

New York Scientific: CrossMark A Culture of Inquiry, Knowledge, and Learning

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REVIEWED BY OSMO PEKONEN

István and Magdolna Hargittai, a Hungarian chemist couple, have written, together or separately, an impressive number of books and papers on topics such as symmetry, interaction of science and art, and biographies of famous scientists. Their latest foray into the cultural history of science is a crunch into the Big Apple: they have produced a richly illustrated guidebook of visible reminders of the presence of science and scientists in New York City. The two authors share a love of the City That Never Sleeps, and they have seemingly roamed every one of its streets—and sometimes climbed into improbable places—to document every statue, plaque, or symbol of famous scientists in the fields of mathematics, natural sciences, medicine, technology, humanities, social sciences, inventions, or explorations. Theirs has been quite an enterprise, to say the least.

As a reminder of the universal character of the metropolis, the Hargittais start their journey from Battery Park, where the monument “The Immigrants” by Luis Sanguino (1983) reminds us of the “huddled masses” that once made the greatness of the city. An eastern European Jew, a Christian priest, a freed African slave, and an emancipated worker are represented. A Moslem figure could be added at a moment when America, or some part of it, considers the possibility of closing her borders to immigrants from certain countries.

The second illustration is an old family-album picture of the Hargittais on top of one of the WTC twin towers that are there no more. The authors point out one very special monument as a symbol of New York’s resilience: The disfigured remnants of Fritz Koenig’s sculpture “The Sphere” (1971), which formerly graced the plaza at the WTC as a symbol of world peace and harmony, now stands as a tribute to the 9/11 victims in Liberty Park near the site of horror. The monument “now has a different beauty, one I could never imagine,” Koenig comments.

The spherical, in the words of Copernicus, is the “form of all forms most perfect, having need of no articulation... the form of the world, the divine body.” Our two authors—who as chemists are specialists in symmetry—have identified quite a few spheres, for instance globes and armillary spheres, but also buckyballs, cubes, polyhedra, and other basic geometrical shapes that adorn the buildings, streets, and parks of the great city. This brings us into the realm of mathematics, and I find it wise to limit the rest of the review to that science.

Places of learning with lists of famous alumni are duly presented, with some bias toward Nobel laureates. When browsing the index of names, it seems to me, however, that few mathematicians have got a monument in New York. Josiah Willard Gibbs (1839–1903) and Simon Newcomb (1835–1909) have got their bust in the Hall of Fame for Great Americans, whereas Richard Courant (1888–1972) unsurprisingly has a bust in the institute carrying his name. John Howard Van Amringe (1836–1915), who was one of the founders of the American Mathematical Society, has a conspicuous memorial on the Columbia University campus at Morningside Heights. More subtly, one can find many scientists, among them Archimedes and Pythagoras, depicted in the Gothic ornaments of Riverside Church on the Hudson (Newton, Darwin, and Einstein are there, too). One of the humorous gargoyles at City College of New York seems to be performing a mathematical calculation, so that one may wonder whether some real professor served as a model. Charles Lutwidge Dodgson, alias Lewis Carroll (1832–1898), has been honored in Central Park through a sculptural group by Jose de Creeft (1959) representing Alice’s adventures in Wonderland.

As a whole, the New York community of mathematicians could have done a better job to honor their elders. Surely Martin Gardner (1914–2010) is the kind of figure who should have a monument in the city where he did some of his best work.

The Hargittais don’t go as far as inventorying contents of museums, but many works of art related to mathematics can be found, for instance, in the Metropolitan Museum of Art [1]. They have also written a scientific guide of Budapest, their home city [2].

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