



# Reflections on Water



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# Introduction

**All human beings need water, not only to drink but also to keep clean and healthy. It can be a struggle to find and keep a supply of clean water, especially in cities. These texts are about the central role water plays in people's lives.**

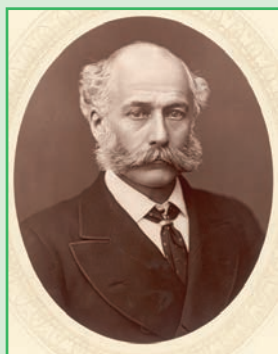


This is an introduction to Stephen Halliday's book *The Great Stink of London*. During Victorian times, there were serious problems with water supply and sanitation in London. Crisis point was reached in the summer of 1858.

# The Great Stink of London

In the mid-19th century, Britain was gripped by the fear of cholera, a highly infectious and deadly disease. When cholera struck Hamburg in Germany, the British government grew alarmed that this latest outbreak might spread to Britain. They decided to create a special committee to deal with the expected epidemic.

However, the epidemic never happened because of the work of one man: Sir Joseph Bazalgette.

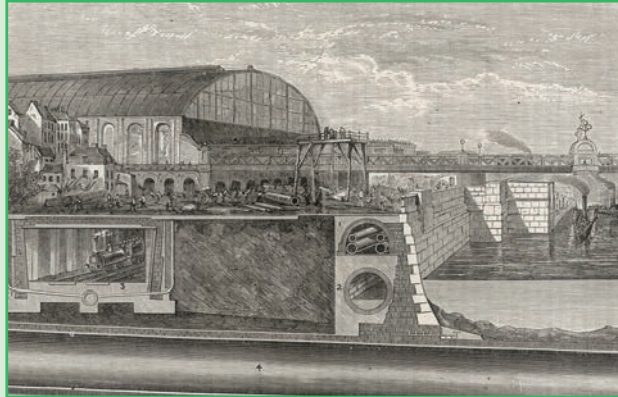


At that time, London's sewage flowed straight into the River Thames. From here it leaked into adjacent springs, wells and other sources of drinking water. This was the root cause of cholera, a waterborne disease. Contemporary accounts describe London being crowded with men, women and children struggling to survive in terrible conditions. In 1849, one journalist reported that the air had 'the smell of a graveyard, and a feeling of nausea comes over anyone unaccustomed to it.' About the Thames, he wrote, 'heavy bubbles now and then rise up in the water, which is covered with a scum like an encrusted cobweb. In it float large masses of noxious, tangled weed and against the posts of the bridges are swollen carcasses of dead animals.'



In the summer of 1858, the stench from the Thames was so bad that Members of Parliament fled from the rooms overlooking the river. The Prime Minister, Benjamin Disraeli, rushed from the debating chamber, handkerchief to nose. The press called the crisis The Great Stink. Disraeli introduced to Parliament a Bill that gave Bazalgette the authority to construct the sewers which he had designed; it was rushed through within sixteen days and Bazalgette began work immediately.

By 1874 Bazalgette had completed his ingenious scheme. He designed a grand system of drains and sewers to carry foul water to new pumping stations and holding tanks, and new embankments to make the river cleaner. In all, he built 1,182 miles of sewers, four pumping stations and two major water treatment works which are still operating to this day.



Bazalgette did much else besides. He designed and created many famous London streets and several magnificent bridges across the River Thames, including Tower Bridge, a present day London landmark. In fact, Bazalgette created more of London than anyone else before or since. But his greatest claim to fame is the system of sewers, which banished cholera forever and which still serve the capital city to this day.





This is an extract from the autobiography of Hong Ying, where she writes about her life as a child in China during the 1960s.

She lived with her family on the banks of the River Yangtze.

## *Daughter of the River*

My house was on the southern bank of the Yangtze. By standing on the ridge in front of my house, I could see where the Yangtze and Jialong rivers meet. An assortment of buildings on the surrounding hills looks like a jumble of children's building blocks. Quays dot the riverbanks, steamships tie up between the quays. Cable cars, dripping rust, crawl slowly up and down the slopes. Dark clouds blanket the river at dawn, and at dusk, when the sun's rays slant down on the water before settling behind the hills to the north, a few bursts of sunlight emerge from the dark mist.

