicia's buried harbors: *Geology*, v. 34, no. 1, p. 1-4.
- MARTIN, P.S., 2005, Twilight of the Mammoths: Ice Age Extinctions and the Rewilding of America. University of California Press, 250 p.
- MATHER, J.D., ed., 2004, 200 Years of British Hydrogeology. Geological Society Publishing House, Special Publication, no. 225, 400 p.
- MAYOR, ADRIENNE, 2005, Fossil Legends of the First Americans. Princeton University Press, Princeton and Oxford, 480 p.
- MCCALL, G.J.H., 2001, Tektites in the Geological Record: Showers of Glass From the Sky. Geological Society Publishing House, Earth in View Series, 264 p.
- MCCALL, G.J.H., BOWDEN, A.J., and HOWARTH, R.J., 2006, The History of Meteoritics and Key Meteorite Collections: Fireballs, Falls, and Finds. Geological Society Publishing House Special Publication, no. 256, 520 p.
- MCCRONE, A.W., 2005, My journey from petroleum geologist to university professor and president: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 23-26.
- MCDONALD, IAN and TREDoux, MARIAN, 2005, The history of the Waterberg deposit: Why South Africa's first platinum mine failed: *Applied Earth Science*, v. 114, no. 4, p. 264.
- MCGUIRE, BILL, 2005, Surviving Armageddon: Solutions for a Threatened Planet. Oxford University Press, 248 p.
- MCNEILL, J.R. and WINIWARTER, VERENA, eds., 2006, Soil and Societies: Perspectives from Environmental history. The White Horse Press, UK., 369p.
- MERRIAM, D.F., 2005, North American geologists as university presidents: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 1-4.
- MERRIAM, D.F. and HOWARTH, R.J., 2004, Pioneers in mathematical geology: *Earth Sci History*, v. 23, p. 314-324.
- MERTENS, JOOST, 2006, Oil on troubled waters: Benjamin Franklin and the honor of Dutch seamen: *Physics Today*, January, p. 36.
- MIDDLETON, G.V., 2006, Andrew Cowper Lawson (1861-1952): how a boy from Canada became a legendary professor of geology at Berkeley: *GSA Today*, v. 16, nos. 4/5, p. 50-51.
- MILANOVSKY, E.E., 2004, The Bicentenary of the Geological School of the Moscow University with Portraits of its Founders and Outstanding Scientists. Akademicheskoy Proekt, Moscow, 448 p.
- MILLS, E.L., 2005, From discovery to discovery: the hydrology of the southern ocean, 1885-1937: *Archives of Natural History*, v. 32, no. 2, p. 246-264.
- MITHEN, S.J., 2004, After the Ice: A Global Human History 20,000-5000 BC. Harvard University Press, Cambridge, 622 p.
- MOORE, KEITH, 2006, An unpublished letter by Charles Darwin in the Royal Society's archives: *Notes and Records of the Royal Society*, v. 60, p. 193-197.
- MORGAN, NINA, 2006, Anne Phillips and the mystery of the Malverns: *Geoscientist*, v. 16, no. 7, p. 6-7.
- MORRELL, JACK, 2005, John Phillips and the Business of Victorian Science. (Science, Technology, and Culture, 1700-1945). Ashgate, Burlington, VT, 437 p.
- MOYAL, A., 2003, The Web of Science: the Scientific Correspondence of the Rev. W.B. Clarke, Australia's Pioneer Geologist. Australian Scholarly Publishing, Melbourne, 1,340 p.
- MURRAY, G.H., 2005, Some inspirations along the way to a life of learning [excerpts from "Encounters with Heroes and Heroines"]: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 39.
- NORELL, MARK, 2005, Unearthing the Dragon: The Great Feathered Dinosaur Discovery. PI Press, New York, 250 p.
- NORTON, W.W., 2006, The Reluctant Mr. Darwin: An Intimate Portrait of Charles Darwin and the Making of His Theory of Evolution. David Quammen, 304 p.
- O'CONNOR, ANNE, 2006, Samuel Hazzledine Warren and the construction of a chronological framework for the British Quaternary in the early twentieth century: *Proceedings of the Geologists' Association*, v. 117, p. 41-52.
- OKADA, HAKUYU and KENYON-SMITH, A.J., 2005, The Evolution of Clastic Sedimentology. Dunedin Academic Press Ltd., Edinburgh, 251 p.
- OLDROYD, D., 2002, Earth, Water, Ice, and Fire: Two Hundred Years of Geological Research in the English Lake District. Memoirs of the Geological Society of London, no. 25, 320 p.

