

THE HEALING SERPENT — THE SNAKE IN MEDICAL ICONOGRAPHY

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*The world's great age begins anew
The golden year's return
The earth does like a snake renew
Her winter weeds outworn.*

When Shelley invoked the snake symbolically in this fashion he was hardly doing anything new. The snake's association with death, rebirth and the cycle of nature is practically universal. For the ancient Egyptians the snake was the life of the earth, and there are texts from as early as 2300 B.C. referring to the Quroborus or tail eating serpent, the symbol of the cyclical nature of the cosmos. In Egyptian medicine we clearly find the snake's most important attribute – its dualistic nature – the snake that kills is the snake that cures. The Egyptian snake Goddess *Meresger* could inflict disease on those who offended her yet was invoked to protect against snake bites. Snake amulets in turn could protect against disease. In the very ancient papyrus Ebers the fat of the black snake is found as a part of the *materia medica*.

The Asklepiian symbol of the entwined rod and serpent does not, as far as I know, occur in Egypt before the Alexandrian period. However, it does in Mesopotamia. The libation cup of King Gudea of Lagash, made of steatite and dating from about 2000 B.C., shows the great serpent god Ningishizda as two snakes coiled round an axial rod. The epic Gilgamesh indicates its significance. Gilgamesh, an early legendary ruler of Uruk dived to the bottom of the primeval sea in search of the herb that bestowed eternal life. On his return he stopped to bathe. Meanwhile a cunning serpent stole the herb and, by casting off its skin, came into possession of eternal life. Man on the other hand was condemned to sickness and death. From then on the serpent was invoked as protector against disease. The myth of rejuvenation and its symbolic association with the snake's ability to shed its skin was almost ubiquitous in the ancient world.

In ancient Greece the serpent appears in multiple roles, nearly always associated with divinity and symbolizing fertility and death. Examples easily come to mind: Medusa the snake-haired gorgon, the serpent that guards the golden apples of Hesperides, the Apollonian python, the death of Laocoon and the struggles of the infant Hercules. In the mysteries of Dionysus the women ran frenzied through the streets with snakes in their hair, and perhaps most important, the snake was an attribute of the earth, personified in Demeter, the earth-mother.

The most famous Greek healing snake is, of course, the one associated with Asklepios the God of Medicine. Around 500 B.C. he was a little known Thessalonian deity; by 400 B.C. he had become the pan-Hellenic God of Healing. The first mention of Asklepios is in the *Iliad*, he is mortal, a local chieftain; Homer calls him 'blameless physician'. He has two sons, Machaon who cures the Greeks of their wounds and later becomes the father of surgery, and Podalarius who becomes the patron of dietary medicine.

How this obscure character became deified and later universally acclaimed the god of medicine is a source of some contention. Whatever the reason, by the fifth century, shrines dedicated to him appear all over Greece. The most famous at Epidaurus. Fortunately there is a superb account of the buildings and ritual of Epidaurus; for Pausanias visited it in the second century A.D. when it was still flourishing. At the centre was the temple in which stood a statue of the god in ivory and gold made by Thrasymedes. There is still a ramp visible at the site of the temple for the bed-ridden to be wheeled in. The temple was surrounded by other buildings, gymnasia, baths and a stadium, and most important of all the abaton or incubation hall.

The temples of Asklepios were essentially sites of miraculous healing. The sick, if they were fortunate, were visited in dreams by the divine physician, often as a serpent, and either immediately cured or instructed how to receive a cure. In cases of successful cure, and there were many recorded, grateful patients left votive offerings, many of which represented their diseases. Incubation, or temple sleep, was not original to the Greeks, they probably imported it from Egypt. It was certainly practised in Mesopotamia, for when Alexander the Great fell sick at Babylon his generals slept for him in the temple of Marduk. Dreams were closely associated with the earth or chthonic deities and consequently were associated with healing, for it is the earth which produces curative herbs.

There are other important centres at Athens, Cos, the home of Hippocrates, Eleusis, and Pergamon the birthplace of Galen. Galen, the most rational of physicians, tells us how he himself was cured by a visitation. He talks of

'The ancestral God Asklepios, of who I declare myself to be a servant since he saved me when I had the deadly condition of abscess.'

Rational and religious cures were quite at home together in the Greek world.

