

PAIRED TEXTS
stories that share a
topic or theme

Killer

IN 1952, THE DEADLIEST ENVIRONMENTAL DISASTER IN ENGLAND'S HISTORY CHANGED OUR IDEAS ABOUT THE AIR WE BREATHE

BY LAUREN TARSHIS



**AS YOU READ,
THINK ABOUT:**

What causes air pollution?

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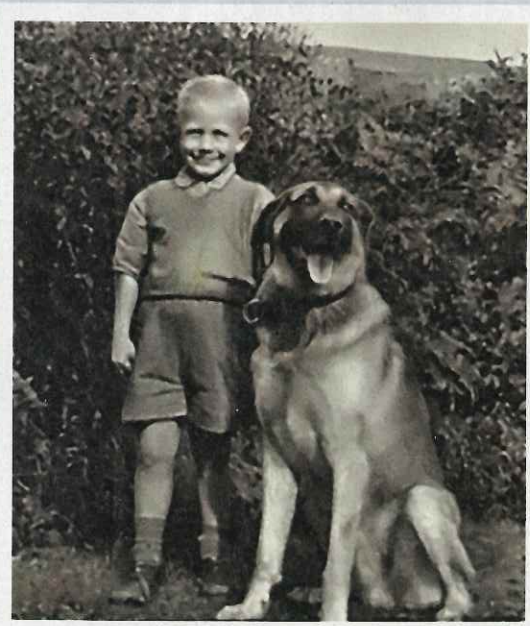
ike so many terrible things, the dark cloud seemed to appear out of nowhere. It swept over London, England—black and poisonous. It brought terror and sickness. It would kill 12,000 people. →

BACKGROUND ART: GARY HANNA; SMOG LETTERING: SHUTTERSTOCK

This was not a monster from a nightmare, an F5 tornado, or an alien spaceship. This terrifying killer was air—a massive cloud of toxic, polluted air. For five days, it blanketed London, causing fear, panic, and death. It became known as the Killer Smog of 1952, and it is one of the deadliest environmental disasters in history.

Plunged Into Darkness

December 5, 1952, was a quiet day. Nine-year-old Brian Bone was at home with his parents and 15-year-old brother, Hugh. When Brian opened the back door to let out his dog, Tarzan, he noticed that the morning was damp and smoky. But that wasn't unusual for London at that time of year. The German shepherd trotted into the fenced-in backyard, and Brian shut the door and went about his day.



Brian Bone, about two years before the Killer Smog, with his German shepherd, Tarzan

It was only later, when Brian went to call the dog in, that he realized something was horribly wrong. The hazy morning had turned midnight black. The air had a sharp smell—a mixture of chemicals and rotten eggs. Brian and his parents called for Tarzan, but the dog had escaped through a hole in the fence. Normally, the shepherd would have been able to sniff his way home. But even a dog's powerful sense of smell was no match for the **smothering** smog. For hours the family searched the neighborhood, braving the darkness as they called for Tarzan. The dog remained hopelessly lost.

Across London, millions of people had been plunged into darkness. Buses screeched to a halt. Trains stopped on their tracks. Cars crashed. People stumbled along the streets, unable to find their

way home. A few got so lost they fell into the Thames River and drowned. Being indoors provided no escape. Black air crept under doors and through keyholes, filling up homes and offices and hospitals.

What was happening?

Pea-Soup Smog

For centuries, London had been known for its fog, a swirling white mist that wrapped itself around the city on chilly days. The fog was as much a part of London as the Big Ben clock and Buckingham Palace. It appeared in countless paintings and inspired celebrated poems and haunting ghost stories.

True, it made London gloomy at times, but the fog was natural and harmless. Fog, after all, is simply microscopic drops of water trapped in the air.

By the 1800s, however, as the city grew more crowded and modern, it wasn't only fog swirling around London. It was also pollution from factory smokestacks and millions of home chimneys. Much of this pollution came from burning coal, which produced an especially sooty and oily smoke. On foggy days, this smoke stuck to the drops of water in the air; imagine trillions of tiny water bubbles **slathered** with dirty oil, filling up every inch of open space.

In 1905, this dark and dirty fog got an official name: smog. By then, smog was already a problem in London. It was especially bad on cold winter days. When the temperature dropped, people burned more coal to keep warm.



Smoke belching out of 12 million home chimneys created hideously green "pea soup" smog.