- OLDROYD, DAVID, 2003, Fossils in the Airport Lounge: *Metascience*, v. 12, np. 25-36.
- OLDROYD, DAVID and MCKENNA, GRAHAM, 2005, Conditions of employment and work practices in the early years of the Geological Survey of Great Britain: *Earth Sciences History*, v. 24, no. 2, p. 197-223.
- ORDAZ, JORDI, 2005, Cuadernos de Estudios del Siglo XVIII. Pedro Diaz de Valdés (1740-1807) y el estudio de las ciencias naturales. Instituto Feijoo de Estudios del Siglo XVII. Universidad de Oviedo, Num. 15, p. 159-173.
- ORDAZ, J. and TRUYOLS, J., 2004, Datos para la historia de la enseñanza de la geología en la Universidad de Oviedo: *Geogaceta*, v. 36, p. 3-5.
- PALMER, TREVOR, 2003, Perilous Planet Earth: Catastrophes and Catastrophism Through the Ages. Cambridge University Press, New York, 522 p.
- PAULY, DANIEL, 2004, Darwin's Fishes: An Encyclopedia of Ichthyology, Ecology, and Evolution. Cambridge University Press, Cambridge/New York, 340 p.
- PEDLEY, M.S., 2005, The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England. University of Chicago Press, Chicago/London, 345 p.
- PIERCE, PATRICIA, 2006, Jurassic Mary - Mary Anning and the Primeval Monsters. Sutton Publishing, 238 p.
- POWELL, J.L., 2005, The Tapestry [excerpts from "Mysteries of Terra Firma"]: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 40-41.
- PSOMIADES, K.A., 2003, Scientific knowledge in the nineteenth century: *Nineteenth-Century Studies*, v. 17.
- RADLEY, J.D., 2006, Trace fossils: a smaller museum's perspective: *Geological Curator*, v. 8, no. 5.
- RAGAN, D.M., 2006, Essay review. The life of Frank Coles Phillips (1902-1982) and the structural geology of the Moine petrofabric controversy by R.J. Howarth and B.E. Leake: *Proceedings of the Geologists' Association*, v. 117, p. 99.
- RANNEY, WAYNE, 2005, Carving Grand Canyon: Evidence, Theories, and Mystery. Grand Canyon Association.
- RAY, C.E., 2005, An idiosyncratic history of Floridian vertebrate paleontology: *Bull. Fla. Mus. Nat. Hist.*, v. 45, no. 4, p. 143-170.
- REILL, P.H., 2005, Vitalizing Nature in the Enlightenment. University of California Press, Berkeley, 388 p.
- REITZ, ANJA, THOMSON, JOHN, DE LANGE, G.J., GREEN, D.R.H., SLOMP, C.P., and GEBHARDT, A.C., 2006, Effects of the Santorini (Thera) eruption on manganese behavior in Holocene sediments of the eastern Mediterranean: *Earth and Planetary Science Letters*, v. 241, no. 1-2, p. 104-187.
- RHODES, F.H.T., 2005, John Henry Newman's the idea of a universe: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 14-18.
- RICE, A.L., 2005, Discovery at sea; a heady mix of scientists, ships, and sailors: *Archives of Natural History*, v. 32, no. 2, p. 177-191.
- RICHMOND, M.L., 2006, The 1909 Darwin celebration: reexamining evolution in the light of Mendel, mutation, and meiosis: *Isis*, v. 97, p. 447-484.
- RODGERS, JOHN, 2001, The Company I Kept: The Autobiography of a Geologist. Transactions of the Connecticut Academy of Arts and Sciences, v. 58, Connecticut Academy of Arts and Sciences, New Haven, CT, 223 p.
- ROSENBERG, G.D., 2006, Nicholas Steno's chaos and the shaping of evolutionary thought in the Scientific Revolution: *Geology*, v. 34, no. 9, p. 793-796.
- ROSSBACHER, L.A., 2005, Asking "why?": geologists and presidents think alike: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 20-22.
- RUDDIMAN, W.F., 2005, Plows, Plagues, and Petroleum: How Humans Took Control of Climate. Princeton University Press, 202 p.
- RUDWICK, M.J.S., 2005, Geology and Genesis: A Historical Perspective on the Interaction of Two Historical Sciences. The Herbert H. Reynolds Lectureship in the History and Philosophy of Science, March 1, 2005. Baylor University, Waco, TX, 20 p.
- RUDWICK, M.J.S., 2004, The New Science of Geology: Studies in the Earth Sciences in the Age of Revolution. Variorum Collected Studies, Ashgate, Aldershot, Hampshire, UK, 336 p.
- RUDWICK, M.J.S., 2005, A note from the president of HESS: *Earth Sciences History*, v. 24, no. 2, p. 157-158.
- RUDWICK, M.J.S., 2006, Bursting the Limits of Time. The Reconstruction of Geohistory in the Age of Revolution. University of Chicago Press, London, 708 p.

