The main entrance to the Old London Street, an attraction at the International Health Exhibition in South Kensington, was through Bishopsgate, an imposing Norman arch sliced through the city wall of the Romans (fig. 1). The wide opening, above which towered a statue of William the Conqueror, was framed by two monumental towers. Narrow slits of windows hinted at the dark, confined prison cells contained within its massive and weather-worn masonry walls.

Through the gateway, the picturesque sweep
of the archaic street was breathtaking (fig. 2). Buildings of four or five stories cast their darkening shadows across the narrow passageway to Elbow Lane. Crowds jostled their way in and out of reconstructions of popular commercial establishments such as the Rose Inn and the Cock Tavern, passing beneath half-timbered façades whose heaviness was relieved only by bands of tiny, discolored windowpanes. A sudden widening of the street just past a reconstruction of Isaac Walton's house afforded a generous view of an old wooden church tower.

A small exterior staircase on the south side of the street ascended to the second-floor level of the buildings, where "darksome little upper rooms" were filled with a mismatched array of tapestries, furniture, and utensils. The windows would not open; the thick panes of glass distorted the view of the crowd below, slowly making its way toward Elbow Lane.
The Old London Street was a brilliant ploy on the part of the executive council of the 1884 International Health Exhibition. Billed as a means of illustrating the overcrowded spaces, dark interiors, and inflammable building materials common in London before the Great Plague of 1665 and devastating fire of 1666, this reproduction of a medieval street—composed, as fairgoers were told, of “honest structures,” rather than “pasteboard and painted canvas delusions”—was the most popular attraction of the exhibition, appealing in its picturesqueness to “lovers of Art.” The Old Street was part of a group of special displays comprising fireworks, flower shows, and illuminated fountains, intended to lure crowds to the exhibition in the hope that they might perhaps go on from there to explore the vast displays of drainpipes and ventilators or to attend one of the lectures on sanitation that formed the official educational program of the fair. Equally instructive of current notions of health, however, was the juxtaposition of the Old London Street with spaces and structures at the fair based on the theme of abundant water.

The International Health Exhibition (IHE), or “The Healtheries,” as it was called at the time, was intended by its promoters to celebrate international progress in the scientific study of health. “Sanitary science” was a relatively new field in the late nineteenth century; by the 1880s it was a fairly autonomous discipline, as illustrated by events like the IHE. By this time courses in sanitation were taught in most schools; hygiene was the subject of royal commissions and government boards; Sanitary Institutes were common in many English cities. Divided into two main sections, “Health” and “Education,” the focus of the International Health Exhibition was on recent reforms in food, dress, the dwelling, the school, and the workshop.

The International Health Exhibition followed the fisheries Exhibition of 1883 in the series of thematic fairs sponsored by Queen Victoria and the Prince of Wales. It was largely accommodated within the buildings and courts constructed for its predecessor, although fair organizers pointed with pride to “the intricacy of the ground plan,” made possible by the “large number of new annexes, courts, corridors, and detached buildings” constructed for the IHE. The health exhibition took place on the grounds of the Royal Horticultural Society, between the Royal Albert Hall and the Natural History Museum. The Royal Albert Hall and the City and Guilds of London Institute for Technical Education, on Exhibition Road to the east, were also appropriated for the health fair.

Most of the displays at the IHE were housed in long, narrow galleries in the south end of the grounds, adjacent to the Natural History Museum on Cromwell Road (fig. 3). The north end comprised a grand terraced court and garden, boasting the Memorial to the Great Exhibition of 1851—a forceful reminder of the history of the area as the setting of other successful public exhibitions—and magnificent fountains; a grand axis, Central Avenue, bisected the site from north to south.
The flurry of activity resulting from the fair, however, extended well beyond the boundaries of the exhibition site. Anticipating the four million visitors who attended the event, vendors filled the streets of South Kensington leading to the grounds with stands and displays of "useless productions." Stalls of cork mice, china dolls, and tin mechanical alligators hardly prepared the visitor for the plethora of hygienic devices exhibited within the boundaries of the IHE.9 Railway companies also offered discounts to all districts within sixty miles of the metropolis, allowing their "country cousins to 'do' the exhibition in a day."10 Fair attendance exceeded all recorded estimates, presumably drawing crowds away from many other cultural events. A satirical cartoon in *Punch* featured a huge "Miss South Kensington" luring people away from the city's theaters with a gigantic magnet called "The Healtheries" (fig. 4).

