



Spinning lies

by Fiona Galbraith, Viva!

Viva!

**THE BIG
COVER UP**

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If you look at advertising campaigns promising luxury, you will often come across the adjective silky. Products such as Galaxy chocolate (Why have cotton when you can have silk?), Giovanni Hair Care Conditioner (Smooth as Silk) and Magnum ice-cream (smooth and silky) exploit the consensus that silk is a luxury product associated with indulgence, sex and affluence. Historically, silk was often worn by the upper classes as a symbol of wealth because of the expense involved in its production. Although silk remains more expensive than other fabrics, it is now readily available to consumers on every high street.

The Global Silk Industry

Global silk production accounts for less than 0.2 per cent of the world's textile output. Silk is produced in over 60 countries although Asian nations create most of the world's silk (Datta & Nanavaty, 2005). China is the biggest manufacturer of silk, generating over three times as much as the world's second largest, India (FAO, 2005).

The international silk market had a turnover of \$6.5 billion (over £4 billion) in 2000 and this continues to increase as India and other developing countries compete to increase their share of the market (Chand, 2001). The UK exports around £60 million worth of raw materials and finished garments each year (The Silk Association of Great Britain).

History of Silk

According to Chinese legend, the Empress Si Ling Chi discovered silk 5,000 years ago when sitting drinking tea under a Mulberry tree. A cocoon fell into her tea and a long thread began to unravel. The story tells that the Empress and the Emperor soon discovered that the thread could be woven to make a soft fabric, and they began to use silk in the production of clothes.

For 2,000 years, the Chinese kept the processes of silk production a secret and as such they controlled the world market. Eventually however, the secret was stolen and spread across the globe to Japan, India and mainland Europe. In 1685, Louis XIV revoked the religious liberties of Protestants living in France and as a result, French silk workers sought refuge in the UK. This was the catalyst for the UK silk industry. French silk workers settled in London and began to weave; they also taught the local community how to weave. The UK silk industry grew

Millions of silkworms are slaughtered each year for silk production



rapidly and was able to monopolise the domestic silk market for a number of years. Currently, the UK produces over £170 million worth of silk goods each year (The Silk Association of Great Britain).

What is Silk?

Silk is the name given to a soft fabric made from the fine thread produced by certain insects. The most commonly used insect is the *Bombyx mori*, a moth native to China. The pupa produces the silk thread to build a cocoon in which to enter the final stage of metamorphosis and become an adult moth.

Tasmin Blanchard, author of the ethical fashion book *Green is the New Black* says: “Commercial silk production is innately cruel. Silk might be biodegradable, renewable, organic and even fair trade. But the traditional production process still requires that moths never leave the cocoon alive. In order to prevent damage to the thread, the larvae are boiled or roasted alive – silkworm cocoons are baked at about 100 degrees centigrade for over two hours, which kills the worms and also makes the cocoons easy to unravel without breaking the thread. And there we were, thinking silk was a lovely natural ethical fibre.” (Blanchard, 2008).

Life of a silkworm

The *Bombyx mori* (the breed of moth most commonly used in silk production) has four lifecycle stages: the egg, the larva, the pupa and finally, the adult moth stage. Unfortunately, the *Bombyx mori* is now extinct in the wild and exists only in silk farms and is now commonly referred to as silkworm (although it is not a worm, but a caterpillar). These wonderful creatures no longer live their natural life span, nor do they experience each stage of their lifecycle. Most silkworms are killed during the pupae stage; only those used for breeding are allowed to live to become adult moths.

A female moth will lay around 400 eggs at a time (Handcrafted-silk-pillows.com, on-line), around 85 per cent of which will hatch. In nature, this would occur in spring, but in captivity the insects are kept in a controlled environment and therefore the farmers are able to control how often breeding occurs. After a week, the eggs hatch to reveal larvae (around 3 mm in length), who will begin to feed on the mulberry leaves provided. During the next four weeks, the larvae will continue to eat until they have grown 10,000 times their original size. Once fully grown, the larva is ready to begin weaving his cocoon. He attaches himself to a twig (or artificial replacement) and begins to secrete liquid silk from his glands, which is forced through openings in his head called spinnerets. He also secretes seracin (a protective gum) and, upon contact with the air, the liquid silk becomes a silk filament. The larva wraps the filament around his body in a figure of eight movement and within three days he is completely contained within his cocoon. The cocoon is made from a single continuous thread that can be up to one mile in length.

