

KA

**A Handbook of Mythology,
Sacred Practices, Electrical
Phenomena, and their
Linguistic Connections in
the Ancient Mediterranean
World**

by
H. Crosthwaite

with an Introduction by
Alfred de Grazia

Metron Publications
Princeton, New Jersey, U.S.A.

Notes on the printed version of this book:

ISBN: 0-940268-25-9

Copyright 1992 by Hugh Crosthwaite

All rights reserved

Printed in the U.S.A. by Princeton

University Printing Services.

Composed at Metron Publications.

Published by METRON PUBLICATIONS,

P.O.BOX 1213, PRINCETON, N.J. 08542, U.S.A.

for Shirley,

".....the sweetest flower of all the field,"

and for Susan

INTRODUCTION

SOME years ago, at my suggestion, Hugh Crosthwaite commenced this major work. Its first pages appeared in the mails as parts of personal letters. He called them notes. They were notes, yes, but like the "toying at the piano keys" of a maestro, they possessed authenticity, reflected a great repertoire, and hit upon original meanings in every direction a tone was struck. The notes began to modulate into cultures and tongues other than the classic Greek as the research continued.

I should be remembered, perhaps, for not having said to him, "Please cease to send me your notes and compose instead a proper monograph: thesis, proof, *basta*." Rather, as the messages kept coming, I redefined for myself, and I hope for hundreds of readers to come, the relation of form to value. The author carries, among other traits characteristic of English scholarship at its best, the famed stubborn empiricism that has so often been the despair of theorists and philosophers such as myself. The work is bound to factuality.

He loosens the reins in only two regards, both at my behest: the grouping of his facts in respect to electrical phenomena, and the testing of words and behavior according to whether they relate to divine behavior in the sky. In the end, this work by Crosthwaite, which we may call a Handbook, took on its own form. It is a dismemberment and reconstruction of Greek and associated myth such as has not occurred hitherto. Its hundreds of sketches and etymologies are grouped to follow a theme: *the electric fire and destructive behavior of the sky gods, as these exhibit themselves in the language, rituals, myths, and behavior of the ancient Mediterranean peoples.*

A surprising form of "Handbook" emerges, which renders too limited the very designation. For it appears that a major portion of the Greek language (and probably all others) derives from

human readings of divine sky behavior, and transfers itself into the necessary language that guides mundane social life and thought. From far away China, the *I Ching* echoes this idea: "Heaven produced the mysterious things, and the sages modelled themselves on them...Heaven hangs out its symbols, from which are seen good fortune and misfortune, and the sages made symbols of them." (Sec.1, Ch.11)

Furthermore, this same "divinely inspired" language, along with the rites and practices associated with it, does not consist of independent etymologically-unique, tribally evolved vocabularies and perspectives. Rather, there appears to have been, among many ancient peoples, an ecumenical language of sacred, electrical, pyrotechnical ritual behavior.

Apparently, what had been happening, not long before the time our evidence comes into being, was similar to the development of modern language of the age of electronics and space-age technology, whereby Latinized English becomes a world-wide language among practitioners of the associated arts and sciences. Moreover, it was a language everywhere of fire, god's fire, electric fire or the closest simulations thereof.

The reader may express surprise and disbelief at the multiplicity of words concentrated in these areas: I would advise him of two considerations. First, a language can be composed of and reduced finally to a handful of syllables (with varying accents, intonations, and syntax), a score of them providing thousands (conceivably ~ 2 raised to the 20th power) of different words. Second, if the primal experiences of speechifying humans occur in conjunction with preoccupying celestial visions and effects tied to them, the corresponding preoccupation of a language, no matter how banal life will ultimately become and filled with ordinary trivial objects, can well be with these original syllables from which the language subsequently descends.

I have been continuously astonished at Crosthwaite's indefatigable and creative energy, not to mention the boldness with which he has attacked an immense set of challenges. The

results make an important contribution to the study of linguistic origins and diffusion. The linguistic connections evidenced, as well as the sacral outlook and practices tied to them, are so close as to bring into question several dearly held beliefs regarding ancient chronology and the relative antiquity of the Mediterranean civilizations.

It begins to appear as if all that was contained in the minds, speech and practice of the ancients took place in the same skies and in everyone's sight at the same time. Greece, Italy, Illyria, Anatolia, Palestine, Egypt, Mesopotamia, the Danube Basin: indeed all are implicated.

Many pages of the present work suggest such a theory. A reading of the chapter on "Ka" will let one understand what is meant here. It will explain, too, why the short title of "Ka" is given the book: this favorite Egyptian monosyllable penetrates Greek and other languages as well; it testifies, not so much on behalf of Egyptian chronological precedence, as for an ecumenical, possibly even hologenetic development of religious and thence all language of the ancient world.

Alfred de Grazia
Princeton, New Jersey

TABLE OF CONTENTS

Preface

CHAPTERS:

- I. AUGURY
- II. THE ELECTRIC ORACLES
- III. DIONYSUS
- IV. AMBER, ARK, AND EL
- V. DEITIES OF DELPHI
- VI. SKY LINKS
- VII. SACRIFICE
- VIII. SKY AND STAGE
- IX. TRIPOD CAULDRONS
- X. THE EVIDENCE FROM PLUTARCH
- XI. THE PRESOCRATIC PHILOSOPHERS
- XII. MYSTERY RELIGIONS
- XIII. 'KA', AND EGYPTIAN MAGIC
- XIV. BOLTS FROM THE BLUE
- XV. LOOKING LIKE A GOD
- XVI. HERAKLES AND HEROES
- XVII. BYWAYS OF ELECTRICITY
- XVIII. ROME AND THE ETRUSCANS
- XIX. THE TIMAEUS
- XX. SANCTIFICATION AND RESURRECTION
- XXI. THE DEATH OF KINGS
- XXI. LIVING WITH ELECTRICITY

APPENDIX A

APPENDIX B: READING BACKWARDS

GLOSSARY

NOTES

PREFACE

THIS book, written for readers who are enthusiastic students of linguistics, of the classics, and of ancient history, results from an effort to detect and collect instances of a certain common factor in the history of the ancient Mediterranean world.

Casting my net as far and as wide as I could, I have assembled a body of myth and behaviour in Greece, Italy, Palestine and elsewhere, that reveals a universal concern over electricity, communicated among all the ancient peoples, and distinguishable in their language, myths, and behaviour.

Because of the wide-ranging nature of the inquiry, which demands an interdisciplinary approach, I have perhaps made more than the usual number of errors. I have also found it difficult to be consistent in the matter of transliteration.

Translations and paraphrases are mostly my own; where not, I have tried consistently to make acknowledgments to the author.

My chief sources are the ancient authors themselves, many of them available in the Oxford Classical Texts, and Loeb Classical Library. For the non-specialist reader, the Penguin Classics translations cover most of the ground.

I am greatly indebted to Prof. Alfred de Grazia. As a result of reading his *'God's Fire'*, I decided to expand an article I had written into this larger work which owes much to his and Mrs. de Grazia's help and hospitality.

I could not have written this book without the constant support, interest, and inspiration of my wife Shirley. She made valuable suggestions and helped in many ways, in company with our daughter Susan, who performed the arduous task of deciphering and typing my manuscript.

My thanks also go to Mr. David Brailsford for his help in making copies, and to the staff of Metron Publications and Mr. Fred Plank of Princeton University Printing Services.

H. Crosthwaite



Three map sketches to help recollect some of the principal *loci operandi* of the Handbook -- Greece, Italy, the ancient Mediterranean region.

(Click on the picture to get an enlarged view. *Caution: Image files are large.*)

CHAPTER ONE

AUGURY

READERS and students of the literature and histories of the ancient Greeks and Romans are faced immediately with a paradox. The people who did so much to develop rational thought in so many areas of life devoted much time and energy to studies, practices and beliefs which, in the eyes of many educated people today, are irrational and valueless, except in so far as a vivid imagination can be thought helpful for the smooth working of the psyche. I refer to the stories about the origin and deeds of the Olympian gods, the practice of pouring wine and other liquids on the earth (libations) as offerings to powers under the earth, the grotesque business of ceremonially slaughtering animals, especially bulls, goats, stags, pigs and sheep, tinkering with blood and entrails, the attempt to divine the future by consulting specialist prophets, the Pythia or Sibyl sitting on a tripod in an underground shrine, the Roman augurs, and so on. Nor were the ancient Greeks and Romans the only ones to hold such beliefs and indulge in such practices. Similar patterns of behaviour are found not only in the Mediterranean area, but world wide. In this short work I attempt an explanation of the apparent contradiction between the rational and irrational, and suggest that the Greeks and Romans were acting rationally according to their lights.

The will of the gods had to be ascertained before any important undertaking. The Greeks sent inquirers to Delphi and Dodona. The Romans and Etruscans relied heavily on the skill of augurs, who watched all animals, but especially birds, and lightning. In Greece, the eagle and vulture were associated with the supreme god Zeus, the crow with his wife and sister Hera, and the raven with the god of prophecy, Apollo.

The Roman *haruspex* and the Greek *hiereus* (priest) studied the entrails, especially the liver, of sacrificed animals. If the *caput*

iecoris, head of the liver, was missing, it was a bad sign, *dirum*, ill-omened. (In the *Elektra* of Euripides, Aigisthos is dismayed to find the liver incomplete; shortly afterwards he is killed). Greek divination was *di'empuron*, by fire, or *hieroskopia*, the study of entrails.

The Etruscans, Rome's neighbor to the north-west, were the recognised masters of the art of augury, and claimed that the birth of their art was at Tarquinia, where a boy, Tages, sprang up out of a ploughed field. Although a child, he had the wisdom of an old man [1].

The *fulguriator* at Rome specialised in the study of thunderbolts. There are frequent references to lightning and earthquakes in classical literature. Cicero, 1st century B.C., in his work on divination, writes that earthquakes have often given warning of disaster, and that the Etruscans have interpreted them [2]. Some of Rome's most important institutions were Etruscan in origin.

