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LIFE-CYCLE STUDIES

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Umbrellas

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## Umbrellas

### Overview

An early 18th century English dictionary defines an umbrella as a “screen commonly used by women to keep off rain.” Men too, of course, shelter from downpours under umbrellas, but the devices were invented—as long ago as 1400 BCE in China and Egypt—as protection from the sun, mainly for nobility. The Latin root of umbrella, umbra, means shade.

In medieval Europe, clergy were occasionally spotted with umbrellas, but it wasn't until the 1500s that European women of fashion began to carry them. Their use became commonplace in high-society Paris and soon spread to London. They remained for some time an accessory of the rich. The first umbrella shop in England, James Smith & Sons Ltd., for example, sold to the aristocracy, including prime ministers of the day, when it opened in 1830.

Things changed in 1852 when the English wire-maker Samuel Fox invented the more affordable steel umbrella of

Lucretious



Public art in Thessaloniki, Greece.

today. The compact collapsible umbrella, with two telescoping shafts, was invented late in the 20th century. They have become so ubiquitous now that in Japan they are even sold in vending machines for only a few dollars. Commercial patio umbrellas, on the other hand, can cost upwards of US\$550. Remote-controlled umbrellas, also for patios, can cost as much as \$800 but come with more advanced features, such as the ability to tilt. Fox Umbrellas in London is widely regarded as one of the finest producers in the world; its top-of-the-range products go for as much as \$750.

Umbrellas have been used to repel unfriendly dogs for ages, but they have also been adapted as more serious weapons. Some have been crafted with

concealed sword blades and even one-shot guns. An umbrella with a poison-tipped needle was used to kill dissident Bulgarian writer Georgi Markov in London in 1978.

### Disposal

Most umbrellas are stocked at convenience stores and are relatively inexpensive, but there is little provision for recycling. Millions are discarded each year, as they are used only fleetingly in the rainy seasons and can be cheaply replaced. Lost-and-found offices often double as umbrella recycling stations, such is the frequency with which they are left on buses and in railway stations. As with so many everyday objects, the huge numbers that are not reclaimed presumably end up in landfills alongside other nonbiodegradable rubbish. As prices of umbrellas have nose-dived and replacements become so easy to obtain, repair shops (and umbrellas with replaceable spines and metal ribs) have all but died out.

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Making umbrellas from bamboo, Chiang Mai, Thailand.

### Manufacture

U.S. households own an average of 3.8 umbrellas each. Thirty-three million umbrellas are sold annually in the United States, many of them made in China. Mainland factories in China produce as many as 800,000 umbrellas a month, using a variety of raw materials, including wood, metal, or fiberglass for the shaft, steel wires and strips for the ribs, and thread for sewing. Nylon, cotton, or silk is used for the dome and the ribs are usually composed of eight panels of cloth sewn together and mounted on eight spokes.

Umbrellas are usually made by a hand-assembly process carried out by semi-skilled workers. But in some countries, such as Japan, old techniques die hard. Craftsmen still make the parasols known as *wagasas* by stretching paper over a frame of bamboo-strip ribs, the whole assembly stuck together with oil and lacquer in a technique which dates back to the mid 18th century.

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Friends going to school in Bali, Indonesia.