In 295 B.C. Asklepios came to Rome from Epidaurus after the Roman citizens sought his aid during the visitation of a devastating plague. He came in the form of a serpent and rested at the Tiber island where an Asclepion was built. The rod and serpent are still visible. Asklepios became one of the most revered of Roman deities and for a while was an important rival to Christianity.

It is of course the serpent which is his constant companion and indeed can stand in place of him. The snake is almost certainly identifiable as *Elaphe longissima*. Besides its association with divinity the snake appears in Classical medicine in a much more material fashion. In the Hippocratic corpus snake in

wine, taken orally, is recommended for retained placenta, serpent grease is incorporated in a pessary for infertility and viper's broth is recommended for skin disease. Celsus, the Latin writer, prescribes snake for scrophula, and Dioscorides, the compiler of the greatest pharmacopoeia of antiquity, recommends serpents for quick eyesight and grief of nerves.

The most renowned snake therapy of the Ancient World was the substance known as theriac. Before pursuing this, however, it is necessary to turn to the most famous snake of all, the serpent in the Garden. Fortunately, there is no need to pursue the complex iconology surrounding this event except to note that it presents the dark side of the serpent. With the expulsion of Adam and Eve from the Garden came disease and death. But this was not the last appearance of the snake in the Bible and the next time it appears in its healing role. When the Israelites were wandering in the desert complaining of their miserable food God visited fiery serpents upon them and many died. When the people repented, at the Lord's command Moses set up a serpent of brass on a pole. Those who had been bitten looked on the serpent and were healed. In the Middle Ages the brazen serpent became a powerful symbol of healing and during severe epidemics of plague Thalers were struck depicting the serpent.

The brazen serpent was, of course, a prefiguration of the crucifixion and in this sense Christ and the healing serpent are one. As Augustine says 'What is the serpent lifted up? The death of the Lord on the cross'. Christ was, of course, the divine healer and his identification with the serpent was frequently made. The Ophites, the early Christian heretical sect, worshipped Christ in the form of a snake.

At this point it is possible to turn back to the panacea of the ancient world – theriac. Mithridates the VI, who came to the throne of Pontus in 111 B.C., lived in constant fear of being poisoned. To thwart any such attempt he concocted an antidote; so effective was this, however, that when he finally desired death by suicide he had to ask his servant to slay him, self-poisoning being of no avail. The antidote or mithridate came into the hands of Nero whose court physician Andromachus improved on the fifty-four existing ingredients and arrived at a new total of seventy-four. The remedy was extolled by Galen, which was perhaps sufficient to ensure its subsequent success. It became one of the most sought after drugs in Medieval and Renaissance Europe. For various commercial and geographical reasons Venice became the centre of the theriac trade and indeed they ran their own serpent farms, breeding the particular species of viper required. Serpents are frequently found figured on theriac jars. The remedy had a long life but gradually came under fire in the late seventeenth and eighteenth century during the revolt from Galenism and polypharmacy.

More significant, however, is that theriac, the panacea, became a symbol of the supreme remedy, Christ himself. Schouten (1967) describes a small panel by Van-Eyck dated 1442. It shows St. Jerome in his study; in the corner is a theriac jar with an apple on the lid. The meaning is clear. The apple in Christian art symbolises the fall, brought about by the serpent. Theriac, the serpent's flesh, the symbol of Christ the healer, represents redemption. The dualistic nature of

the serpent could hardly be more apparent. It was the fall initiated by the snake that brought disease into the world. Grunewald's picture of the trespassing lovers covered with snakes brings out all too clearly the motifs of the serpent, the fall, sin, disease, and punishment.

If then Christ became the healer for the Middle Ages and Renaissance, what became of the healing God Asklepios? The cult of Asklepios reached its zenith in the second century A.D. and presented a serious contender to Christianity, for in one aspect at least, Asklepios presented the same message as Christ. The God came under heavy fire in the patristic literature and, though temporarily revived by Julian the Apostate, he eventually went underground. Many pagan gods never truly disappeared but were subsumed under Christian saints in the same way that amulets and talismen lived on as saintly relics possessing healing power. Asklepios was certainly subsumed in part under Christ himself though he was also strongly linked to the two Christian patron saints of medicine, Cosmas and Damian. In many accounts these saints were reported to heal the sick by appearing to them in their dreams. The connection with Asklepiian incubation is clear. Perhaps the most famous miracle is the one frequently depicted in which the two saintly physicians exchange the healthy leg of a dead Moor for the diseased leg of a priest.