- RUDWICK, M.J.S., 2005, Lyell and Darwin, Geologists. Studies in the Earth Sciences in the Age of Reform. Ashgate, Aldershot, Hampshire, UK, 316 p.
- RUSE, MICHAEL, 2005, The Evolution - Creation Struggle. Harvard University Press, Cambridge, MA, 367 p.
- RUSKIN, STEVEN, 2004, John Herschel's Cape Voyage: Private Science, Public Imagination, and the Ambitions of Empire. (Science, Technology, and Culture, 1700-1945). Ashgate, Burlington, VT, 229 p.
- RUTFORD, R.H., 2005, Evolution of a university: *The Compass of Sigma Gamma Epsilon*, v. 79, no. 1, p. 33-37.
- SAIKKU, MIKKO, 2005, This Delta, This Land: An Environmental History of the Yazoo-Mississippi Floodplain. University of Georgia Press, London/Athens, 373 p.
- SALVADOR, AMOS, 2005, Energy: A Historical Perspective and 21st Century Forecast. Studies in Geology, no. 54. American Association of Petroleum Geologists, 216 p.
- SALVADOR, AMOS, 2005, Energy: A Historical Perspective and 21st Century Forecast. Geological Society of London, Studies in Geology, no. 54, 216 p.
- SAVOURS, ANN, 2005, Ships employed in Arctic ice: discoveries past, 1602 to 1876: *Archives of Natural History*, v. 32, no. 2, p. 144-160.
- SCHMITT, H.H., 2006, Return to the Moon: Exploration, Enterprise, and Energy in the Human Settlement of Space. Praxis Publishing, 335 p.
- SCHWEIGERT, G., 2005, Die Evolution - ein Lügegebäude: *GMIT*, no. 22, p. 106-107.
- SCOTT, A.C. and FREEDBERG, DAVID, eds., 2000, Fossil Woods and Other Geological Specimens. The Paper Museum of Cassiano Dal Pozzo, Series B, Natural History, Part 3. Harvey Miller Publishers, Turnhout, Belgium, 424 p.
- SEIBOLD, I., 2001, Die Geologen und die Künste. Kleine Senckenberg-Reihe, no. 39, 154 p.
- SELLEY, R.C., 2006, Jack Hancock at Imperial College, London (1986-1993): *Proceedings of the Geologists' Association*, v. 117, p. 123-124.
- SEVER, MEGAN, 2006, News notes: sizing up a crater: *Geotimes*, v. 51, no. 1, p. 12-13.
- SMED, JENS, 2005, The central laboratory of the international council for the exploration of the sea (ICES) and its successors: *Earth Sciences History*, v. 24, no. 2, p. 225-246.
- STENO, NICOLAUS, 2004, PUODOROMUSU: KOTAI-RON (The Prodromus to a Dissertation on Solid Bodies Naturally Contained Within Solid Bodies), Translated by Toshihiro Yamada, Tokai University Press, Hadano, Japan, 220 p.
- STREMME, H.E., 2001, "Der Geologe Hermann Stremme gestaltet ein biogenetisches System der Bodentypen und die ersten internationalen Bodenkarten von Europa (1927 und 1937): *Geohist. Bl.*, p. 75-86.
- TAYLOR, K.L., 2005, Thomas Malcolm Smith, Jr., 1921-2005: *Isis*, v. 96, no. 4, p. 612.
- TAYLOR, P.D., ed., 2004, Extinctions in the History of Life. Cambridge University Press, Cambridge, Melbourne, New York, 191 p.
- THACKRAY, J.C., ed., 2003, To See the Fellows Fight: Eye Witness Accounts of Meetings of the Geological Society of London and its Club, 1822-1868. The British Society for the History of Science Monograph, no. 12, 243 p.
- THOMPSON, J.M.T., ed., 2005, Advances in Astronomy: From the Big Bang to the Solar System. Royal Society Series on Advances in Science, v. 1, Imperial College Press, London, 417 p.
- THOMSON, M.R.A. and VAUGHAN, A.P.M., 2005, The role of Antarctica in the development of plate tectonic theories: from Scott to the present: *Archives of Natural History*, v. 32, no. 2, p. 362-393.
- THOMSON, K.S., 2006, American dinosaurs: who and what was first?: *American Scientist*, May-June.
- TOBIN, WILLIAM, 2004, The Life and Science of Léon Foucault: The Man who proved the Earth Rotates. Cambridge University Press, Cambridge, 338 p.
- TORRENS, H.S., 2006, Notes on 'The Amateur' in the development of British geology: *Proceedings of the Geologists' Association*, v. 117, p. 1-8.
- TOURET, J.L.R. and VISSER, R.P.W., eds., 2004, Dutch Pioneers of the Earth Sciences. Edita, Royal Netherlands Academy of Arts and Sciences, Amsterdam, 200 p.
- TRISHCHENKO, ALEXANDER and CHEN, WENJUN, 2005, Special issue on Earth's observation of Canada's landmass: results and future needs: *Canadian Journal of Remote Sensing*, v. 31, no. 5, p. 314.
- TURNER, JON, 2003, Lovelock and Gaia: Signs of Life. Revolutions in Science. Columbia University Press, New York, 157 p.
- TWIDALE, C.R., 2004, Reinventing the wheel: recurrent conception in geomorphology: *Earth Sciences History*, v. 23, p. 297-313.