The crowds attending the health exhibition were a testament to the population's interest in the new field of sanitary science, as well as to the Victorian faith in the power of spaces and things—supposedly "useful productions"—to improve public health. Heating and cooking apparatus, clothing, shoes, machinery, food, ambulances, lighting, furniture, and baths, among other objects, were displayed by individual manufacturers, grouped by categories. Images of the fair show that most of the displays were arranged in large shop windows, or in small shoplike stalls constructed inside the open exhibition halls. Belgium, China, India, and Japan were represented by separate national pavilions in and around which were exhibited more objects, more or less related to health in those countries.11

Food, dress, furniture, and houses of the past were juxtaposed with similar contemporary productions in order to illustrate—and to celebrate—Victorian progress in the field of sanitation. This pointed juxtaposition of historical and contemporary artifacts communicated a clear message to fairgoers: living conditions in 1884 were much healthier than those of the past. This message was expressed not only by the architecture of individual buildings and the displays of objects within them, but also by the visitor's experience of moving through the entire grounds, directed by a fluid ground plan in and out of buildings, in a dynamic interplay of changing sights, smells, and sounds. The Old Street, the fountains, the buildings, and such displays as that of a room-ventilating tube could be read—at one level—as a lesson in the progress
of sanitary science. At the same time, the design of the IHE glorified the productive organizational capacities of the municipal government and manufacturers; it was the streamlined, rationalized structure of the industrial corporation and the city bureaucracy that seemed to offer hope in the present against what Victorians were warned to fear about the past.

In this sense, the display of water at the fair assumed special importance as a self-congratulatory promotional gesture by municipal water companies touting their role in the recent restructuring of London's sewer system, as well as a direct reference to the importance of clean water in the Victorian conception of disease control. Decorative pools and drinking fountains could be found throughout the grounds of the IHE. This conspicuous consumption of water for apparently purely recreational use in the main court of the IHE was much more than an aesthetic choice; it was a public celebration of the city's good health in 1884.

In both its sheer quantity and its illumination, the water displayed at the exhibition was, in the words of one journal, "novel as well as ingenious" to the Londoner of the 1880s. The magnificent Illuminated Fountains in the main courtyard of the fair, the "greatest attraction" of
the IHE, were visible from a great distance, as a single jet of water one hundred and twenty feet high rose from an island in the center of a water garden. Two hundred and fifty smaller jets and sprays of water "in the most fantastic designs" surrounded the island, changing constantly in their form and lighting (fig. 5). The prime location of the fountains, on the axis between the Central Gallery and the Memorial to the Great Exhibition of 1851, was a further indication of the importance of water in the larger political agenda of the plan.

The sophisticated technology behind the elaborate water displays at the IHE was "invisible," intriguing the crowds with its seemingly magical qualities (fig. 6). Giant arc lights cast a range of colors upon the fountains, producing "the most varied effects to be attained, the water sometimes appearing red, at others purple, and again, when the white beam falls on it, the falling spray against the dark background of the sky resembles showers of diamonds." A journalist described the lighting effects as a "stream of fire," as electric lights were shot through the jet of water internally, so that the water itself appeared to be the source of illumination, rather than the reflecting surface. Advertisements of the health exhibition claimed it was the "largest display of electric lighting in the world."

Colonel Francis Bolton, Examiner of the Metropolitan Board of Works, personally worked the display from the clock tower in the courtyard, sending signals to five men who controlled the lights from a cramped machine room under the island. Meters located on the western side of the center basin recorded the quantity of water displayed for the enthusiastic crowd.