If Asklepios assumed another form during the Middle Ages, the snake retained all its pristine healing power and this was transmitted through scholastic and popular culture. For instance Avicenna the Arabic physician whose *Canon* was the major medical text of the Middle Ages, recommended snake for leprosy. Snake remedies were ubiquitous in the orthodox medicine of the Middle Ages. In the Renaissance snake preparations were much sought after as promoters of rejuvenation and beauty treatments.

Not only did snakes heal, they still retained their malevolent power. Topsell in his *Historie of Serpents* of 1608 records that in mid-sixteenth century Hungary 'many serpents and lizards bred in the bodies of men' and caused about 3,000 deaths. With the birth of the new experimental science in the seventeenth century, the serpent lost none of its healing power. Its traditional qualities were soon redescribed in the new language of chemistry. Charas (1673) subjected the viper to innumerable experimental investigations and concluded they were valuable remedies for itch, erysipelas, measles, smallpox, leprosy and were a valuable adjunct to the production of a beautiful skin.

His most interesting section is that on theriac. The initial remarks are sceptical of that famous remedy, not however that he doubts the wondrous efficacy of viper, it is because he considers that in preparation the essential salts were lost. A careful method was necessary to produce the quintessential volatile salt. The snake's healing power had survived revolutions of theory before and it was not to be eclipsed by something so trivial as experimental investigation. The snake was more than just an ingredient of medicine however, it has always been a powerful symbol of healing itself.

At the time of the Roman Empire there was a central Italian tribe known as the Marsians, famous for their knowledge of snakes. Galen himself tells us how he ventured into the hills to learn from them. Their tradition still lives on at Cocullo in the Abruzzi mountains. Here the shrine of the tenth century Saint Domenico of Foligno, famous for its healing cures, has an annual serpent festival on the first Thursday in May. The term Marsians in the Ancient World came to mean anyone with power to handle snakes for as Firmicus, the fourth century astronomer says:

‘In the first degrees of Capricorn rises the snake handler. Those born when this constellation runs will be Marsians who charm poisonous snakes by sleeping spells or charmed herbs’.

The constellation Ophiucus or the serpent-handler was also called Asklepios in the Ancient and the Medieval world. Snake-handlers then were more than just charmers and sellers of poisons and antidotes, they were also the public vendors of drugs and remedies. The handler of snakes in the market place was the quack, the mountebank and the medicine seller. An illustration in a fifteenth century manuscript, *The Dresden Galen*, shows an itinerant medicine vendor at work, with his accompanying snakes.

The association did not only exist in the popular arena, for the symbolism was the same in high renaissance culture. When Duke Federigo Gonzaga of Mantua decorated the Palazzo del Te with astrological symbols, he chose to illustrate the quotation from Firmicus in the same manner. The tradition did not die with the birth of the modern world. There are engravings from the nineteenth century showing quacks with snakes as their symbol.

I have discussed so far the single snake of Asklepios as the symbol of medicine. But also familiar is the double snake as the symbol of healing. This is the caduceus of Mercury. Hermes was the messenger of the gods and the guide of departed souls. In antiquity the caduceus was the symbol of the messenger and it ensured him unmolested passage. I know of one possible example of its association with medicine in antiquity, that described by Hast (1972). This is an oculists stamp from the third century A.D. On the top surface are said to be four lightly scratched caducei joined at the centre to form a cross. The origin of this lone association is a mystery but it may arise from the fact that Homer describes the caduceus as being able to charm the eyes of men.

The next time the caduceus is found as a symbol of medicine is in the sixteenth century. In England the caduceus was used by Sir William Butts, physician to Henry VIII and by John Caius who presented the Royal College of Physicians with a caduceus in 1556. In the Philadelphia Museum is a picture described as a portrait of an elderly physician, a copy after an original of 1500-1510. He is shown holding a caduceus (Szancer and Szancer 1971). If this is so it is the earliest post-classical example existing. However, it is possible that the man has been identified as a physician because he is holding a caduceus, he could equally well be a hermetic philosopher.