A Fact of Life?

Air pollution wasn't a problem only in London. The early 1900s were a time of growth for cities across Europe as well as the United States. Smog from factories and steel mills blanketed American cities like Pittsburgh and Cleveland. It turned cities ugly and smelled terrible. Kids playing outdoors would return home with blackened clothes, their lashes and brows coated with dark slime that could

WHEN DAY TURNED TO NIGHT

ABOVE: Londoners make their way through the darkened streets. RIGHT: A policeman uses a torch to direct traffic through the smog.

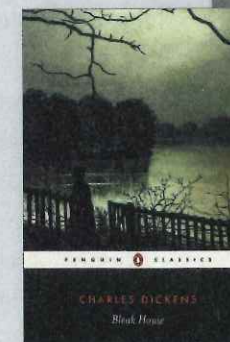
be removed only with strong detergent. Many people assumed that nothing could be done to make the air cleaner.

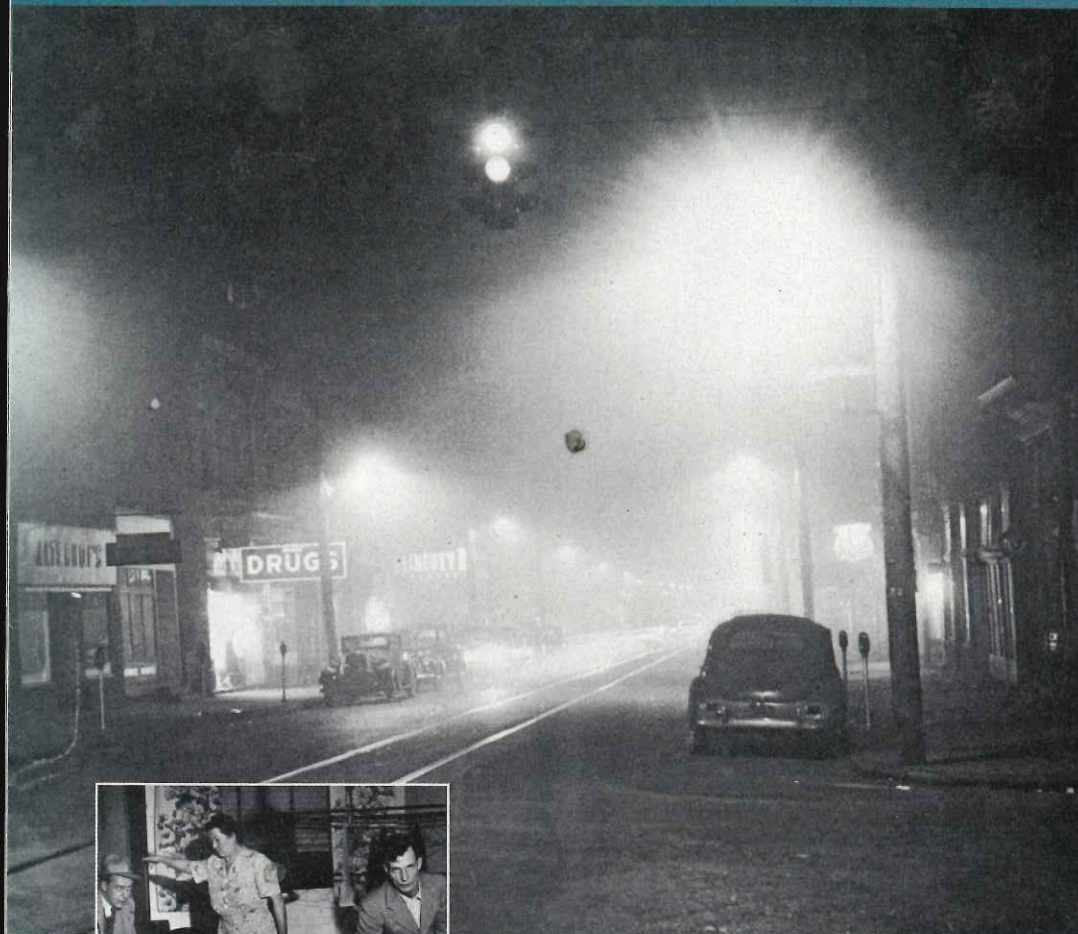
In London, coal was the cheapest way to heat a home, and most Londoners could not afford cleaner heating systems.