The general opinion in the ancient world was that Etruscans had come to Italy from the east. Cicero mentions the Lydian soothsayer of Etruscan race, "*Lydius haruspex Tyrrhenae gentis*." He mentions Etruscan books on divination, *haruspicini* (pertaining to entrails), *fulgurales* (about lightning), and *tonitruales* (about thunder) [3].

Ancient peoples considered that it was a king's duty both to be wise, *sapere*, and to foretell the future, *divinare* [4]. At Rome in early times the augurs met regularly on the Nones of the month [5]. The magistrate is spoken of as *auspicans*, taking the auspices, and the augur is *is qui in augurium adhibetur*, he who is called in for augury.

In his history of Rome, Livy, 1st century B.C., tells us that during the reign of Tullus Hostilius there was a report of a shower of stones on the Alban Mount [6]. This seemed so improbable that they sent men to the Mount to check on the *prodigium*. They were assailed by a heavy fall of stones like a

hailstorm. They thought they heard a voice from the grove (*lucus*) on the top (*cacumen*) of the hill, giving instructions about religious observances. A nine days festival, *novendiales*, was declared and became a regular festival whenever falls of stones occurred.

The augur set up a *tabernaculum*, tent, in the centre of his station, inside the *pomerium*, the sacred boundary of the city. He must not cross the pomerium before the completion of the ceremony. He carried a *lituus*, a staff without a knot. Cicero has left us a description of Romulus's *lituus*: "*Est incurvum et leviter a summo inflexum bacillum*"; it is a staff, curved and slightly bent at the top. It was kept by the *Salii*, a college of priests, in the *Curia Saliorum*, on the Palatine Hill. After the temple was burnt down, it was found unharmed. Under the king Tarquinius Priscus, Attus Navius made a *discriptio regionum* with this staff [7].

The augur wore the *trabea*, a state robe edged with purple. Such a garment was worn by kings, augurs, some priests, and knights. He had to stand on high ground, and a stone was needed. There are representations by Roman artists of the augur with his left foot on a boulder. On the *arx*, or citadel, at Rome, there was a stone, probably a meteorite, and it may appear in Livy's account of the procedure for finding whether the gods approved of the choice of Numa as successor to the throne on the death of Romulus (8th century B.C.).

"Inde ab augure, cui deinde honoris ergo publicum id perpetuumque sacerdotium fait, deductus in arcem in lapide ad meridiem versus consedit. Augur ad laevam eius capite velato sedem cepit, dextra manu baculum sine nodo aduncum tenens, quem litaum appellarunt. Inde ubi prospectu in urbem agrumque capto deos precatus regiones ab oriente ad occasum determinavit, dextras ad meridionem partes, laevas ad septentrionem esse dixit, signum contra, quoad longissime conspectum oculi ferebant, animo finivit; tum lituo in laevam manum translato dextra in caput Numae imposita precatus ita est: Iuppiter pater, si est fas hunc Numam Pompilium, cuius

ego caput teneo, regem Romae esse, uti tu signa nobis certa adclarissis inter eos fines, quos feci. Tum peregit verbis auspicia, quae mitti vellet; quibus missis declaratus rex Numa de templo descendit. [8]

Numa sat on a stone, facing south. The augur sat beside him, his head covered, *lituus* in right hand. He surveyed the city and countryside, prayed to the gods, and marked out the area from east to west, with south on his right, north on his left. He transferred the *lituus* to his left hand, put his right hand on Numa's head, and prayed to Jupiter for a sign. He recited the desired auspices, which were sent, and Numa then descended from the temple.

The augur marked out with movement of his *lituus* an area of the sky. The east-west division was called *Decumanus* (sc. *limes*), the north-south division *Cardo* (hinge). The *templum* from which Numa descended was originally the area corresponding to that which was cut off, and transferred to the ground. The *templum* corresponded to the Greek *temenos*, from *temno*, cut. Aeschylus, in his play *The Persians*, refers to the *temenos aitheros*, or temple of the sky, and the Roman poet Lucretius refers to "*coeli templa*" [9]. The survey of the city and fields may be referred to by Plautus: "Look carefully around you like an augur." [10] Words for the enclosure are *curt*, in Etruscan, *gorod*, in Slavonic, and *garth*, in English.

Before a solution to the problem of what the augur was really doing is possible, we need to consider some other words and their implications.

The cap worn by priests and augurs, especially by the flamen *Dialis* (the priest who attended the fire at the altar of Jupiter), was called an *apex*, after the name of the small rod on top, with a tuft of wool, the *apiculum*, wound round it. Such a white hat was also called an *albogalerus*. The connection with whiteness and light may also be seen in the word *Luceres*, the name of one of the original Roman tribes. The Etruscan word *lauchume* means a chieftain; it is related to the root *luk*, light.

Livy tells us that the young slave-boy Servius Tullius was seen asleep with fire round his head. This was taken by Tanaquil, the queen, as a sign that he would be the saviour of the royal household, even that he would be the king [11]. Plutarch writes that the same thing happened to the young Romulus. In Homer, *Iliad*: XVIII, flames are seen round the head of Achilles.

Livy tells a story of the augur Attus Navius. The king, Lucius Tarquinius, challenged him to say whether what he, the king, had in mind could be done. When Attus said yes, the king said that he was thinking of Attus cleaving a whetstone with a razor. "*Tum illum haud cunctanter discidissee cotem ferunt. Statua Atti capite velato, quo in loco res acta est, gradibus ipsis ad laevam curiae fuit...*" He did it, and they put up a statue of Attus, with his head covered. [12]

Cicero mentions a rather similar occurrence. Numerius Suffustius of Praeneste, acting on a dream, split open a flint rock. Oak lots with carvings in ancient letters emerged, "*sortes in robore insculptas priscarum litterarum notis.*" Honey is said to have flowed from an olive tree at the same place [13].

The authority of the augur was great. "Quae augur iniusta, nefasta vitiosa dire defnerit, irrita infectaque sunt." What the augur marks as unjust, impious, harmful or inauspicious, let it be invalid and of no effect [14].

The names of the augur Attus Navius probably mean father (*attus, at*), and prophet (*navi*). (*Navi* is a Semitic word).

Having begun with examples of Etrusco-Roman prophecy, let us go back in time to the establishment of the Greek oracles. Much valuable information is to be found in *The Delphic Oracle* by Parke and Wormall; *Greek Oracles* by H.W. Parke; *The Oracles of Zeus* by H.W. Parke, and *Greek Oracles* by R. Flaceliere.

Generally speaking, an oracle was a place where a deity spoke through a prophet or prophetess. The word means literally 'mouthpiece.' The most famous oracle was situated in central Greece at Delphi not far inland from the north coast of the Corinthian Gulf. It was consulted by private individuals, cities, and kings, and exercised a conservative and unifying influence on the Greek world.

The problem that has so far resisted attempts to find a generally accepted solution is that of the nature of the prophetic inspiration in terms that are understandable in the modern world. One may begin by distinguishing two kinds of activity: mantle, and inductive. The Trojan seer Helenos understood in his heart (*thumos*) the plan of Apollo and Athene [15]. The Roman augur, however, is described as using observation and induction.

For the most part, divining the future at a Greek oracle combined the two methods, mantic and inductive. It was a matter of interpretation by priests or priestesses of the utterances of a woman in a 'manic' or inspired state. The word 'mantis' for a prophet is related to the word 'mania', or raging (of love as well as anger). The Greeks thought in terms of possession of a human being, whether prophet or poet, by a divinity. They used the word '*enthousiasmos*', god (*theos*) being in one. It is usually translated as 'inspiration,' but, as we shall see later, was not caused by breathing in, as the word inspiration suggests. At Delphi, the woman whom the god or goddess entered was called the Pythia, and was inspired, at any rate in classical times, by Apollo. She went into an underground chamber and, in imitation of the deity, sat on the lid of a cauldron fixed on a tripod. Tripods were of metal, and were highly valued.

For a poet's description of an oracle in action, we can turn to Virgil. Aeneas goes to Cumae to consult the prophetess or Sibyl about the journey he is destined to make into the underworld to consult the ghost of his father Anchises.

"The side of the Euboean cliff is cut out into a huge cave, into which lead a hundred wide entrances, a hundred mouths, whence rush out as many voices, the Sibyl's answers. They had come to the threshold, when the maiden said. 'It is time to ask your fate; look, the god is here!' As she said this at the entrance, her colour and expression changed, her hair went wild; she panted, her heart was filled with frenzied raging, she seemed to grow in stature, and her voice was no longer natural, as she was breathed upon by the presence, now close, of the god." [16]

There is a resemblance between the Latin *ravidus*, raging, and Hebrew *rabh*, great.

Line 77 ff.: "The prophetess, not yet accepting Phoebus, is filled with Bacchic frenzy, trying to shake the great god from her breast; but he exercises her raving mouth all the more, subduing her fierce feelings, and moulds her to his will with his force. And now the hundred huge mouths of the place opened of their own accord, and carried the answer of the prophetess out into the open."

Cicero says: "To presage is to have acute perception (*sentire acute*). Old women and dogs are '*sagae*.' This ability of the soul, of divine origin, is called '*furor*' (frenzy), if it blazes out." [17]

Again in *Aeneid* VI: "With such words from the shrine the Cumaean Sibyl sings frightful riddles that resound in the cave, wrapping true words in obscure ones; Apollo plies the reins and drives his spurs into her breast." [18]

The oracle of Zeus at Dodona in northern Greece was held to be most ancient. In its oak groves a dove, or doves, were said to speak. The priestesses were called *peleiae* (doves). The priests, called Selli, slept on the ground and never washed their feet. The sound of a sacred dove, of leaves in the wind, of water in a spring, and of bronze gongs suspended in the trees, helped the interpreter to give an answer.

At Delphi, the inspired utterances of the Pythia were interpreted by the priests and put into verse, giving what was often an equivocal answer, such as that to King Croesus: "If you cross the river Halys you will destroy a great kingdom." It turned out to be his own that was destroyed.

Delphi is situated on the slopes of Mount Parnassus. Parnassus has a huge cleft, with the Phaedriades, the shining cliffs, on each side. The oracle was associated with a chasm in the ground, and the inner room where the Pythia prophesied was underground. There were two sacred springs, Cassotis and Castalia.