It is hard to fault Schouten's explanation for the association in the Renaissance of the caduceus and medicine. The transfer was almost certainly made by way of alchemy. The Egyptian God Thoth, the giver of wisdom, was identified by the Greeks with Hermes. In the first centuries after Christ a large alchemical and astrological literature developed under the name of Hermes Trimegistus. The Renaissance accepted Hermes as a real person of great antiquity and the source of profound knowledge. One of the texts in the Hermetic corpus is known as the *Asklepios* and the knowledge in it is imparted by Hermes to Asklepios as master to pupil. Renaissance philosophers knew their symbols and it is hardly likely they confused the caduceus and the rod and staff of Asklepios. Rather the caduceus of Mercury the symbol of transmuting power, was adopted by the physicians who practised alchemy. Whatever the true reason the caduceus soon became a medical symbol. It can be found on the frontispiece of medical texts, pharmacopoeias, perhaps in its most famous form as the official insignia of the U.S. Army Medical Department.

I have briefly reviewed a mere fraction of the many manifestations in medicine of this remarkable beast and have confined myself largely to European culture, neither have I made mention of the snake's association with medicine in primitive societies. I want, however, to finish with an example from current anthropology for it permits me to speculate a little on what is clearly the recurrent feature of serpent symbolism — its dualistic character — the rich imagery of health and disease, life and death always associated with it.

Animals, it has been suggested, are a primordial metaphor through which men came to define their own humanity. In all cosmologies there is an explicit assumption of order in the universe. It is this after all that allows man to demarcate himself from animals. In primitive cosmologies the classification of animals parallels the divisions of society. Among the Nuer people, animals, like men are organized on the lines of descent groups. Among the Benin peoples animals are classified by the domains they occupy, and this in turn is an invocation of the natural order to sanction the maintenance of social station. There are animals of the sky, land, day and night, just as there are kings, warriors and magicians. Each knows his place.

There are some animals, however, that nearly always fall in the cracks, for they are neither one thing nor the other. It is always at the boundary lines too, that there exist the greatest dangers and the most powerful natural forces. These are the areas of greatest avoidance and ritual (witness the forces, now but a parody, that are unleashed at the transitional time of Halloween). For the unwary they are fatal areas. Yet in all societies certain individuals can master and control these forces and use them for good or evil. The animals which dwell at these interstitial areas are likely to be powerful symbols of the most profound natural forces. By its very nature the snake is an animal that is potentially anomalous in any classification system. It is, after all, a creature that lives on land yet has no legs, that swims in the water yet has no fins, that dwells in trees but has no wings. It is an abomination, in the categories of Leviticus, 'a swarming thing'. Among the Benin peoples the snake holds such an anomalous position. In Benin society only two categories of people can harness the most powerful

natural forces there are, the witch and the divine healer. Like the snake in nature, these individuals in society fall outside the normal social groupings. The one however, can control the boundary forces for the production of evil, the inflicting of disease, the other for good, for healing. I use the example of the Benin for one symbol of the medicine man is his staff and on it is entwined the most powerful and dangerous of all animals, the snake (Ben-Amos 1976).

The association of the snake and medicine, with the life and death, good and evil is thus no accident. It stands as a natural symbol of the most powerful forces in the cosmos. For us who live in a universe where animals are classified by evolutionary descent the snake no longer holds this ambiguous position, the symbol has become a badge. There is no reason, though, why we should not recast its old meaning in modern terms, for we are all very much aware that medicine today stands guard over some of the most powerful forces ever discovered by men and these too have the capacity for evil as well as good.

REFERENCES

1. BEN-AMOS, P., "Men and animals in Benin art". *Man*, 1976, **11**, 241-252.
2. CHARAS, M., *New Experiments on vipers*, 1675. London: J. Martyn.
3. HART, G. D., "The earliest medical use of the caduceus", *Canadian Medical Journal*, 1972, pp. 107, 1107-10.
4. SCHOUTEN, J., *The rod and the symbol of Asklepios*, 1967. Amsterdam: Elsevier Publishing Company.
5. SZANCER, E. A. and SZANCER, H., "An early example of the caduceus as a medical symbol". *Episteme*, 1971, pp. 285-288.
6. TOPSELL, E., *The historie of serpents*, 1608. London: William Taggard.