In this magnificent use of electricity and waterworks, the Metropolitan Board of Works had succeeded in turning its mundane work into the stuff of fantasy and drama in the name of public health. "Londoners can no longer complain that they are deprived of all means of out-of-door enjoyment at night," claimed the author of the official guidebook to the exhibition. Ernest Hart, an organizer of the IHE, pointed to the fountains as the exhibition's most important contribution, in his assessment of fair's overall influence. "The metropolitan water companies appeared in a new light at this Exhibition," he explained, "and entered the arena as caterers for pleasure, amusement, and instruction of the public." Hart claimed that London's parks were nothing more than "dreary desolate areas of darkness, . . . unused in the evenings for any wholesome or moral purpose." He saw the IHE as both a physical and moral model for the city:

Why should we not learn from the success of the music and the lighting of the gardens of the Health Exhibition, that our great parks should all be lighted by the electric light at night, . . . and should make those places, which are now not only useless but scandals to the metropolis, the sites of healthful and innocent recreation?

In this way, the popularity of the Illuminated Fountains at night linked issues of urban safety and health, projecting an atmosphere of optimism for the use of public spaces at night in the city.

Undeniable as its value as both spectacle and model for the real city must have been, the health exhibition was condemned by critics who felt the connection to health had been interpreted by the commissioners and exhibitors far too broadly. The music, lighting, and water, as many visitors noted, drew the crowds away from the exhibition halls to the exterior spaces. But beyond their obvious role as an attraction to the overall event, the water gardens were also the vehicle of one of the IHE's most potent lessons.
In 1854, John Snow had proven that cholera, which had raged through the city, killing thousands in 1832 and 1848, was transmitted primarily through infected water. He had been able to demonstrate that each victim in Westminster had consumed water from an infected pump in Broad Street. This discovery was followed by desperate calls to clean the Thames River, from which the water supply of London was drawn. Through massive urban restructuring—
a new sewer system, the embankment of the river, and widespread slum clearance—London had attempted to cleanse itself.\textsuperscript{19}

As a subtle reference to this idea of sanitary progress, the clean-water theme was carried throughout the site plan of the International Health Exhibition in pools, fountains, and even in architecture. The Water Pavilion, for example, an octagonal building constructed especially for the fair, was jointly sponsored by the eight water companies supplying London at the time.\textsuperscript{20} In the center of the building was a cast-iron fountain: a single jet of water rose from the mouth of a swan, whose neck was clasped by a young boy. An observer remarked that the statue was "an emblematic figure, no doubt, signifying the cupidity of the water companies." A journalist in \textit{Punch} was even less sympathetic to what he read as pure hypocrisy, clearly disappointed with the building, following a rumor that "these monopolists were about to atone for a past of mismanagement and extortion, by affording a display that would soften the heart of the most indignant economist." As he shrewdly perceived, the architecture of the Water Pavilion was clearly intended to mask the general mismanagement of the city's water by the sponsoring companies with art and entertainment.\textsuperscript{21}

The water theme was carried outward from this central motif through the rest of the building, recalling to \textit{Punch} the "venerable squirts of Trafalgar Square." The basin surrounding the fountain was decorated with water lilies and other aquatic plants. From its edges, eight streams of water, representing each of the city's water companies, were directed toward the middle of the fountain. Scenes of the Thames River decorated the walls of the pavilion. Each company also displayed, "behind a glass screen, an actual section of the materials of its filter bed, and in each angle is a tap and a drinking-cup, so that persons who feel that they 'may well abide it' can drink the water of all the different companies and compare them."\textsuperscript{22} It is difficult to imagine Londoners of the 1850s drinking water that appeared to have been taken from the Thames River!

The elaborate use of water at the International Health Exhibition, even in its "artistic" guise, was a direct reference to the significance of clean water in the Victorian conception of disease control. But on another level, it operated as a subtle counterpoint to the quaint but lamentable picture painted by the architecture of the Old Street. The Water Pavilion, in its location and architecture, and in the sensual experience that it offered to visitors, was the antithesis of the Old Street.\textsuperscript{23} In this way the water companies portrayed themselves as a means of relief, or even protection, from a horrific past.

