

## Remarkable reading

You may recollect that Sherlock Holmes once remarked to his colleague Dr Watson: "Let me recommend this book — one of the most remarkable ever penned. It is Winwood Reade's 'Martyrdom of man'." I recently was tempted to take another look at that same book, which is a vast overview of the various phases through which human culture has passed, and I have to admit that Holmes had a point. One section that I found particularly engrossing was Reade's description of the ancient Phoenicians.

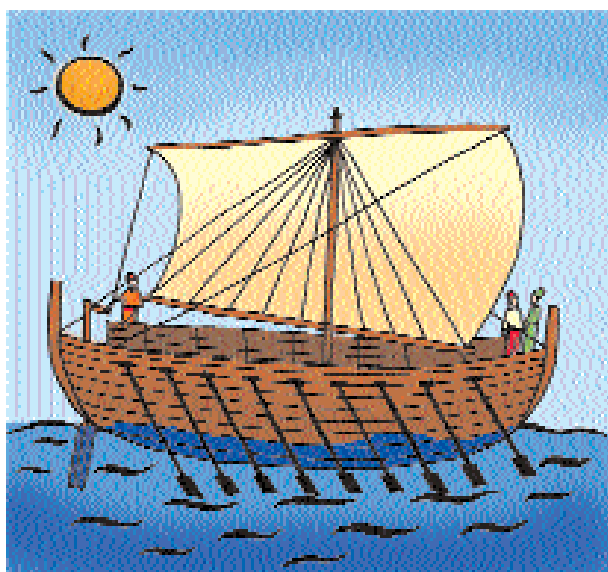
Phoenicia, I suspect, has been rather neglected in the selection of historical studies in schools, but it has a strangely modern aspect that links it strongly to our own times. The Phoenicians, or as they were called in antiquity *Phoenikes* or *Poeni*, were a Semitic race inhabiting the narrow coastal strip of the Levant. They earned their name, it is said, either from their copper-coloured complexion or their expertise in preparing purple dyes from shellfish. Their established cities were Tyre, Sidon and Byblos, which have been traced back to the third millennium BC, and they later set up an important settlement at Carthage, which occupies a powerful situation in the ancient world of trade and conquest.

The unique characteristic of the Phoenicians was their entrepreneurial activity, remarkably similar to that which we are now struggling to contain in our tricky economic globalisation. Tyre and Sidon were mainly concerned with the murex dye industry, which had close connection with the textiles of flax, cotton and wool produced in the same cities. Other crafts included metalworking of jewellery and trinkets, glass-making, wood carving and stone carving. Agriculture and husbandry were also carried on. Ivory was worked in Carthage. But the great genius of Phoenicia lay in trading and the shipbuilding that this involved. The Phoenicians were almost crazy about maritime trading, and did not limit their activity to local seaports.

Phoenician seamen were preceded only by the Minoans, who were active about 3000BC. When Carthage was established as a colony in 814BC, and continuing until 146BC, it became the centre for expeditions and sailing training. The Persians had come to dominate the homeland, and impeded as they became to the east, the seamen turned

their attention to the western horizon. They sailed through the Straits of Gibraltar and northward along the coasts of Spain and France to the British Isles, from which they derived a rich booty of tin and copper, used in the manufacture of bronze. They may even have reached the Azores on some of their expeditions.

It is curious that, by contrast with most of their neighbours, the Phoenicians preferred to be sailors rather than soldiers. Their enthusiasm worried the Romans, and Cato in the second century BC declared "*Delenda est Carthago*" meaning that "Carthage must be destroyed" because it was a rising menace. This has a modern ring.



William Winwood Reade himself was a great traveller, mainly in Africa, but he turned at one time to medicine and studied for three years at St Mary's Hospital in London. He wrote a series of books, mostly dealing with mystery religions, and was severely criticised and even accused of blasphemy. Yet for a man who died at the early age of 36 he had a remarkable career.

In the preface to his 'Martyrdom' (1872) he wrote: "My conscience is my adviser, my audience and my judge. It bade me write as I have written, without evasion, without disguise; it bids me to go on as I have begun, whatever the result may be. . . . One thing at all events I know — that it has done me good to write this book, and therefore I do not think that it can injure those by whom it will be read."

If there were more of such spirit in the world it would be a better place.

## Beginning and end

*Men fear death as children fear to go in the dark. . . . It is as natural to die as to be born; and to a little infant, perhaps, the one is as painful as the other.* — Francis Bacon: Essays, 1625.

## The walking dead

Students of anthropology have long been fascinated by the strange religious observances known as voodoo and the associated phenomenon of placing individuals in a deep trance which renders them to all intents and purposes devoid of life and sensation but capable of being aroused to a completely different level of being.

Voodoo arrived in the West Indies, and Haiti in particular, with African slaves in the second half of the 17th century. The word "voodoo" in the Fon group of languages denotes a god, spirit or sacred object. And "zombi" denotes a person from whom a sorcerer has extracted the soul with the aim of reducing him or her to unquestioning slavery. Zombies are reputedly recognised by their fixed staring expression, nasal intonation, repeated, clumsy and purposeless actions and limited repetitive speech. No single explanation covers all forms of zombism. One possibility is mistaken identification of a wandering mentally disturbed stranger by bereaved relatives. In Haiti, it is not uncommon to come across chronic schizophrenics, or people with a severe learning difficulty, who might be labelled as zombies.

An interesting feature is that certain drugs have been used traditionally to induce the zombi state, something which the slave owners of old could use to subjugate their workers. Zombification ingredients mentioned by Haitian practitioners include human remains, polychaete worms, toads, lizards and tarantulas. Among the potent substances involved have been neurotoxins, such as tetrodotoxin from puffer-fishes, and alkaloids from *Datura stramonium*.

In the November 2002 issue of *Chemistry in Britain*, Luigi Garlaschelli has discussed the possible role of tetrodotoxin in zombification. Samples of "zombi powder" obtained from witch doctors in Haiti have not been greatly informative. Tetrodotoxin, known in Japan as fugu, causes progressive limb paralysis without loss of consciousness, but although fugu is frequently consumed in Japan there have been no reported cases of zombies. Administration of the mystery zombi powder to rats and monkeys has paralysed the animals while still permitting central nervous and cardiac function. But in other experiments, the mystery powder when fed to rats, rubbed into their skin, or injected intraperitoneally, has produced no effect. Thus, it cannot reasonably be maintained that tetrodotoxin is the active principle in the zombi powder.

Zombification, therefore, may not simply be a pharmacological phenomenon but far more complex, having its roots in superstition, folklore, cults of magic and sheer misinterpretation. Reported cases of apparent death followed by resuscitation may have a basis in fact, but the explanation is unlikely to embody a precise pharmacological activity of a drug combination.