Oracles were not confined to the Greek mainland. The west coast of what is now Turkey, especially the area known to the Greeks as Ionia, had many oracles, and it is even possible that their existence was a factor in the choice of site for a city by colonists from the Greek mainland. The writer, Berossus, mentions a Babylonian Sibyl. There was an oracle at Marpessus in the Troad. The Hebrew *marpe* means healing. There was another oracle of Apollo, also in a cavern, at Erythrae in Ionia. The late 4th century writer Heracleides Ponticus mentions various Sibyls, including Herophile, the Sibyl at Erythrae. There was an Erythrae in Boeotia, at the foot of Mount Cithaeron, and another in Locris on the Corinthian Gulf. The red soil at Marpessus may account for the name of one of the towns (Erythrae = red). Heracleides Ponticus expresses the view that the oracle at Canopus is an oracle of Pluto, the god of the underworld.

The Sibyl Bacis, in Boeotia, and Epimenides of Crete, were *manteis*, inspired prophets.

Telmessus in Caria was famous for *haruspicum disciplina*. At Elis, two families, the Iamidae and the Klutidae, were famous for their prophetic skills.

In early times, the Roman Senate decreed that six (some said ten) of the sons of the noblest families should be handed over to each of the Etruscan tribes to study prophetic technique.

An Aeduan Druid, named Divitiacus, claimed to have studied the *naturae rationem* which the Greeks called *physiologia*, the study of nature, and made predictions by augury and by inference (*coniectura*).

Among the Persians, the Magi "*augurantur et divinant*" practised augury and divination. Their king had to know the theory and practice (*disciplina et scientia*). [19]

The Spartans assigned an augur to kings and elders, and consulted the oracles, of Apollo at Delphi, of Jupiter Hammon, and of Zeus at Dodona [20].

Cicero writes: "Appius Claudius observed the practice not of intoning an oracular utterance (*decantandi oraculi*), but of divination" [21].

Cicero appears to refer to shamanism when he writes: "There are those whose souls leave the body and see the things that they foretell. Such *animi* (souls) are inflamed by many causes, e.g. by a certain kind of vocal sound and Phrygian songs; many by groves, forests, rivers and seas. I believe also that there have been certain breaths of the earth, which filled the people's souls so that they uttered oracles" [22].

He then quotes words spoken by Cassandra, who saw the future long beforehand.

The Latin word *anhelitus*, breath, which is sometimes translated as 'vapours', does not justify the assumption that inspiration at Delphi was caused by gases, steam from boiling laurel leaves, or smoke. Inspiration is associated much more closely with panting as the god 'breathes' fire into the soul, as Cassandra puts it in the Agamemnon. Furthermore, Cassandra could prophesy anywhere, without restriction to caves. See, for example,

Aeschylus, *Agamemnon*, line 1072 ff., where she prophesies before the palace at Mycenae.

Caverns and water were favoured surroundings for oracles. Mopsus founded one at Claros, near Colophon, where there was a sacred spring under the temple. Cumae, near Naples, is a good example. In 1932 Amadeo Maiuri found a cavern at Cumae. There was a passageway 150 yards in length, 8 ft. wide, 16 ft. high, of trapezoidal section, narrow at the roof. It ran parallel to the cliff, and had a series of openings at regular intervals. The Cumaean oracle is thought to have flourished in the 6th and 5th centuries B.C.. The oracle of the dead at Ephyra in Thesprotia was in a labyrinth with many doors, reminiscent of Cumae, and iron rollers were found there. Strabo, a Greek writer born in 64 B.C., quotes an early writer, Ephorus, on the Cimmerians at lake Avernus. They lived in subterranean houses called *argillae*, tended an oracle, and only emerged at night. Homer describes them as never looked on by the sun, whether Helios is high up in the sky or underneath the earth. There was an oracle of Apollo at Didyma, near Miletus, where the priestesses had to wet their feet in a sacred spring.

The earliest reference to a Sibyl is by Heraclitus, one of the pre-Socratic philosophers living in Ionia about 500 B.C., quoted by Plutarch, 1st century A.D.: "But Sibylla with frenzied mouth speaking words without smile or charm or sweet savour reaches a thousand years by her voice on account of the god."

At Delphi, before consulting the god, one paid a fee, a '*pelanos*', or honey cake. The Pythia was purified with water from Castalia, and drank from Cassotis. The latter was for purification, not inspiration. A goat was sprinkled with water to make it shiver, and was then slain. It is noteworthy that at Aigeira, opposite Delphi and Crisa across the gulf, there was an oracle of Ge, the earth, where a Sibyl drank bull's blood and descended into a cavern to be inspired by the goddess. The name Aigeira suggests goats (*aix*, *aigos*, goat).

When the goat was slain, the Pythia went into the '*cella*', or shrine, where there were an altar of Poseidon, the iron throne of Poseidon, the '*omphalos*', votive tripods (dedicated to the god), a hearth for burning laurel leaves and barley, and a fire that was always kept alight. There was a golden statue of Dionysus, the god who was killed and restored to life at Delphi. The Pythia descended into the innermost shrine. Livy, 1.56, has: "*ex infimo specu vocem redditam ferunt*," "They say that a voice answered from the depths of the cavern." She sat on the cauldron lid, in imitation of the god Apollo. The cauldron was supported by a tripod. Plutarch mentions emanations. There is no archaeological or geological evidence for fumes, only solid rock, nor is there any clear reference to vapour in the context of other oracles. More will be said later about Plutarch's account.

The priests at Delphi wrote out the answer given by the Pythia, and put it into the '*zygasterion*', the collection of answers. There is a tradition that answers had at one time been written on leaves. Aeneas at Cumae asks the Sibyl not to do this. References to the Pythia chewing leaves are late, and there is no experimental evidence of such a practice causing inspiration.

Diodorus Siculus, a historian writing in about 40 B.C., gives us valuable information. "Since I have mentioned the tripod, it seems appropriate to refer to the old traditional story about it. It is said that goats found the ancient oracle; because of this the Delphians even today use goats for consulting the oracle. They say that the manner of the discovery was as follows: There was a chasm in this place, where now is what is called the sanctuary of the temple. Goats fed round it, since it was not yet inhabited by the Delphians, and whenever a goat went up to the chasm and looked over, it leaped about in a remarkable way and uttered sounds different from the usual. The goatherd marvelled at the strange occurrence, went up to the chasm, and having examined it suffered the same experience as the goats; he acted like people whom a god enters, and he proceeded to prophesy things that were going to happen. Subsequently the report was passed on among the locals about the fate of those who approached the chasm, and more people went to the place, and

because of the unusual occurrence all made trial of it, and all those who went near were inspired by the god. Thus the oracle was the object of admiration and was held to be the oracle of *Ge* (Earth). For some time those who wished to get answers went up to the chasm and prophesied to each other. Later, many jumped into the chasm and prophesied to each other in their frenzy, and all disappeared. The inhabitants of the region all decided, for safety reasons, to appoint one woman as prophetess, and that answers should be given through her. So a contraption was rigged which she mounted. She 'enthused' in safety and gave answers to those who asked. The device has three supports, hence its name 'tripod'. Almost all, even today, are bronze tripods modelled on the lines of this one."

It is significant that the Hebrew '*chaghagh*' is to dance, stagger; '*chaghav*' is a ravine.

Next there is a valuable clue from Plutarch, 1st century A.D.. As well as giving the name of the goatherd in the story, Koretas, he reports that during his term of office as priest of Apollo at Delphi there was a fatal accident. The goat refused to shiver, and was repeatedly dowsed with water. The Pythia went reluctantly to take her seat on the cauldron, spoke in a strained voice, then rushed out shrieking and collapsed. Plutarch gives no more details beyond saying that she died within a few days.

I append some examples concerning omens and divination, starting with Homer's *Iliad*:

II:100: Agamemnon calls an assembly and stands up holding a staff. It was made by Hephaestus, who gave it to Zeus the son of Kronos, and Zeus gave it to the guide, the slayer of Argus. And Hermes gave it to Pelops the charioteer, who gave it to Atreus, shepherd of the people. Atreus died, leaving it to Thyestes rich in flocks, and Thyestes gave it to Agamemnon to carry, to rule over many islands and all Argos. Leaning on the staff he spoke to the Argives.

II:265: Odysseus strikes Thersites with his staff, for criticising Agamemnon.

II:305: Odysseus tells how at Aulis, while waiting for a favourable wind for the voyage to Troy, they were sacrificing hecatombs at the holy altar round a spring under a beautiful plane tree, whence sparkling water emerged. Then there was a great portent: A snake, red-backed, frightful to see, which Zeus himself had caused to emerge, shot out from the altar towards the tree. On the topmost branch there was a nest of young sparrows, hiding under the leaves, eight of them, nine including the mother. The snake ate them all up, but then the son of Kronos of the Crooked Ways turned the snake into stone. The prophet Calchas interpreted the omen. The nine birds were the nine years of the siege of Troy. The city would be captured in the tenth.

II:447: The Greeks prepare for battle. Athene joins them, wearing the aegis, unageing, immortal with a hundred gold tassels fluttering from it. She gives them courage and eagerness to fight.

At the start of Book V Athene inspires Diomedes. She makes his helmet and shield blaze with tireless fire like the summer star which is brighter than others when it rises from bathing in Ocean. Such was the fire that she kindled round his head and shoulders.

VI:76: Homer mentions Priam's son, Helenus, the best augur in Troy.

VIII:245: Zeus answers Agamemnon's prayer for help by sending an eagle - the most sure of birds to bring something about - holding a fawn in its talons. It lets go the fawn by Zeus's beautiful altar, where the Achaeans used to sacrifice to Zeus Panomphaios (Zeus Father of Oracles). When they see that the bird comes from Zeus, they rush at the Trojans all the more and remember the joys of battle.

IX:236: Odysseus talks to Achilles. The Trojans are doing too well. Zeus, son of Kronos, has encouraged them with flashes of lightning on the right.

X:272: Diomedes and Odysseus set out at night on an intelligence-gathering mission behind the Trojan lines. As they set off, Athene sends a heron on the right. They hear its cry, and Odysseus sends up a prayer to Athene.