- WALKER, MALCOLM, 2005, Antarctic meteorology and climatology: an unfolding story of discovery: *Archives of Natural History*, v. 32, no. 2, p. 316-333.
- WALTON, D.W.H., 2005, Antarctica and the global jigsaw – a centennial perspective: *Archives of Natural History*, v. 32, no. 2, p. 394-401.
- WARKENTIN, B. P., ed., 2006, *Footprints in the Soil: People and Ideas in Soil History*. Elsevier, 572 p.
- WEGENER, ALFRED, 2005, *Die Entstehung der Kontinente und Ozeane*. Gebrüder Borntraeger Verlagsbuchhandlung. Berlin, Stuttgart, 482 p.
- WINCHESTER, SIMON, 2006, *A Crack in the Edge of the World - The Great American Earthquake of 1906*. Viking Penguin, 412 p.
- WYSE JACKSON, P.N., 2005, Editorial: The Black Hills, institutional histories, dinosaur collecting, and the 49th parallel: *Earth Sciences History*, v. 24, no. 2, p. 155-156.
- WYSE JACKSON, PATRICK N., 2006, *The Chronologers' Quest: episodes in the Search for the Age of the Earth*. Cambridge University Press, xvii+291 p.
- YAALON, D.H. and BERKOWICZ, S., eds., 1997, *History of Soil Science: International Perspectives*. Catena-Verlag, 439 p.
- YEILDING, C.A. et al., 2005, The history of a new play: Thunder Horse Discovery, Deepwater Gulf of Mexico: *AAPG Bulletin*, v. 89, no. 8, p. 1112.
- YOCHELSON, E.L., 2006, Charles D. Walcott: a few comments on stratigraphy and sedimentation: *The Sedimentary Record*, March, p. 4-8.
- YOCHELSON, E.L., 2005, C.D. Walcott – definitely a Rocky Mountain geologist: *Rocky Mountain Geology*, v. 40, no. 2, p. 157-163.

