

Preface to Chinese edition of **Green Gold: The Empire of Tea.**

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It is an honour and pleasure to be able to introduce our work to readers in the greatest tea producing and drinking civilization in history. We would like to do so by drawing out of the book some of the lessons which can be learnt about the impact of tea on Chinese civilization. For tea has been the secret source of much of China's greatness, but in the end, through the craving it induced and the strength it gave, it led to terrible disasters from which China is only now recovering. Let us explain.

How tea led to China's greatness.

Tea (*camellia sinensis*) originated in the hot wet jungles of the Eastern Himalayas. By the time of the unification of China in the third century B.C. it was already known in the monastic gardens and aristocratic households of part of China as a wonderful medicine and drink that helped in Buddhist meditation.

It became a national and universally admired drink around the time of the rise of the Tang dynasty. Its spread coincided with the great move southwards of Chinese civilizations in the late Tang and Sung dynasties from the ninth to thirteenth centuries.

One suggestion we make in our book is that the sudden rapid growth of population numbers and economic wealth at this time, linked to the spread of intensive rice cultivation in the Yangtze delta, may have been made possible by tea.

Tea helps in two ways. Firstly it gives extra energy in farming. The caffeine in the tea relaxes and invigorates and gives better muscle use and brain concentration. Tea helps overcome fatigue and makes complex and difficult work possible. If we subtract tea from the Tang-Sung period we suspect the effort would have been seriously diminished.

Secondly, as the population of China increased rapidly, it soon faced one of the greatest obstacles to human progress. The huge cities and crowded countryside of the Sung produced a huge amount of human waste – excrement. This polluted the water supplies. The danger of dysentery and later cholera and typhoid increased. Infants are likely to die soon after birth, adults to be constantly sick. What can people do to avoid this almost certain disaster?

In China there was no obvious alternative to drinking polluted water. Milk is equally dangerous before Pasteurisation and in any case there were not enough milking animals to supply the population with their main drink. Beers or wines use too much of the grain crop to be the staple drink to provide an average of 2-3 pints of liquid a day per person.

By one of the great accidents of history, it was discovered that by infusing an easily grown leaf in boiling water it was possible to make a very cheap drink which could safely (and pleasurably) be drunk all the time. If the leaf itself could not be obtained, then just boiled water would have to be used instead.

It was the safest of all drinks for two reasons. Firstly there is the obvious fact that the boiling of the water killed many bacteria. If the boiled water was drunk straight away, having been boiled for at least five minutes, and the cup was fairly sterile, it would be safe. But more surprisingly, there was another protection.

In the early Chinese books tea is described as a medicine, like ginseng. It is said to have a bitter taste which reveals something which is good for many diseases, among them 'drinking water sickness'. It was believed to have some kind of anti-septic content.

When we read this, it gave us the clue we needed. We followed the chain from the water-borne diseases through drink and discovered that of the many chemicals in tea, the most abundant is what is called 'tea tannin', which is another term for what is technically called 'phenolics'. Phenolics are one of the most powerful antiseptics known to man. They were the basis of the carbolic disinfectants which were used in the nineteenth century to revolutionize the cleanliness of hospitals.

When the microscope developed in the late nineteenth century and bacteria were discovered, it became possible to test the effects of tea. Experiments showed that typhoid, dysentery and cholera bacilli were all destroyed when put into a solution of *cold* tea. It was not the boiling that killed them, but something in the tea. So when people drink tea they do not just drink sterilized water, but a substance what cleans out the mouth and the stomach.

So what the Chinese had discovered was an enormously powerful medicine, which they were also the first to note was effective in diminishing the likelihood of many other diseases of the brain, heart and body.

How tea led to China's miseries.

Tea also brought some terrible disasters to China. The first of these was something which we do not include in our book since the evidence is as yet thin. But we will explain the idea here in case any readers can supply further evidence to confirm or refute the connection.

Tibet early on became one of the great tea drinking nations of the world, relying largely on exports from China. The Tibetans in the past or today could have had their high level of civilization without tea. Likewise tea was a stimulant and energy-giver on the silk roads. What interests us, however, is the possible effect tea may have had on other great pastoral nomadic groups on China's borders, especially the Mongols and Manchus.

If tea early on became a significant export to the Mongols and later the Manchus this could have had tremendous consequences. Tea, among other things, is a significant source of vitamin C. In its green form, a cup of tea has more of that

vitamin than a cup of orange juice. In its brown form it has an enzyme which greatly helps to increase the vitamin C value of green vegetables. Hence it was early noticed to be effective against scurvy. In the vegetable scarce areas of the steppes, this was probably very important.