XII:200: As the Trojans were about to storm the wall protecting the Greek ships, an eagle appeared high up on their left, with a huge red snake in its claws, still alive and gasping, still full of fight. It bit the eagle, which dropped it among the crowd and flew away with a cry. The Trojans were terrified when they saw the snake lying wriggling among them, an omen from aegis-bearing Zeus.

XIII:821: When the Trojans are fighting by the Greek ships, Ajax taunts Hector. An eagle appears on the right, and the Achaeans take heart.

XVI:233: Achilles encourages his troops, the Myrmidons, for the battle, and prays to Pelasgian Zeus of Dodona, where his *hypophetae*, announcers of the oracular answer, live, the Selli, who never wash their feet and who sleep on the ground.

XVI:450: Hera urges Zeus to allow Sarpedon to be killed by Patroclus. Zeus agrees, but sends a shower of bloody raindrops to the earth to honour his son, whom Patroclus is about to kill.

XVIII:202: Hera sends Iris to Achilles with instructions to appear in the battle over the body of Patroclus. Achilles has lost his armour, but Athene spreads her tasselled aegis over his shoulders, and puts a crown of golden mist round his head, and creates a blaze of fiery light from him. The charioteers are astonished when they see the terrible fire, sent by Athene of the bright eyes, steadily burning on the head of the valiant son of Peleus.

XIX: At the end of Book XIX, when Achilles sets out in his new armour to avenge Patroclus, his horse Xanthus speaks to him and says that the day of his death is at hand. It is noteworthy that Hera enabled the horse to speak and the Erinyes, the Furies, checked its speech.

Passages from Homer's *Odyssey*.

II:37: Telemachus summons an assembly. He stands up, and the herald, Peisenor, puts the *skeptron*, the staff, into his hand. Antinous, chief of the suitors, urges Telemachus to send his mother away. When Telemachus refuses, Zeus shows his support by sending two eagles, who fight in the air above the assembly (1.146). The omen is interpreted by Halitherses, who is best at bird lore and prophecy.

III: Telemachus goes to Pylos. At line 406 Nestor gets up and sits on a smooth white stone, shining and polished, in front of his house. It is the seat where he sat with his staff in his hand to rule his people.

XI: Odysseus goes to the underworld, and consults the ghost of Teiresias, who appears holding a golden staff.

XVIII:354: Eurymachus says that the beggar (Odysseus in disguise) must have been guided to Ithaca by some god -- at any rate light seems to emanate from his head.

XIX:33: Athene accompanies Odysseus and Telemachus as they hide the suitors' weapons before the battle. She carries a golden lantern. Telemachus cries to his father: "The walls and fir rafters and panels and pillars look as if a fire were blazing. There must be some god from heaven in the house."

XIX:536: Penelope tells the beggar of her dream that an eagle swooped down on twenty geese, killed them, and flew away. The eagle returned and told her that the geese were her suitors

and that the eagle was her husband Odysseus. When the beggar endorses the interpretation, Penelope is dubious: dreams reach us through two gates, one of horn, the other of ivory. Dreams from the ivory gate are deceitful and unfulfilled.

XX:98: A double omen. Early in the morning Odysseus raises his hands to the sky and prays for a *pheme*, utterance, from somebody in the house, and for a sign out of doors, that his return is approved of by the gods. At once there is a clap of thunder. Then a slave, grinding barley and wheat, amazed at thunder from a clear sky, expresses a wish and belief that the suitors should eat in the palace for the last time. This second omen almost falls into the category of *kledons*, which are discussed later in the book.

XX:243: The suitors plan to kill Telemachus, but an eagle appears on the left holding a dove in its claws. Amphinomus at once warns that the plan will miscarry, and proposes dinner instead.

XX:345: Athene leads the suitors' minds astray. When Telemachus has made a short speech refusing to drive his mother from the house, unquenchable laughter, *asbestos gelos*, seizes them. Theoclymenus, a god-like seer, is present. Their laughter stops and they seem to see blood on the food they are eating. The seer speaks: "Your heads, faces and knees are shrouded in night; a cry of mourning is kindled; your cheeks are wet with tears, the walls and panels are sprinkled with blood. The porch and courtyard are full of spectres, rushing down to darkness and Hades. The sun has perished from the sky, and an evil mist has come upon all."

At the end of Book XXI, as Odysseus strings his bow, Zeus marks the occasion with a great clap of thunder.

Passages from Vergil's *Aeneid*.

I:393: Aeneas has been shipwrecked on the coast of Africa. Venus meets him and gives him encouragement. An eagle has just swooped down on twelve swans. They escape, some coming to land, others still in the air. Thus, she says, some of the Trojan ships are safe in port, others are approaching.

II:682: During the escape from Troy, "*levis summo de vertice visus Iuli fundere lumen apex tactuque innoxia mollis lambere flamma comas et circum tempora pasci.*" Iulus's cap poured out light, and a gentle flame, harmless to touch, licked his hair and played round his forehead.

While others tried to extinguish it with shaking and with water, Anchises prayed to Jupiter. He was answered by thunder on the left, and "*de caelo lapsa per umbrae stella facem ducens multa cum luce cucurrit. Illa summa super labentem culmina tecti cernimus Idaea claram se condere silva signantemque vias; tum longo limite sulcus dat lucem et late circum loca sulphure fumant.*"

A star fell from the sky through the darkness and moved fast, trailing a torch of brilliant light. We saw the shining object glide over the roof of the house and plunge into the forest on Mount Ida, illuminating the paths; then it left a long trail of light in its wake, and everywhere around, far and wide, was sulphurous smoke.

III: 1-12: We have a summary of the fate of Troy. Its destruction was the will of those above (*visum supers*), and the Trojans were driven into exile to seek new homes by divine auguries (*auguriis divam*). They carry the Penates and Great Gods.

III:90: Delos is one of their first stops. Aeneas enters the temple to pray. Suddenly the hill seems to move, the shrine to open, and the cauldron (*cortina*) to bellow (*mugire*) like a bull.

III: 135: When they have sailed to Crete, home of their ancestor Teucer, pestilence from a disturbed part of the sky afflicts trees, crops, and limbs. Anchises urges a return to Delos to ask the oracle for guidance. Before they can go, the Trojan gods appear to Aeneas in a dream, with advice from Apollo that Hesperia is their goal, not Crete.

III:245: They approach the Strophades islands, home of Celaeno and the Harpies. Celaeno, the prophetess of evil (*infelix vates*), prophesies that they will reach Italy, but fail to build a city, and be so hungry that they will eat their tables. We shall see later that the eating of tables is a *kledon*.

III:359: Epirus is their next port of call. Here the Trojan seer Helenus has succeeded King Pyrrhus. When Aeneas asks Helenus for advice, he addresses him as interpreter of the gods, who perceives (*sentis*) the presence (*numina*) of Phoebus, the tripods, bay trees of Claros, the stars, the tongues of birds and omens of their flight. Helenus sacrifices bullocks, asks for divine permission (*pacem*), unties the fillet from his consecrated forehead, and leads Aeneas to the threshold of the god, and prophesies (*canit* = sings).

III:405: Helenus tells Aeneas that when he has sailed past the Italian cities on the nearer coastline, he must, when sacrificing on the beach, wear a purple robe which will cover his hair, lest while busy with the sacred fires in honour of the gods some hostile face may be seen and disturb the omens. This is to be the *Mos Sacrorum* (sacred custom). After urging him to be particularly careful to honour Juno, Helenus describes the raging prophetess of Cumae; Aeneas must insist on direct spoken answers, not writing on leaves which get blown away.

V:704: After the funeral games held in Sicily on the anniversary of the death of his father, Anchises, Aeneas consults the prophet, Nautes. He was the only pupil of Tritonian Pallas (Athene). He could explain what the great anger of the gods portended, or what order of events the fates demanded.

VI:779: In the underworld, Anchises reveals to Aeneas the future greatness of Rome. The soul of Romulus is seen: "See how twin crests stand on his head (vertex), and his father himself marks him out for the life of the gods above."

VII:59: After his visits to the underworld, Aeneas sails north and reaches the river Tiber. Lavinia, daughter of Latinus, the aged king of the Latins, is to marry Turnus, prince of the Rutuli, but the gods send two signs. A swarm of bees settles on a laurel in the palace. A prophet interprets this as the arrival of an army who will rule from this citadel. Next, Lavinia's hair and dress catch fire as she stands beside her father, who is kindling the altar fire. Prophets sing that she has a distinguished destiny, but that great war is the fate of the nation.

The king visits the oracle of his father, Faunus, predictor of fate. At this oracle the inquirer sacrificed sheep, then lay down to sleep on the sheepskins. The voice of Faunus was heard prophesying the future.

Shortly afterwards the Trojans sit down under a tree for a meal. They use cakes of meal instead of plates. Iulus exclaims "We are eating our tables!" Aeneas recognises the *kledon*, and declares that this is the land promised them by destiny. He wreathes his head with laurel and utters prayers to various deities, while Jupiter thunders three times from a clear sky and displays a cloud gleaming and quivering with golden rays.

VIII:608: Venus brings Aeneas his armour, made by Vulcan. The helmet is terrible with its crests, spouting flames.

XII:244: Iuturna, wishing to break the truce and prevent or postpone the death of her brother Turnus in a duel with Aeneas, sends a confusing omen. An eagle seizes the leader of a group of swans, but is attacked by combined tactics of the other swans, drops his prey, and flees. The augur, Tolumnius, says, "This is the omen I prayed for. Follow me into battle."

VIII:663: On the shield of Aeneas:

*"hic exsultantis Salios nudosque Lupercos
lanigerosque apices et lapsa an cilia caeloextuderat..."*

"Vulcan had hammered out the dance of the Sali and the naked Luperci, and caps with wool on their peaks, and shields that had fallen from heaven..."

VIII:680: On the shield of Aeneas, at the battle of Actium, Augustus is seen, his brow shooting forth twin flames.