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This article is based on research in the James David Forbes Papers, at St. Andrews University Library, in St. Andrew’s, United Kingdom. It has also drawn on the Oral History Interview of Walter M Elsasser, conducted by J. T. Kiehl on 12 March 1986. This interview and a preliminary transcript are part of the American Institute of Physics/American Meteorological Society Project and may be consulted at the American Institute of Physics, College Park, MD, USA.

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- Oldroyd, D. R. 1991.
 Oldroyd, D. R. 2006.
 Oldroyd, D. R. and McKenna, G. 2005.
 Rudwick, M. J. S. 1996a.
 Rudwick, M. J. S. 1996b.
 Torrens, H. S. and Cooper, J. A. 1986.
 Torrens, H. S. and Getty, T. A. 1984.

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Book:

- Bullen, K. E. and Bolt, Bruce A. 1985. *Introduction to the Theory of Seismology*. 4th edition. Cambridge: Cambridge University Press.
 Good, Gregory A. (ed.) 1998. *Sciences of the Earth: An Encyclopedia of Events, People, and Phenomena*. 2 volumes. New York and London: Garland Publishing Inc.
 Robinson, Arthur H. 1982. *Early Thematic Mapping in the History of Cartography*. Chicago: University of Chicago Press.
 Suess, Eduard, 1904. *The Face of the Earth*. 5 volumes. Oxford: Clarendon Press.

Article in journal:

- Heezen, B.C. and Ewing, M. 1952. Turbidity currents and submarine slumps in the 1929 Grand Banks earthquake. *American Journal of Science* 250: 849–878.
 Jago, J. B., Pharaoh, M. D. and Wilson-Roberts, C. L. 2005. Douglas Mawson's first major geological expedition: the New Hebrides, 1903. *Earth Sciences History* 24: 93–111.
 Oldroyd, D. R. 1991. The Archaean Controversy in Britain: Part I – The Rocks of St. David's. *Annals of Science* 48: 407–452.

Article or chapter in book:

- Herries Davies, G. L. 1995. The Stenonian Revolution. In *Rocks, Fossils and History*, Gaetano Giglia, Carlo Maccagni and Nicoletta Morello (eds), 45–59. Firenze: Festina Lente.
 Pyne, S. J. 1979. Certain Allied Problems in Mechanics: Grove Karl Gilbert at the Henry Mountains. In *Two Hundred Years of Geology in America*, Cecil J. Schneer (ed.), 225–238. Hanover, NH: University Press of New England.