For us, water was precious. Several hundred families shared a single tap. Queuing up was only part of the problem, for once water came, it was usually a dirty yellow. If we went down to the river to fetch water, a hard sweaty job at best, we had to treat it with bleach to make it fit for drinking or cooking, and it left a metallic taste. Except for times when the running water was turned off, we fetched water from the river only for laundry or to mop the floors.

Anyone who has never suffered the heat of this place cannot possibly understand how it burns its way from your heart and clogs up every pore on your body, to lie there baking your skin. Normally there is no wind, but when there is, it's like adding coal to a fire. That was in the summer. Then when the Yangtze began to rise the water flowed from the higher reaches and hundreds of metres of riverbank would be swallowed up overnight when the flood season arrived.





Once the weather cooled off, the inconvenience of bathing increased. Hot water was particularly scarce, but since we couldn't afford to go to the public baths, we simply took fewer baths or no baths at all. The winter cold was as oppressive as the summer heat. Our houses weren't heated and heating materials were virtually non-existent. Sometimes we simply cocooned ourselves in quilts and lay in bed. At night we bundled up in as many clothes as we could wear and climbed into bed, shivering until morning with freezing hands and feet. I don't think there was a winter in my childhood when my hands weren't covered with chilblains that made my fingers look like carrots.

For my brother, the river was a source of food. Water from the snowy peaks kept the river temperature icy cold most of the year. Nevertheless, whenever he saw something that even looked like food, he dived in after it: vegetable skins, leafy greens, even melon rinds. Once he had whatever it was in his grasp, he'd swim back to shore and take it home, where mother would wash it, cut out the rotten parts, and throw it in the wok. But he wasn't always lucky. Most of the time all the river offered up was muddy water and he'd return home empty-handed.



Over 2,000 years ago, the Romans had sophisticated systems for water and drainage in place. This was important as the public baths were more than just a place to keep clean, as Dinah Starkey explains in this article from an educational magazine.

## Bath times with the Romans

### Something for everyone

In Roman times, everyone, men and women, rich and poor, visited the public baths that could be found in every town. The baths played a central part in people's daily lives. A visit to the baths was the Roman equivalent of a trip to the health club: it combined a workout in the gym and beauty treatments with a chance to meet friends and do a bit of networking.



### Marble or murky water?

The baths ranged from the luxurious to the downright squalid. There were baths panelled with marble and set with dazzling mosaics, and there were baths where fumes from the furnace overcame the bathers and toenail clippings floated in the murky water. In the more up-market establishments, such as the baths of Carcalla in Rome, there were dozens of columns made from marble and imported stone. The floors and walls gleamed with polished marble panelling in ten different colours, the roof glittered with glass mosaics and there were alcoves for more than a hundred statues.

Roman Baths



### Working up a sweat

The Romans began bathing by rubbing perfumed oil into their skin and then proceeded to exercise to work up a sweat, for example by running, wrestling or boxing. From the exercise room bathers then moved through into the *tepidarium* (the warm room) and from there into the *caldarium* (the hot room) to really sweat out the dirt. After a while, the bathers returned to the *tepidarium* for the serious business of getting clean by scraping off dirt and sweat with a curved metal *strigil*. Finally, some bathers could finish off their session with a breathtaking plunge into the ice cold water of the *frigidarium* (the cold room).

### Time to relax

Those who could afford it might also treat themselves to a massage or a shave. Sometimes there was a large pool where bathers could relax before going home. There were even snacks for sale: evidence has been found that the Romans enjoyed such delicacies as cutlets, sausages, bread, cakes, nuts and hog's fat!



Octagonal Frigidarium

### No fun for the neighbours

Seneca, the Roman philosopher, shows that it wasn't so much fun to live near the baths.

"I live right over a public baths. Just imagine the noise. I hear the grunting of the body builders. Then a ball player arrives and begins to count shots. Add the people who like to sing in the bathtub. And the people who jump into the pool with a deafening splash. On top of all this, don't forget the professional hair remover, forever screeching as he advertises his services. He only shuts up when he starts work – and makes someone else do the yelping! Then there are the drink-sellers, the sausage-sellers and the cake-sellers, each with his own special call ..."













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