Pausanias, a Greek from Asia Minor of the 2nd century A.D., wrote a guide to Greece. There are many references to augury and oracles. The Penguin Classics translation, '*A Guide to Greece*' by Peter Levi, 1985 reprint, is readily available. The following are among the many relevant passages. References are to the Greek text in the *Loeb Classical Library* edition.

I:4:4: When the Gauls tried to sack Delphi, they were attacked by thunderbolts, and by stones and rock falling from Parnassus.

I:21:7: At Gryneion in Asia Minor there is an oracular temple of Apollo, mentioned in Vergil, *Eclogue* VI:72, and *Aeneid* IV:345. Linen breastplates were on show there, a fact whose significance will appear infra, Chapter IV.

II:26:5: Re the sanctuary of Asclepius near Epidaurus, he tells how the child Asclepius was found by a goatherd, abandoned. A flash of lightning came from the child.

VII:25:10: At Boura, in Herakles's grotto, the oracle is consulted by throwing dice on a table before the statue. There are many dice, and for every throw there is an interpretation written on the board.

IX:16:1: Teiresias's observatory is behind the sanctuary of Ammon at Thebes.

IX:39:5: At Lebadeia in Boeotia is an oracle of Trophonius. To consult it, one had to live for some days in a building nearby dedicated to Good Fortune and the Good Spirit. No hot water was allowed for washing. Sacrifice was offered to Trophonius and his sons, to Apollo, Kronos, Zeus, Hera the charioteer, and Demeter Europa, the nurse of Trophonius. One then had to slaughter a ram, calling to Agamedes. Priests checked the entrails of all the sacrificed animals. The inquirer had to bathe in the river Herkyne; he was then washed and anointed with oil by two boys called Hermae. He drank water, first of forgetfulness, then of memory. He looked at the statue of Daedalus, put on a linen tunic tied with ribbon, and wore heavy boots.

The oracle was on the hillside above a sacred wood. It was surrounded by a circular platform of white stone, the size of a small threshing-floor, about four feet six inches in height. There were bronze posts joined by chains. Inside the circle was a chasm, like a kiln ten feet in diameter, twenty feet deep. The inquirer descended a ladder to a hole at the bottom, and took honey cakes. He was snatched down feet first as though by a river. Inside, some heard sounds, others saw things. He returned feet first, and was put by the priests on the nearby Throne of Memory. He was possessed with terror, but finally recovered in the building of Good Spirit and Fortune.

X:5:7: Phemonoe was Delphi's first priestess and first to sing the hexameter. But a local woman called Boio wrote a hymn for Delphi saying that Olen and the remote northerners came and founded the oracle, and Olen was the first to sing in hexameters. Russian *olenj* is a reindeer.

IV:10:6: The Messenian prophet Ophioneus was blind from birth. He found out what was happening to everyone, private and public, and thus predicted the future.

VI:2:4: The Elean prophet Thrasyboulos son of Aineias was of the clan of the Iamidae. These were prophets descended from

Iamos (Pindar, *Olympian Odes* VI:72). They studied lizards and dogs.

The *Cypria*, scholiast on Pindar, *Nemean* X:62: Lynceus climbed Taygetus and saw Kastor and Polydeukes hidden in a hollow oak.

Herodotus, writing in the 5th century B.C., says that, according to the Egyptians, two priestesses of Zeus at Egyptian Thebes were carried off by the Phoenicians. One was sold in Greece, the other in Libya. The oracles at Thebes and Dodona were similar.

Callimachus writes: "Servants of the bowl that is never silent," of the bronze gongs at Dodona.

Zenobius refers to Bombos the Prophet at Dodona.

In Homeric pyromancy (telling the future from fire) the priests burnt the thighs of the victim first. The altar flames should rise high. The thigh may have been significant; cf. Zeus concealing the infant Dionysus in his thigh, and Jacob and the angel.

A statue could apparently come to life, enabling a prophet to give a warning, as we see in the next example:

Vergil, *Aeneid* II:171: Sinon tells the Trojans that Minerva gave clear signs of disapproval. The Palladium, an image of Minerva in Troy, was stolen by two Greeks, Diomedes and Ulysses. Flames flickered from its staring eyes, salt sweat covered its limbs, and three times it jumped from its base with trembling shield and spear. The prophet Calchas sang of the need to leave Troy at once.

Aeneid III:466: Fleeing from Troy, the Trojans stay with Helenus in Epirus. He gives them presents when they leave, cauldrons from Dodona, etc.

Homer, *Odyssey* XIV:327: Odysseus has returned in disguise to Ithaca. In the hut of Eumaeus the swineherd, he says that he has heard of Odysseus. The king of the Thesprotians had said that Odysseus had gone to Dodona to learn the will of Zeus from the oak trees with lofty foliage.

Asbolus the diviner is mentioned by Hesiod, *Shield of Herakles* line 185, in the representation of the battle between Lapiths and Centaurs. Asbolus is with the Centaurs.

Frazer, in his edition of Apollodorus, mentions wizards in Loango, West Africa, who descend into a pit to get inspiration.

Apollodorus I:9:24: The ship Argo speaks as the Argonauts sail past the Apsyrtides islands. Apsyrtus was the brother of Medea, whom she murdered to facilitate her escape. The Argo says that Zeus's anger will not cease until the murder is expiated.

Notes (Chapter One: Augury)

1. Cicero: *'De Divinatione'* II:23
2. *Ibid.* I:18
3. *Ibid.* I:33
4. *Ibid.* I:40
5. *Ibid.* I:41
6. Livy: I:31.
7. Cicero: *'De Divinatione'* I:17
8. Livy I:18
9. Lucretius: I:1014
10. Plautus: *'Cistellari'* IV:2:26
11. Livy: I:39
12. *Ibid.* I:36
13. Cicero: *'De Divinatione'* II:41
14. Cicero: *'De Legibus'* II:8
15. Homer: *'Iliad'* VII:44
16. Vergil: *'Aeneid'* VI:42
17. Cicero: *'De Divinatione'* I:31
18. Vergil: *'Aeneid'* VI:98

19. Cicero: *'De Divinatione'* I:41
20. *Ibid.* I:43
21. *Ibid.* I:47
22. *Ibid.* I:50

CHAPTER TWO

THE ELECTRIC ORACLES

WE have seen enough evidence to attempt an explanation. I shall deal with augury first.

I suggest that augury was an art, or science, based on the combined study of the behaviour of living creatures, especially birds, and of electrical fields both of the atmosphere and of the earth.

Even today, the electrical effects of a thunderstorm are easily detectable by the naked eye. Piezoelectric effects and earthquake light are recognised phenomena, and there are grounds for supposing that conditions were more turbulent, electrically, in the ancient world [1].

The Greek augur faced north, the Roman south, and watched especially the behaviour of birds and animals. The Roman augur had a staff with a curved top. The contact with a boulder indicates the discovery of the importance of a good earth connection. Finally, since the augur worked in daytime, he threw part of his robe over his head to enable him to detect any variations of brightness of electrical glow. A Greek seer wore a net garment over his *chiton*.

It is not suggested that this technique would be useful under average present conditions, merely that there was a time when electrical conditions were different, as we can expect from the frequency of recorded earthquakes, and that elementary electrical principles were being studied. Certainly experiments with magnets were carried out, for example at Samothrace. Cicero mentions "*auspicious militare in acuminibus*",

divination from the points of spears (*De Divinatione* II:36). This was presumably the observation of electrical flashes.

When we bear in mind the fact that kings originally dealt with divine matters, we see the significance of such words as *lauchme*, chieftain, and of the fire playing round the head of a future king. Light, and lightning, were obvious indications of the presence of an electrical deity.

At Delphi the force was used to affect the Pythia by direct contact, whereas at Dodona the emphasis was on sound effects, but there were tripods there too. At Delphi the Pythia was stimulated by a force of earth. The gods spread their force far and wide, sometimes enclosing it in caves in the earth, sometimes involving it in the human body. [2]

According to Cicero, poetic inspiration shows that there is a divine power in the soul [3]. He says it is possible that the earth force, which used to stimulate the soul of the Pythia with divine inspiration, has disappeared because of age [4]. In *Trimalchio's Banquet*, by Petronius, Trimalchio claims to have seen the Cumean Sibyl suspended in a jar. When asked what she wished, she said "I wish to die." The story of a Sibyl small enough to hang from the ceiling in a jar may originate in the gradual ebbing of the inspirational force of the place.

Cicero speaks of oracles which are poured forth under the influence of divine inspiration [5].

I suggest that the breathing of the earth, *spiritus, aspiratio terrarum*, and the god's breathing upon the Pythia, *afflatus dei*, are both examples of electrical stimulation, rather like the feeling of the approach of a thunderstorm, as in the storm in Vergil, *Aeneid IV*.

Just as the Roman augur had to make contact with the earth via a boulder, so the Selli at Dodona were forbidden to wash their feet and had to sleep on the ground. The Flamen Dialis, or priest of Jupiter at Rome, slept in a special bed whose feet were

smearred with mud. The name of the famous seer Melampus means Blackfoot. Frazer, in *The Golden Bough*, writes of the Agnihotris, Brahmin fire priests, who sleep on the ground. The 5th century B.C. dramatist Euripides, in his play *The Bacchae*, describes the behaviour of the worshippers of Dionysus, a god who fills his worshippers with frenzy. A Maenad, producing electrical effects from a thyrsus, which resembles the wand in which Prometheus brought divine fire down from heaven, went barefoot as she waved it in the air, then struck the ground [6].

Good electrical effects could be obtained on high ground, e.g. Parnassus, Cithaeron, Mount Sinai, etc.. Cithaeron, as well as being the scene of *The Bacchae*, had below it the town of Erythrae. There is another Erythrae in Asia Minor. Clefs in rock if possible combined with water, as at Delphi, would be helpful. Homer speaks of "rocky Pytho." Such places, together with oak groves, as at Dodona, were likely to be *enelysioi*, containing Zeus Kataibates, Zeus the sky god who descends in a thunderbolt. One may compare the mysterious flame that burned in Thebes on the tomb of Semele, mother of Dionysus, killed by a thunderbolt from Zeus, and also the fire round the head which did not burn [7].