Unpublished theses or dissertations:

- Wolter, J. A. 1975. The Emerging Discipline of Cartography. Ph.D. dissertation, University of Minnesota.

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Fields of academic endeavor often memorialize the passing of their practitioners through the publishing of obituaries, memorials, or éloges. The History of the Earth Sciences Society has established a committee (composed of the Past President and three other HESS members) to arrange for the writing of such biographical notices. These éloges will be published in *Earth Sciences History* at the first opportunity. The committee and the authors of éloges will follow these guidelines:

1. Individuals who contributed significantly to the history of the earth sciences will be appropriate for an éloge, for their contributions including the writing of articles or books in the field, for their efforts as editors, or generally in the support of history of the earth sciences, and to HESS particularly. Eligibility will extend to non-members as well as to members of the History of the Earth Sciences Society.
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TREASURER'S REPORT FOR 2006

(AS OF OCTOBER 23, 2006)

BALANCE FORWARDED FROM 2005	\$ 29,755.19
Less Payments to Patrick Wyse Jackson for <i>ESH</i> 24/2 and 25/1.	\$ 6,811.43
Less other operating Expenses including Website and postage	\$ 1,108.52
INCOME TO HESS INCLUDING INTEREST	+\$ 18,750.49
BALANCE AS OF October 23, 2006	\$ 40,585.96

EXPLANATION

Two issues of *Earth Sciences History* have been published in the year 2006 up to October 23, 2006. The issues were volume 24 number 2 for 2005 and volume 25 number 1 for 2006. The costs for the two issues including mailing materials was \$6,811.43. I would point out that this cost has taken into account the negative exchange rate with regards the EURO to the US dollar. Patrick Wyse Jackson has saved HESS an incredible amount of publishing and mailing costs. HESS owes Patrick Wyse Jackson an immense debt of gratitude and every member should be working with Patrick in every way possible to assist him. The cost of these two issues is less then the cost of one issue with our previous printer, Allen Press. The savings has helped HESS maintain and in fact improve a healthy budget surplus through 2006. However HESS also realized a loss of a number of institutional memberships due to budget cuts and we lost a number of individual memberships through retirements, deaths and delinquency in dues payment. Our income saw nearly a 13% drop from 2005. We need to increase our membership.

Other expenses for 2005 include: Website fees of \$109.85. Once again Ed and Mary Rogers picked up a large part of the web site expense. HESS paid a \$398 fee for membership affiliation in AGI. HESS paid \$489.89 to cover the cost of printing and mailing ballots, dues notices to members and reminder notices to delinquent members. HESS paid \$110.78 for handling back issues of *ESH*.

This is my last year as HESS treasurer. HESS remains a fiscally strong society and I hope to see a growth in active membership in the future.

Respectfully submitted

Ed Rogers
HESS treasurer

NOTES ON CONTRIBUTORS

Robert H. Dott, Jr. is Stanley A. Tyler Professor (Emeritus) of Geology at the University of Wisconsin, Madison, Wisconsin, USA. Besides specializing in sedimentary geology throughout his fifty-year career, he has also contributed to the history of geology for the past four decades. His historical research has included Charles Lyell's visits to America, the geosynclinal theory of James Hall and James Dwight Dana, the career of T.C. Chamberlin, and the editing of *Eustasy: The Historical Ups and Downs of a Major Geological Concept* (Geological Society of America Memoir 180, 1992). After completing his education at the University of Michigan (B.S. 1950; M.S. 1951) and Columbia University (Ph.D. 1956), he worked in the petroleum industry before joining the University of Wisconsin faculty in 1958. Dott is co-author of a popular textbook, *Evolution of the Earth*, now in its seventh edition.