THE FOG IN LITERATURE

In his 1853 novel *Bleak House*, Charles Dickens used the London fog as a symbol of society's problems.





AMERICA'S TOXIC BREW In 1948, the smog in Donora, Pennsylvania, turned lethal, sickening half the town and causing 20 deaths. The air was polluted by the city's railroad yards and steel and zinc plants. The tragedy led to the Air Pollution Control Act of 1955—the first federal law aimed at reducing air pollution.

The owners of factories and power plants insisted that reducing pollution would be too expensive. And what would happen if they had to close their factories? People would lose their jobs.

Smog, it seemed, was just a fact of modern urban life.

A True Disaster

What few people understood was that smog wasn't just dirty and smelly—it was also dangerous.

It contained toxic chemicals and particulates—specks of unburned coal. As Brian and his family searched outside for Tarzan, their lungs were filling with this poison.

Even before scientists fully understood how smog damages the body, there were signs that it was harmful. On pea-soup smog days in London, schoolkids would be hunched over their desks, wheezing and hacking as they tried to do to their work. Elderly people

would collapse in the streets. Emergency rooms routinely filled with patients showing signs of smog-related **respiratory** problems, such as asthma and pneumonia. Chemicals and particulates in smog can damage the lungs—permanently. Still, decades went by and government leaders took few steps to reduce air pollution.

But then came the smog of 1952.

This smog was different from others before it, more extreme and longer lasting. The unusually cold weather meant that people were burning more coal than usual to stay warm. There was no wind, nothing to clear away the smog.

So day after day, London remained dark. Schools stayed closed. Workers couldn't get to their jobs. Even funerals were canceled; grieving relatives couldn't see well enough to drive from churches to cemeteries to bury their loved ones.

By day three of the smog, there was some good news at the Bone house: Tarzan had somehow made his way home. But Brian couldn't do much celebrating, because he

3 WAYS You Can Reduce SMOG

Cleaning up the air starts with us.

1 Turn off the light

when you leave a room to save electricity. Producing electricity often involves burning fuels such as oil and gas, which contributes to smog.



2 Plant trees

around homes and businesses. Trees that shed their leaves provide shade in the summer and let in light in the winter so less energy is needed for heating and cooling. Trees and plants also "clean" air by absorbing harmful gases and releasing oxygen.



3 Take the bus, ride a bike, or carpool

to school to use less gas, which is a major cause of air pollution.



was sick in bed with a burning, painful cough. He felt as though the smog itself was trapped inside his chest.

All around London, others were getting sick too—thousands and thousands of people. At first, most doctors believed that people were suffering from the flu or other typical winter illnesses. Even scientists did not immediately make a direct connection between the smog and the growing number of coughing, wheezing people staggering into hospitals.

Soon it became clear that London was in the grips of a true disaster. The smog wasn't just making people sick.

It was killing them.

By the time the smog finally cleared on the fifth day, more than 4,000 people had died. In the coming months, roughly 8,000 more would die from illnesses related to the smog.

New Laws for Cleaner Air

The Killer Smog of 1952 changed the way people thought about air pollution. For the first time, there could be no doubt that smog was a deadly problem. Over the next three years, the British government passed laws designed to make air cleaner. Polluting factories were moved outside the city. The government helped people pay for cleaner heating systems that didn't rely on dirty coal.

America followed with clean-air

laws of its own. Since 1955, these laws have supported research on air pollution and **imposed** limits on the toxins that can be released into the air by factories, power plants, cars, and other sources of pollution.

Since then, there have been no killer smogs in England or America. But dirty air continues to be a problem in many parts of both countries, thanks largely to cars and growing populations.

Smog also remains a truly deadly problem around the world. Beijing, China, and New Delhi, India, are just two of dozens of cities frequently **shrouded** in pea-soup smogs caused by factories, burning coal, and car exhaust.

According to the World Health Organization, air pollution is the world's most dangerous environmental problem. Millions suffer from pollution-related health problems such as asthma. In 2012, about 7 million people died from exposure to dirty air.

Few understand the dangers of air pollution better than survivors of the Killer Smog of 1952—like Brian Bone.

Happily, Brian recovered from his illness. But throughout his life, he has suffered from lung problems that may have been caused by the smog.