The tripod and cauldron are clearly important. The tripod as a throne for Apollo was probably introduced between 1000 and 750 B.C., conventional dating. Votive offerings of tripods were made to other gods as well as to Apollo. At Dodona the many votive tripods were arranged in a circle, touching each other, round a sacred oak tree. I suggest two lines of investigation. Firstly, they are generally of metal, and the legs of the tripod would be a good electrical earth for the cauldron on which the Pythia sat. (See above for a reference to iron rollers at Ephyra). Secondly, three metal legs are the most inconspicuous safe support for a cauldron and occupant if one wishes to create the impression that the Pythia, who is in contact with the god Apollo, is hovering in the air. There is a third possibility which will be considered later in the section on tripod cauldrons.

At this stage of the argument we can well consider the play *King Oedipus* by Sophocles. Oedipus, king of Thebes in Boeotia, is faced with plague in his city. A messenger has been sent to Delphi to ask the god's advice. The chorus say: "*elampse gar tou niphontos artios phaneisa phama Parnasou.*" Literally: "The voice of snowy Parnassus, recently shown, flashed (or: shone)." [8]

The use of a verb of shining rather than of sounding calls for comment, especially as this usage is found elsewhere when describing oracular action. I give rough translations or paraphrases of some instances.

Aeschylus, *Eumenides* 797 ff: Orestes, who has killed his mother to avenge the murder by her of his father Agamemnon, is tried at Athens. The Furies, instruments of justice, are the prosecutors. His defence has been that he was acting on the instructions of the god Apollo. Athene, patron goddess of Athens, has a casting vote, and Orestes is acquitted. When the Furies grumble, Athene consoles them: "But there was shining (*lampsa*) evidence from Zeus, and he who gave the oracle and he who bore witness were one and the same."

In the first play of the trilogy, the *Agamemnon*, the captive prophetess Cassandra sees disaster looming when the triumphant procession arrives at Agamemnon's palace at Mycenae, on his return from the capture of Troy. (Cassandra starts to prophesy) "Ah, it is like fire! He is coming to me. Ah, woe, Lycian Apollo, woe is me!" [9].

Certain Greek words are of significance in an oracular context. *Pheme* is a divine voice or oracle, as also is *omphe*. The verb *phao* means to make known either by sight or by sound. *Aeido*, sing, is sometimes used of wind in the trees, and of the twang of a bowstring. *Audan*, to utter, of oracles, and *aoide*, contracted to *ode*, a song, are similar. *Aoidos*, like the Latin *vases*, means a singer or prophet, and, in the *Trachiniae* of Sophocles, an enchanter. The link between sound, sight, and divine revelation is close.

Heraclitus, the Obscure, was one of the philosophers working in Ionia in the 6th century B.C., known as the Pre-Socratics. They all studied the problem of the nature of the physical world, trying mostly to find a single underlying substance behind the variety of appearances, whereas Socrates in the 5th century turned his attention to the problem of how one ought to live. The ideas of Heraclitus are known from fragments quoted by later writers. *Fragment 93* (Diels) reads: "The god whose is the oracle at Delphi neither speaks nor hides. He signals."

Gaia, the earth goddess, was the mother of various powerful creatures. She is probably to be equated with Demeter, the Earth Mother. *De* is the same as *Ge*, earth. She was worshipped as a source of fruit and crops, and was connected with the mystery religion of Eleusis. In the *Homeric Hymn to Demeter*, 275 ff., Demeter appears to Metaneira to instruct her about her cult at Eleusis. Radiance like lightning fills the house.

Earlier I mentioned two kinds of electrical activity, that of the atmosphere, lightning, auroras, etc., and that of the earth, earthquake phenomena such as earthquake light and piezoelectric effects. It is possible to see in the succession of deities at Delphi the development of Greek thought about electricity. The opening of the *Eumenides* of Aeschylus is a good starting point.

Gaia, earth, is the first occupant of the shrine. She is succeeded by her daughter, Themis, whose name implies 'the way things are established', and by Phoebe. There is a red figure vase illustrating Themis on the tripod. According to Hesiod she was mother of Leto and of Asterie by her brother Koios. Themis and Gaia are referred to by Aeschylus as *pollon onomaton morphe mia*', one form with many names.

Koios suggests stones. The poet, Antimachus, tells us: "*Koias ek cheiron skopelon meta rhiptozousin*", they hurl stones at the rock with their hands. The '*thriobolus*' was a sooth sayer who threw pebbles into a divining urn. There may be a link with the

Thriae, three goddesses who practiced divination at Delphi. They are compared by Hesiod to bees, and feed on honey. Vergil describes honey as '*caelestia*', and the infant Zeus was fed by bees [10].

There are other points of interest in *Georgic IV*. Vergil speaks of a skilled farmer and beekeeper, *Corycium senem*, an old man from Corycus. The Corycian cave above Delphi was dedicated to Bromios, a name of Dionysus, and there was another cave of the same name in Asia, where Zeus was kept prisoner for a time. Vergil also reports a belief that bees have a share of the divine mind and ethereal essence [11].

Themis is shown as the Pythia on the Vulci goblet. The name Phoebe, one of the successors of Gaia, like Apollo's name Phoebus, suggests light, but before we move on to discuss Apollo in detail, there is another occupant of the cauldron to consider, Dionysus.

There is a story that the god Zeus fought a battle in the sky against a monster, Typhon. Typhon cut the sinews of Zeus's hands and feet and took him to Corycus in Cilicia. He hid the sinews in a cave, with the dragon Delphyne on guard. Vide '*Homeric Hymn to Apollo*', 39; '*korakos*' means a leathern quiver. Corycus was the site of the sanctuary of the Hittite weather god, and the incident illustrates the Oriental background of early Greece. Hesiod says that Typhon married Echidna, a monster half nymph and half snake. The episode seems to be duplicated at Delphi, where Delphyne is the name of the female dragon killed by Apollo, and the Corycian cave was sacred to Bromios, or Dionysus. Heb. *obh* is a leather bag, spectre, conjuring ghost, sorcerer, necromancer. Cf. *obi*, African witchcraft.

Examples to illustrate this chapter:

Vergil, *Aeneid* IV:518: "*Unum exuta pedem vinclis.*" In a temple at Carthage Dido stands before the altar with one foot bare.

Pausanias, X:5.9: The Delphians say the second shrine at Delphi (the first was of bay branches) was of beeswax and feather, made by bees, and sent by Apollo. Another legend is that it was built by a Delphian called Feathers. Apteris in Crete (north-west coast) was named after him. The theory that the shrine was woven out of feather grass growing on the mountain is not generally accepted.

The third temple was of bronze. A fragment of Pindar describes it as having enchantresses in gold over the pediment, and reads "...opened the ground with his lightning and hid the holiest..."

Pausanias mentions the bronze house of Athene in her sanctuary at Sparta, and refers to a temple in the forum at Rome, which had a roof of bronze.

There was a story that Apollo's bronze temple dropped into a chasm in the earth or was burnt. The fourth temple was built by Trophonius and Agamedes, of stone. It was burnt down in 548 B.C.. The temple still standing at the time Pausanias visited it was, he said, by the Corinthian architect Spintharos. He mentions legends about the founding of the city, e.g., that one Parnassos discovered divination from the birds here, that it was flooded at the time of Deucalion, that Delphos was the son of Apollo and Kelaino, that Kastalios had a daughter Thuia, who was a priestess of Dionysus. (In Greek, Thuia suggests fire). As to Pytho, the snake shot by Apollo was corrupted (Pytho in Greek implies corruption).

Pausanias X:12:1: A rock sticks up out of the hillside below Apollo's temple at Delphi. The Sibyl Herophile used to stand on this to sing her oracles. The former Sibyl was the daughter of Zeus and Lamia, daughter of Poseidon. The Libyans named her Sibyl. Herophile was younger but prophesied the events of the Trojan war. She claimed that her mother came from Marpessus,

a city near Troy, on Mount Ida. Herophile is associated with Sminthean Apollo.

Other Sibyls mentioned by Pausanias are Demo, who came from Cumae, and Sabbe, who was brought up in Palestine by Jews. Sabbe's father was Berosus, her mother Erimanthe. She was also known as the Babylonian Sibyl, and as the Egyptian Sibyl. Phaennis was the daughter of the king of the Chaonians; she and the doves at Dodona gave oracles. The doves were earlier than Phemonoe. They were the first women singers to sing these verses: "Zeus was, and is, and shall be, O great Zeus. Earth raises crops. Cry to the earth-mother."

Euklous was a Cypriot prophet, Mousaios and Lykos were Athenians; Bakis from Boeotia was possessed by the nymphs.

Pausanias, X:7: There is mention of the bronze head of a bison.

X:13:4: The fight for the tripod between Herakles and Apollo. Athena restrains Herakles, Leto and Artemis restrain Apollo.

X:24:4: In the temple an altar has been built to Poseidon, because the oldest oracle was his also. There are two statues of Fates, and the iron throne on which the poet Pindar used to sit whenever he came to Delphi to compose songs to Apollo. Near the temple is the stone. It is oiled every day, and at every festival unspun wool is offered to it.

III:22:1: In Laconia, near Gythion, is a stone called *Zeus kappotas*, fallen Zeus, where Orestes sat with the result that his madness left him.

One may compare the *Old Testament*, *Genesis XXVIII:11*: "And (Jacob) lighted upon a certain place, and tarried there all night, because the sun was set; and he took of the stones of that place, and put them for his pillows, and lay down in that place to sleep. And he dreamed, and behold a ladder set up on the earth, and the top of it reached to heaven: and behold the angels of God ascending and descending on it. And behold, the Lord

stood above it and said, I am the Lord God of Abraham thy father, and the God of Isaac..."

And from verse 16: "And Jacob awaked out of his sleep, and he said, Surely the Lord is in this place; and I knew it not. And he was afraid, and said, How dreadful is this place! this is none other but the house of God, and this is the gate of heaven. And Jacob rose up early in the morning, and took the stone that he had put for his pillows, and set it up for a pillar, and poured oil upon the top of it. And he called the name of that place Bethel: but the name of that city was called Luz at the first."