Gerald M. Friedman is now Distinguished Professor Emeritus of Geology of the City University of New York and Professor Emeritus of Rensselaer Polytechnic Institute in Troy, New York. He also serves as president of the Northeastern Science Foundation, a not-for-profit corporation. He has been Assistant Professor of Geology at the University of Cincinnati, Consulting Geologist in Sault Ste. Marie, Canada, and Research Geologist and Supervisor for Amoco Production, now British Petroleum Corporation in Tulsa, Oklahoma.

Friedman received his B.S. degree from the University of London, and M.A. and Ph.D. from Columbia University. He is a former Vice President of the American Association of Petroleum Geologists, President of the Society for Sedimentary Geology, President of the International Association of Sedimentologists, President of the Association of Earth Sciences Editors, founder of History of Earth Sciences Society, and founder and editor of the History of Earth Sciences Society journal.

He has been honored by many societies including receiving the Doctor Honoris Causa from the University of Heidelberg, Germany—an award given in the earth sciences after the University was 500 years old once every 50 years, and an Honorary Doctorate presented by the Queen Mother, London, England at the University of London. Friedman is an American Association of Petroleum Geologists Certified Petroleum Geologist, an American Institute of Professional Geologists Certified Petroleum Geologist, and has been a Chartered Geologist from the Geological Society of London since 1991 and now is an Honorary Fellow. Friedman has had 56 Master students, 47 Ph.D. students, and 31 post-doctoral students. He is the co-author of *Principles of Sedimentology* which has been singled out by *Choice Magazine* as part of its list of Outstanding Academic Books.

Ricardo Conrado Pasquali was born in the City of Buenos Aires, Argentina, in 1947. He is a Doctor of the University of Buenos Aires in the area of Pharmaceutical Technology. He is professor in the Department of Pharmaceutical Technology in the Faculty of Pharmacy and Biochemistry of the University of Buenos Aires. He is author of more than 200 articles of scientific popularization, several articles on the history of natural sciences, mainly geology and paleontology, and, along with Pedro E. Tonni, of four books on the fossil mammals of South America. He made investigations into the geology and paleontology of the northeast of the province of Buenos Aires and collaborates with local paleontological museums. He was integral of the Directive Commission of the Paleontological Association of Argentina during 1998–1999.

Eduardo Pedro Tonni was born in the Buenos Aires Province, Argentina, in 1945. He is a Doctor in Natural Sciences (Paleontological Orientation) of the Universidad Nacional de La Plata. At the moment he is Full Professor in the Facultad de Ciencias Naturales y Museo of the Universidad de La Plata

He instituted Argentinian studies in palaeornithology and zooarchaeology, directing the first doctoral theses on both topics. The current central topic of investigation is the birds and the mammals of the late Cenozoic of South America, as well as the environmental and climatic aspects of the Quaternary. He has published many scientific papers in national and international journals, contributed chapters to a number of books, and authored 42 articles and eight books of popular science. He has edited two books on the vertebrate paleontology of the late Cenozoic: *Evolución climática y biológica de la región pampeana durante los últimos cinco millones de años. Un ensayo de correlación con el Mediterráneo occidental* (Consejo Superior de Investigaciones Científicas, Madrid), and *Quaternary Vertebrate Palaeontology in South America* (A. A. Balkema, Rotterdam). From 1978 he has been a Scientific Research of the Comisión de Investigaciones Científicas of the Buenos Aires Province. He has directed research projects supported by national and international organisations. He was vice-president of the Palaeontological Association of Argentina and directed the palaeontological magazine *Ameghiniana*.

Victor P. Tollerton, Jr. is Research Associate in Paleontology at the New York State Museum in Albany, New York, U.S.A. He specializes in the study of eurypterids. His other research interests include general paleoecology, the taxonomy of arthropods and geologistology (the study of geologists). He is currently completing a redescription of the Ordovician eurypterids of New York State, and is doing research on Col. Ezekiel Jewett (1791–1877), third curator of the New York State Cabinet of Natural History (the forerunner of the New York State Museum). He received his Master's degree from SUNY at Buffalo in 1992.

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