Today, at age 72, Brian understands what a gift it is to take a deep breath of sweet, fresh air. ●



Tuesday, December 8, 2015



Children wear masks to help protect their lungs from smog. Today, Chinese people rank air pollution as one of their country's most serious problems.

Smog So Thick, Beijing Comes to a Standstill

Air pollution in Beijing, China, has become a public health crisis

By Edward Wong

BEIJING, CHINA—Residents across this city awoke to an environmental state of emergency as poisonous air quality prompted the government to close schools, force drivers off the road, and shut down factories.

On Monday, the government declared a “red alert” over air pollution. It also broadcast what sounded like bombing raid alerts in the subways to warn

people of the health dangers. Yet even with those extraordinary measures, the toxic air grew worse, shrouding China’s capital city of more than 20 million people in a soupy, metallic haze.

By 4 p.m., walking the dim streets was like strolling through a coal mine. The city’s air quality index read 308, rated “hazardous” by United States standards. At that level, people should not even set foot outdoors.

Paying the Price

Cities in China regularly have poor air quality. In fact, the air in China is among the worst in the world. Rapid industrialization, burning coal for power, and a quick rise in the number of people who own cars have all contributed to the problem. According to some estimates, as many as 1 million people in China die each year from diseases linked to the polluted air.

Officials in Beijing issued the red alert to try to rein in the smog and to show residents that the government was taking action. During the alert, the number of cars allowed on the road was restricted, so many workers couldn’t get to their jobs. Others had to stay home with their children, as Beijing’s 3,200 schools were ordered to close for several days.

The inconvenience caused by the red alert showed residents just how severe China’s environmental crisis has become.

“What bothers me the most is that my child may have a very negative view of nature,” said café manager Kan Tingting, 35. Tingting remained indoors with her 3-year-old daughter—one of some 2 million schoolchildren affected by the school closures. “She loves nature much less than she would in a normal environment. I don’t want her to grow up thinking nature is ugly.”

In another corner of Beijing, university professor Wang Bei was bunkered down

at home with her 10-year-old son. “Air pollution is a huge problem that we ignored early on, while we concentrated on economic development,” she said. “Now we are paying the price.”

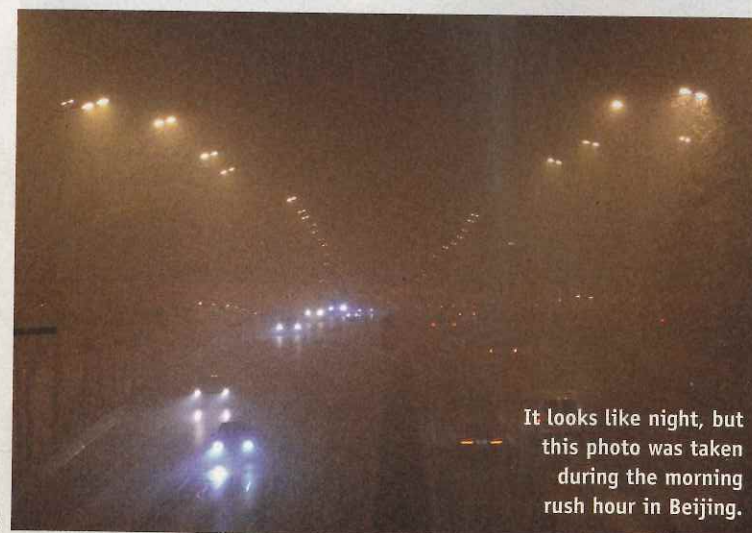
Devil’s Handshake

Beijing has had a color-coded emergency response plan to smog since 2013. Until now, however, it had never sounded a red alert. Many residents wondered why.

Did city officials fear the economic losses that might result?

In recent years, China has made a devil’s handshake: the trading of a healthy living environment for extremely fast economic growth. Now, as government leaders try to deal with this dystopian scenario, many are realizing that lasting change could take years, maybe decades.

“Shutting down factories is not ideal for the economy,” said Zhao Ling, a technology salesman. “But health should come first.” ●



It looks like night, but this photo was taken during the morning rush hour in Beijing.

WRITING CONTEST

How has smog impacted the lives of people throughout history? Has enough been done to solve the problem? Use details from both articles to support your answer. Send your essay to **KILLER SMOG CONTEST**. Five winners will each receive *The City of Ember* by Jeanne DuPrau.

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