Romans sometimes swore by Stone Jupiter, '*per Iovem Lapidem.*'

Pausanias, IV:33:6: There are two rivers, Elektra and Koios. They might refer to Atlas's daughter Elektra and Leto's father Koios, or Elektra and Koios might be local divine heroes.

V 11:11: When I asked the attendants why they didn't pour oil or water for Asklepios, they said that the statue and throne of Asklepios were over a well.

The *Old Testament*, *I Samuel* VI. tells how the Philistines sent back the ark which they had captured. It was transported on a cart.

Verse 14: "And the cart came into the field of Joshua, a Beth-Shemite, and stood there, where there was a great stone: and they crave the wood of the cart, and offered the kine a burnt offering unto the Lord."

Verse 18: "And the golden mice, according to the number of all the cities of the Philistines belonging to the five lords, both of fenced cities, and of country villages, even unto the great stone of Abel, whereon they set down the ark of the Lord: which stone remaineth unto this day in the field of Joshua, the Beth-Shemite."

Pausanias, II:35:4: There is a sanctuary of Klymenos at Hermion, through which Herakles dragged up from Hades the dog Kerberos.

Notes (Chapter Two: The Electric Oracles)

1. For destruction of Bronze Age sites, *vide*: Schaeffer-Forrer, *'Stratigraphie comparée et Chronologie de l'Asie Occidentale (III. et II. Millénaires)*(Oxford 1948).
2. Cicero: *'De Divinatione'* I:36
3. *Ibid.* I:37
4. *Ibid.* I:19
5. *Ibid.* I:18
6. Euripides: *'The Bacchae'* 665
7. *Ibid.* 757
8. Sophocles: *'Oedipus Tyrannus'* 473
9. Aeschylus: *'Agamemnon'* 1251 ff.
10. Vergil: *Georgic* IV 149
11. *Ibid.* 219

CHAPTER THREE

DIONYSUS

THE account given of the birth of Dionysus by the followers of Orpheus goes as follows: Dionysus was the son of Zagreus, a son of Zeus and Persephone. He was torn to pieces by Titans, who ate his limbs. Athene rescued the heart, and a new Dionysus was made from it. This dismemberment is in Greek *sparagmos*. Osiris, in Egypt, was also dismembered and then resurrected.

The Titans were burnt up by lightning, and men were born from the ashes and soot. Plato refers to man's 'Titanic nature.'

This 'original sin' was known to other writers as well.

Of special interest to us is the fact that Zagreus is another name for Zeus Katachthonios, Subterranean Zeus, and is held to mean 'Great Hunter.' He must be a god of long standing, since he assisted Kronos in a fight with a monster. The Greeks thought he was the same as the Egyptian Osiris.

The usual story is that Dionysus was the son of Zeus and Semele. Diodorus Siculus, 1st century B.C., refers to an old Dionysus with a beard, who joined in an attack on Kronos, and a young Dionysus, shaven and effeminate.

Semele is an earth goddess (Greek *chamai*, Latin *humus*, and Slavonic *zemlya*. She is long-haired [1].

Euripides, in his play *The Bacchae*, tells us how the thunderbolt from Zeus destroyed Semele, and Zeus hid the infant in his thigh [2]. One version of the tale is that Zeus named him

Dithyrambus because he emerged twice, from his mother and from the thigh of Zeus. But in *The Bacchae*, 526, Euripides appears to derive the name from his having entered a door in Zeus's thigh, *Dios thura*, the door of Zeus.

Much can be found about the nature of Dionysus in *The Bacchae*. Dionysus on his travels comes to Thebes in Boeotia, central Greece. His worship has been rejected by Pentheus, the young king of Thebes. The stranger, who is Dionysus, fills the women with divine frenzy; they rush out to Mount Cithaeron to worship and revel. Pentheus has the stranger imprisoned. There is an earthquake and the stranger breaks free. He induces Pentheus to dress up as a woman and spy on the women's revels. Pentheus is discovered and torn to pieces. His mother, Agave (sister of Semele), triumphantly carries his head back to Thebes, recovers her sanity, and recognises that she has killed her son. (Vide *Agave* in the glossary).

In *The Bacchae*, 594, "*hapte keraunion aithopa lampada*", the stranger urges the reveller to kindle the blazing lightning torch. The scholiast on Euripides, *Phoenissae*, 227, mentions *automaton pur*, spontaneous fire, at his sanctuary on Parnassus, with which we can compare the '*mega selas puros*', great blaze of fire, at his sanctuary in Crastonia in Macedonia. The name of his priestesses, Thyadae, recalls the verb *thuo*, sacrifice by fire. As a god of mountainous places, see Sophocles, *Oedipus Tyrannus* 1105: "Bacchic god dwelling on mountain peaks."

Pentheus vows to stop him "*ktupounta thurson*", making a noise with his thyrsus, and shaking his long hair. *Ktupos* is the sound of an electrical discharge: "*ktupei Zeus Cthonios*", Underground Zeus thundered; [3]. 'Chthonia brontemata', underground thunderings [4]. '*Ktupos*' is a crash of thunder, *Iliad* XX:66.

The plain near Cirrha was sacred to Apollo and was not to be cultivated. In the 4th century B.C., during the Sacred War, the Phocians were fined for disregarding this prohibition. In 347

B.C., the officers on the staff of the Phocian general Phalaecus searched for treasure. As they attempted to dig round the tripod in the shrine, an earthquake occurred and frightened them away. The people living in the district, known as the Amphictyonic League, had responsibility for the protection of Delphi.

The Bacchae, line 145: The Bacchant runs, waving a wand with a flame, rousing the wandering dancers, raising Bacchanalian cries, tossing his luxuriant hair in the *aither*, or air. *Aither* is an interesting word to use here; normally it is the upper air, home of the gods and heavenly fire.

Line 185: The aged Kadmos asks the prophet Teiresias to join the dance and shake his grey head. He loves to strike the ground with his thyrsus. *Kroteo*, strike, means to make a sound by striking, and is used in music.

Line 306: Teiresias says: " You will see him on the rocks of Delphi, and leaping with torches over the twin-headed mountain, striking and shaking the Bacchic branch." One peak of Parnassus was sacred to Apollo, one to Dionysus.

Line 313: Teiresias says: "Pour libations, dance, wear the *stephanos*." The *stephanos*, or crown, was of great importance, and a brief digression is necessary here.

A crown was awarded to a victor in the games. It was also worn by a poet, and by a victorious general. At Olympia, a victor received a crown of wild olive; at Delphi, of laurel, which was sacred to Apollo; at Nemea, of parsley; and at the Isthmian games, of ivy and pine. In the case of ivy, *kissos*, the fruit formed a yellow cluster, *corymbus*, sacred to Dionysus. Offering friends wine to drink in ancient Greece or Rome involved setting up a mixing bowl, *krater*, for the wine and water. One put a crown of flowers not only round one's head, but also round the rim of the bowl. A priest wore a crown when sacrificing. Wine is described as fiery, Greek '*aithon*'.

In a Homeric house, the *krater*, or mixing bowl stood on a tripod in the hall, left of the entrance. It was of silver, sometimes with a rim of gold, as in *Odyssey* IV:615, sometimes all gilt. Vergil has his father Anchises crowning a bowl, filling it with wine, and calling upon the gods: "*Tum pater Anchises magnum cratera corona induit implevitque mero, divosque vocavit.*" [5]

The Bacchae, line 341: Kadmos suggests to Teiresias that he should put on his head a garland of ivy to honour the god. In line 363 Teiresias has a wand with ivy on it.

Pentheus interrupts and says: "Hands off! Don't wipe off your folly onto me." Avoidance of infection and pollution by touch and association was important in Greek life. The bringer of plague was Apollo. This deep-rooted fear may have been encouraged by the sensation and effect of electric shock, and even the movements of Greek dancing may have been influenced by it. The word *skirtao*, dance, is to make movements and skip like a goat. See above, Diodorus Siculus, on goats and herds at Delphi.

Line 494: Pentheus threatens to cut off the stranger's hair. The stranger replies: "My hair is sacred; I cherish it for the god." The word for a lock of hair, *phobe*, is very close to the word *phobos*, fear. In the *Iliad*, XXIII:141, Achilles offers a lock of hair to the dead Patroclus. In Vergil, *Aeneid* VII:391, in a description of Bacchic rout, we see the phrase "*sacrum tibi pascere crinem*", to let grow the hair sacred to you.

The Bacchae, 596. The chorus exclaim: "Do you not see the fire around the holy tomb of Semele?"

Line 626: The stranger tells the chorus how he escaped from prison in Pentheus's palace. The god caused an earthquake, and Pentheus, out of his mind, saw fire from Semele's tomb attacking his house. Water is of no use against this kind of fire.

Pentheus attacks a phantom which Bromios (Dionysus) creates out of shining *aither*. The word used here for shining is '*phaennos*', reminiscent of the old name for Kronos or Saturn, Phaeinos. (Compare the madness of Ajax in the play of that name by Sophocles. He slaughters sheep, thinking that they are his enemies).

Line 665: The Maenads go barefoot, '*leukon kolon*'. In the *Dionysiaca* of Nonnos a Bassarid (follower of Dionysus) was *apedilos*, barefoot. One can compare the Selli, the flamen *Dialis*, and the augur, mentioned above. We might also quote *The Bacchae*, lines 137 ff.: "He is pleasant in the mountains when he falls to the ground." This recalls the giant Antaeus, who derived his strength from the ground, and was defeated when Herakles lifted him up.

Line 704: A messenger reports the revels of the Bacchantes. One of them obtains water from rock by striking with a thyrsus, another strikes the plain and gets wine. Compare the words spoken to Moses, *Old Testament Exodus XVII:6*: "Behold. I will stand before thee there upon the rock in Horeb; and thou shalt smite the rock, and there shall come water out of it, that the people may drink. And Moses did so in the sight of the elders of Israel."

Line 757: Their hair is on fire but does not burn away.

Line 918: The stranger talks to Pentheus until Pentheus has hallucinations. He sees two suns and two cities of Thebes, and horns on the stranger's head. Nonnus, *Dionysiaca* 46, has: "He saw two Phaethons and two Thebes." Vergil, *Aeneid* IV:469, has: "*Eumenidum veluti demens videt agmina Pentheus, et solem geminum et duplices se ostendere Thebas*". Pentheus sees troops of Furies in his madness, a twin sun and two Thebes.