As an amalgam of buildings from different time periods and different parts of London, the Old Street exhibition was less an accurate representation of an actual street than a creative recombination of "typical buildings, of which authentic drawings have come down to us."\textsuperscript{24} The scale of the exhibit was equally misleading: the reproductions of medieval buildings that lined the street were much smaller than the original structures they were meant to represent.\textsuperscript{25} Furthermore, realism in the Old London Street was invalidated by signs, advertisements, and evidence of modern technology at the fair. Old London, presented in this fictional, miniatu-rized model, clearly communicated to visitors that the mistakes of the past, which had resulted in horrifying plague and fire, were now understood and would, therefore, never be repeated. As one observer perceptively remarked, "as it stands, the sole relation of the old street to Health is a negative one."\textsuperscript{26}

New London, the healthy city, was represented by more "positive" displays: the Water
Company Pavilion and the other displays of water in the site plan. In every way, the architecture of the building was a subtle rebuttal to the conditions simulated in the Old Street. While the Old Street was dark and overcrowded, the Water Pavilion was brightly illuminated and spacious; the Old Street was dry, while the new building was fresh and cool. Its lush decorative motifs, drawn from water and plant life, provided a counterpoint to the austere simplicity of medieval buildings, which recalled death and destruction from disease and fire. While the Old Street was essentially an enclosed space—its buildings were intended to be experienced like a stage set—the Water Pavilion was only one part of a complex series of relatively open spaces, linked by water, leading to the Illuminated Fountains, and eventually to the Memorial to the Exhibition of 1851.

The overall plan of the International Health Exhibition thus functioned as a lucid sketch of health issues as they were understood by the British middle class in 1884; like other large public exhibitions, the health fair simplified and clarified complex urban questions, codifying the relationships of power, disease, and recreation in physical form at a single moment in time. Its value cannot be overestimated as a compelling statement of current notions of health for historians of Victorian medicine.

For historians of architecture, too, an interpretation of the Old London Street in its larger context illustrates the critical relationship of nineteenth-century buildings to experiences, both outside their own physical boundaries and inside, and to the health of those who inhabited the spaces. It is only by examining urban projects in context and by locating ordinary people within these spaces that we can begin to understand the complexity of the nineteenth-century city.

**Notes**

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2 *ILN* 85 (August 2, 1884): 94.

3 *Art Journal*, n.s. 4 (1884): 161.


5 Health exhibitions had already been held in England in conjunction with the annual meetings of the Social Science Association, beginning with that in Leeds (1871), followed by Norwich (1873), Glasgow (1874), Brighton (1875), and Liverpool (1876). The Sanitary Institute held a similar exhibition in 1879. See Hart, "International Health Exhibition," 35.

6 A guide to the Education section of the fair was published as *Special Catalogue of the Education Division* (London, 1884).


8 A detailed plan of the arrangements of exhibits in both these buildings was published in the beginning of the *Special Catalogue of the Education Division*.

No trace of the IHE has survived on the site; today the grounds are occupied by the Imperial College of Science and Technology, established in 1907 through the federation of the Royal College of Science, the

9 "Our Insane-itary Guide to the Health Exhibition," Punch 86 (June 14, 1884): 277. For a description of the vendors along Exhibition Road in South Kensington, see Architect 32 (August 23, 1884): 114; the statistics on visitors are reported in Architect 32 (November 8, 1884): 296.


11 For further information on the international pavilions, see Architect 31 (February 23, 1884): 129–30. The entry to the Belgian pavilion is illustrated in ILN 85 (August 2, 1884): 168; outside dining and a stand offering mineral waters were adjacent.


13 Other health exhibitions also featured water fountains illuminated with colored light. See "The Manchester International Health Exhibition," Sanitary Record n.s. 16 (May 10, 1891): 1613.

14 ILN 85 (August 2, 1884): 106.


18 Hart, "International Health Exhibition," 40, 56.


20 There are no extant images of this building; it is described in the Official Guide, 44.


23 It was recommended to visitors that they first visit the Old London Street, then the Prince of Wales' and the Water Companies' pavilions. Official Guide, 13.


25 This may have been due to constraints of the site, but it is also completely consistent with the style of other nineteenth-century exhibitions. Burton Benedict has described this common technique of miniaturization in the construction of models of cities, parks, and streets at world's fairs as a way of both impressing the public and expressing control of the simulated environment. See B. Benedict, The Anthropology of World's Fairs (Berkeley, 1983), 17.

26 Builder 46 (May 17, 1884): 687. See also "Our Insane-itary Guide," 49.