Likewise the energy which tea gives, especially in cold climates through the caffeine, plus the protection it offers against various diseases, especially water-borne ones, are all significant.

Can this growth in tea consumption be one of the factors behind the previously largely unexplained growth in the power of the Mongols in the twelfth century? Certainly, we gather from an exhibition we saw in Beijing, tea was widely consumed in some of the newly excavated border states. Certainly Chinese advisors discussed at an early period the possibility of punishing the Mongols by cutting off their brick tea.

If this guess turns out to be true, then the conquest of China by Genghis and Kubla Khan and the establishment of the Yuan Dynasty may have been connected to tea. Later the Manchu invasions and establishment of the Qing, may be equally unimaginable without the leaves of this little bush. All this is open to further research.

The later calamity.

There is no doubt about the next huge blow that tea gave to China. This came in two parts. The first was in the early nineteenth century. The British had become addicted to tea in the middle of the eighteenth century. The wealth of the East India Company was largely based on importing tea. Huge fortunes were made and it is arguable that the British take-over of India and its victory over the French was dependent on tea fortunes.

There was a large problem for the British, however. How was this British addiction to be paid for? All attempts to transfer tea production to an area which the British controlled failed until the 1840's. So for the crucial period 1780-1840 as Britain went through the first industrial revolution in history and set up the largest Empire that the world has ever known, the British were dependent on Chinese tea.

At first the tea had been paid for with silver, but as the quantities of imported tea rapidly increased the amount of silver needed increased also. The fact that the Mexican silver mines were cut off from the British by the American secession in 1776, the devaluation of silver, and the Chinese feeling that they had enough silver made this currency no longer effective. What else could the Chinese be induced to exchange for tea? It seemed appropriate to try a hard drug – opium – in exchange for a soft one, tea.

So began the opium story. The three-way trade, opium from India to China, Chinese tea to Britain (and some silver as well starting to flow back), silver to India to pay for the opium. And the tragic sequel, the Chinese attempts to shut down the trade, the Opium War of 1839-42 and the huge reparations and treaty ports forced on China are well known. The destruction of the unchallengeable superiority of China was the start of the erosion of the Qing Empire. Tea and opium had together conspired to show its hollowness.

The second disastrous effect was later in the century. The British were intent on obtaining the profits of tea for themselves. So they developed tea plantations in Assam and then Ceylon. By the 1880's they had undercut the Chinese markets through the use of machinery and cheap transport. In 1897 in Amoy it was reported that 25 years earlier 65,800 piculs (some four million kg.) of tea were exported from this area alone. In 1897 only 12 piculs or 720 kg were exported. Four years later there was no tea being exported from Hankow (Wuhan). The great tea trade had totally collapsed. This sudden change was another source of that Chinese weakness which was the background to the tragedies of the twentieth century.

Other effects.

We have spoken of two of tea's great attractions – strength and health. But it has had a third feature which has had nearly as great an effect as these. This is related to the fact that tea is a very ceremonial drink.

Most drinks are consumed very simply, poured into a cup or glass and then down the throat. With tea there is an art in the infusing of the leaves which the host or hostess can perform and there is a period in the brewing and pouring which is long enough for an elaboration of ceremonial.

So around the consumption of tea has grown some of the most elaborate of social ceremonials which humans perform. These are the famous Chinese and Japanese tea ceremonies and the English afternoon tea party. The effects of the elaborate preparing and giving of hospitality have been widespread. Tea consumption and Buddhism were closely linked in China.

Furthermore, the particular artefacts associated with tea became very important. Among them was the massively important development in ceramics in China. Tea also influenced architecture through the simplicity of the tea house and garden.

Conclusion

More tea is consumed by humans than any other substance except air and water. Two thirds of the people on earth take almost all of their liquid intake flavoured by a leaf containing over five hundred chemicals, most of which we do not understand. This has changed history and, above all, Chinese history. Tea and China are more or less synonymous. We very much hope that a Chinese audience will enjoy reading about the global impact of a small plant which has shaped not only China, but, spreading out has also shaped Japan, Britain and much of the world.

Further information:

If you would like to see video films of how tea is grown, prepared for use, sold and drunk and its impact on health and wealth, please explore the website at www.alanmacfarlane.com. There you will also find further writings on tea which will add to the information in this book.