Silk producers desire the continuous nature of the silk filament as this creates the texture of the material. Inside the cocoon, the caterpillar has transformed into a chrysalis and then into a moth and is ready to rejoin the outside world. The next natural step is for the moth to secrete a liquid to dissolve the cocoon. Silk farmers, however, want the silk filament to remain a continuous thread and prevent the moths from secreting liquid by killing them. Silk farmers have numerous ways of slaughtering the moth and the most commonly used method



An adult *Bombyx mori*

is to place the cocoon (with live insect still inside) into boiling water. Other methods include baking the cocoons in an oven, or exposing them to long periods of hot sunlight. No concern is given to the animals' welfare and they are not stunned before slaughter. This is an unquestionably cruel and barbaric practice.

The boiling water melts the seracin that holds the silk together and

allows the silk filament to be unraveled. A thread of silk for weaving requires at least three (and up to 20) silk filaments to be twisted together. The fewer filaments used, the more delicate the silk thread shall be.

Hormones are sometimes given to the larvae to ensure that they grow bigger, thus guaranteeing a bigger cocoon and a longer silk filament. Juvenile hormones can also be given to force the larvae to spin for longer than is necessary; this again ensures the farmer is able to gather more silk.

One cocoon is made of a single thread about 900 metres long, and about 3,000 cocoons are needed to make one pound of silk (Wong, 2000). This means that hundreds of silkworms are killed for just one silk scarf or tie.

Silkworms at a silk factory in Vietnam



Silk Workers

Most silk production takes place in developing countries such as China and India where workers endure low wages and poor working conditions. Workers in such countries do not have the same rights as they would in the UK and therefore they have little legal protection. This means that workers can be exploited and unfairly treated. Of course this helps to keep costs low and is one of the reasons why silk is so readily available at a low cost in today's market. If countries such as the UK and the United States produced raw silk themselves, the price would increase dramatically.

Human Rights Watch is an organisation that investigates human rights' infringements across the world. In 1996 they visited India to investigate the silk industry. The report they published stated the following: "Reeling is the process by which the silk filaments are pulled off the cocoon. The cocoons are cooked in boiling water in order to loosen the seracin, a natural substance holding the filament together. The reeler dips his or her hands into the scalding water and palpates the cocoons, judging by touch whether the fine threads of silk have loosened enough to be unwound ... More than 80 per cent of silk reelers are under 25-years-old, with most of them between ten and 15-years-old." (Human Rights Watch, 1996).

In 2003, *The Independent* featured a story about the report. According to the article, hundreds of thousands of children work 12-hour days and suffer injuries, burns and beatings. The children are bonded labourers, which means that they are bound to their employers in return for a loan to their family. This kind of bond is common in poor countries and the children exchanged in the deal may expect years of abuse and suffering to follow. The article stated that there must be at least 350,000 bonded children working in India's silk industry (Reeves, 2003).

Children making silk thread routinely dip their hands in boiling water, which burn and blister them: “Their hands become raw and often infected. They breathe smoke and fumes from machinery, handle dead worms that cause infections, and guide twisting threads that cut their fingers.” (Human Rights Watch quoted in *The Independent*).



Silk is used for luxury fashion items such as ties

Alternative materials

Silk is used for shirts, dresses, ties, bedding, skirts, underwear, linings and other luxury products. However, it can easily be avoided. Artificial silk has been widely available since it was first created in the 1890s. There are various textiles on the market which look and feel like silk including rayon, nylon, polyester, bamboo and cotton. Rayon fabric looks and feels most like silk and can be found in high street shops.

Boycott Silk

Silk is marketed with connotations of luxury and sexiness. The process of boiling moths alive is neither sexy nor luxurious. In fact, silk is the hardened mucus created by a caterpillar during their final stage of metamorphosis.

Vegans and many vegetarians refuse to buy or wear silk because of the animal suffering involved. The silk industry exploits silkworms, trade workers and the environment: when you consider all of this it is hard to justify choosing silk.

What you can do

- Do not buy silk products
- Donate any silk items you own to charity shops
- Educate your friends and family about the origins of silk
- Order a pack of The Big Cover Up leaflets from Viva! to distribute and raise awareness of cruel fashion
- Write to businesses and ask them to opt for cruelty-free fabrics
- Write to your local paper about silk production to raise awareness in your community
- Visit www.thebigcoverup.org.uk for more information

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