Line 943: The thyrsus is held in the right hand, and raised in time with the right foot (a somewhat equivocal instruction).

Line 977: The hunting dogs of the goddess Lyssa are mentioned. Is there a link with Artemis, the huntress and sister of Apollo? 'Lyssa', rage, is used of martial fury, *Iliad* IX:239. Later it is used of raving caused by gods.

In *The Bacchae*, line 851, "*elaphra lyssa*" means lightheaded madness.

Line 1082: Pentheus has been set up on a high fir tree, to see all the revels. The voice of Dionysus is heard from the *aither*, ordering his punishment. As he spoke, "he set up a column of holy fire to earth and to heaven, and the heaven was silent, and so were birds and beasts..."

Line 1103: The Bacchantes attack, as though with lightning, the branches of oak trees, and scatter the roots (of the tree in which Pentheus is sitting) with levers not made of iron. The word '*synkeraunousai*', striking with lightning, is noteworthy.

Line 1159: At the end of the messenger's speech announcing the fate of Pentheus, the chorus make a few comments, including the phrase "a bull leads to disaster." Already in lines 920 and 921 we have heard of the bull-like appearance of Dionysus. In this play, Dionysus signifies a bull, Kadmos (the founder of Thebes) a serpent.

In *The Bacchae*, the disturbing forces seem to be electrical, rather than alcoholic as one would be inclined to expect, given the connection between Dionysus and wine. Pentheus may see double, but he is not drunk and incapable, nor is anyone else for that matter. Wine would help when electricity failed. The thyrsus could be fitted with a sharp metal point to simulate electrical shock.

The tomb of Dionysus was close to Apollo's tripod in the sanctuary at Delphi, and his successor Apollo is described as Dionysodotes, a dispenser of Dionysus.

When we think of the ancestry of Dionysus, the name Zagreus, and the links with thunder, lightning and earthquake, it seems that Dionysus is almost a double of Zeus. Zeus is a sky god, lord of the clouds and the thunderbolt. The Romans worshipped Jupiter Diespiter, god of the open sky. The Greeks also had Zeus Katachthonios, Subterranean Zeus. The Roman counterpart was Jupiter Veiovis, or Vedijovis, Subterranean Jupiter. The title suggests seeing and knowledge.

We have already seen *Fragment 93* of Heraclitus: "The god whose is the oracle at Delphi neither speaks nor hides. He signals." Another passage from Heraclitus is relevant: "Fire's turnings: First sea, and of sea one half is earth, the other *prester* ...(?) is spread about as sea, and is measured to the same account as it was before becoming earth." '*Prester*' may be connected with *pur*, fire, *sterope*, lightning flash, and *aster*, star or meteor. Turnings presumably imply transformations, but might also imply a changing course.

There are two other fragments to consider with this one: *Fragment 34*: "The beginning and the end on a circle are common;" and "The way up and the way down are one and the same." It seems possible that Heraclitus is comparing celestial fire with electrical 'fire' as experienced at shrines and in caverns in the earth.

Plutarch writes that a visitor to some islands near Britain had been greeted by a great tumult in the air and many signs from heaven. There were violent winds, and *presters* fell.

Passages relating to: Dionysus, *The Bacchae*, fire, crowns.

Homer, *Iliad* IV:533: "*Threikes akrokomoi*" Thracians with hair on the crown. This may mean shaved, except for a crest, or it may mean drawn up in a top-knot.

Iliad VII:321: Agamemnon sacrifices a five year old ox to Zeus, and gives Ajax the best part, the chine. Why is chine best? Presumably because of mane and bristles which may have electrical significance.

Vergil, *Aeneid* III: 125: The Trojans leave Delos and sail past "*bacchatam Naxum*", the island of Naxos, where Bacchic revels take place.

Aeneid IV:469: Dido, despairing of marriage with Aeneas, begins to go mad, like Pentheus who saw the Eumenides and two Thebes.

Pausanias IX:12:3: There is a story that when the thunderbolt struck Semele a log fell with it. Polydorus decked out the log in bronze and called it Dionysus Kadmos. Nearby is a statue of Dionysus in solid bronze. Polydorus was a son of Kadmos, brother of Semele.

Euripides, a fragment from *The Cretans*: The chorus address King Minos: "For when I become an initiate of Zeus and herdsman of night-watching Zagreus..."

At Elis there was a festival, called *Thyia*, in honour of Dionysus. The *anaklesis*, or invocation, has survived; the women call on him to be present with the Graces (Charites), raging with his ox-foot. Plutarch, in his *Quaestiones Graecae*, asks the reason for this in question 36.

The god's epiphany was followed by the miraculous creation of wine. There is reference to Dionysus Tauromorphos, Dionysus in the shape of a bull, in Plutarch's *Isis and Osiris*. In *Orphic Hymns* 44:1: we have "Come, blessed Dionysus, created in fire, with the face of a bull."

Sophocles, *Fragment* 94: "Iacchus with horns of a bull."

Athenaeus mentions a tauriform statue of Dionysus at Cyzicus.

Frazer, *The Golden Bough* XLIII, says that Dionysus was worshipped as Dionysus of the Tree. The Corinthians were commanded by the oracle at Delphi to worship a pine tree "equally with the god," and they made two images, with red faces and gilt bodies.

In Naxos he was Dionysus Meilichios, with face of figwood. There is a connection with honey (scholiast on Sophocles, *Oedipus at Colonus* 159).

He was Dionysus Liknites, He of the Wincrowing Fan. A wincrowing fan was a shallow basket. As an infant he was cradled in it, and his mask is portrayed on it as it is carried in the phallic processions at the Eleusinian Mysteries. Greek 'kalathos' = basket. We shall attempt an explanation of the word *kalathos* in a later chapter.

Plutarch refers to the immortality of the soul as revealed in the Dionysiac mysteries.

At Cynaetha (a name suggesting 'blazing dog') there was a winter festival of Dionysus. The men annointed themselves with olive oil and carried a bull to the sanctuary.

He was in the shape of a bull when torn to pieces by the Titans. His worshippers thought that by devouring a bull they were eating the god and drinking his blood. As a goat, he was worshipped as 'He of the black goatskin'.

Dionysus wore long hair, *phobe*. Compare *phobos*, flight, the outward sign of fear.

For burning which does not consume, compare *Old Testament Exodus* III, Verse 2: "And the angel of the Lord appeared unto him in a flame of fire out of the midst of a bush: and he looked, and behold, the bush burned with fire, and the bush was not consumed. And Moses said, I will now turn aside and see this great sight, why the bush is not burnt. And when the Lord saw that he turned aside to see, God called unto him out of the midst

of the bush, and said, Moses, Moses. And he said, Here am I. And he said, Draw not nigh hither; put off thy shoes from off thy feet, for the place whereon thou standest is holy ground."

Apollodorus, *The Library*, III:4: Dionysus was entitled 'Kid', in Greek *Eriphos*. He was turned into a goat when the gods fled to Egypt to escape the fury of Typhon.

Antoninus Liberalis, *Transformations* 28) .

Apollodorus III:5:3: Dionysus descended to Hades to bring back Semele, whom he named Thyone.

Notes (Chapter Three: Dionysus)

1. Pindar: *Olympian* II:26
2. Euripides: *The Bacchae* 525
3. Sophocles: *Oedipus at Colonus* 1606
4. Aeschylus: *Prometheus Bound* 994
5. Vergil: *Aeneid* III:525

CHAPTER FOUR

AMBER, ARK, AND EL

FURTHER evidence for an electrical explanation of oracles is to be found in the Greek word *elektron*, amber, Latin *electrum*. It has two meanings: amber, the tears of the Heliades, sisters of Phaethon, when he was killed trying to drive the sun's chariot through the sky; and a metal, four parts gold to one of silver. Tacitus refers to it as *glaesum*, flotsam and jetsam, found on the shores of what he calls, in his *Germania*, the Suebic Sea.

There is uncertainty about the gender of the Greek word. The form *elektros* is found, both masculine and feminine, as well as the usual neuter form *elektron*. Its derivation is unknown. It may be connected with *elektor*, shining, of the sun [1]. A link with *helko*, pull, has been suggested, because of the attracting power of amber. Examples of its use: "having a gold chain, strung at intervals with amber beads," "*meta d'elektroisin: eerto*" [2]; a necklace, strung with amber beads, like the sun [3].

I suggest that we look at the links between Greece and the eastern Mediterranean in the period of, very roughly, 1500 B.C. to 500 B.C.. We find evidence of a knowledge and application of electricity throughout the area.

One of the most remarkable artefacts mentioned in the literature of Israel is the Ark of the Covenant. A recent study of the ark has been carried out by De Grazia, in *God's Fire*. There, in Chapter 4, he describes the ark in action. Readers are referred to the book for a full account of all the evidence, but a brief summary here may be helpful.

The ark was basically a Leyden jar, or collector of electrical charge, with the lid of the box supporting two cherubim, figures

with wings. The cherubim were earthed, in electrical contact with the ground. Between them, and insulated from them, was a rod, which collected atmospheric charge. The high priest probably controlled a mechanism which enabled him to adjust the position of the rod to vary the display and sound of the ark. The "mercy seat" is the wings of the cherubim, with the *kapporeth* or lid of the box underneath.

There are representations of Egyptian arks which support this reconstruction. *Kabhodh*, a word associated with the ark, is the radiation. One may compare Greek *kephale*, head, and Latin *caput*, and *capio*, take or contain; compare also the fire playing round the head of Romulus, and of the slave boy Servius Tullius.

'El', as in Hebrew 'Elohim' and 'El', means god. I suggest that *elektron* is 'el ek thronou', Greek for 'God out of the seat'. The Greekless reader needs to know that 'th', theta, was originally pronounced as a t followed by an aspirate, not like English th as in 'thing'.

There are many references in the *Old Testament* to images of Yahweh on the ark, ea. *Psalm XCIX:1*: "He sitteth between the cherubims; let the earth be moved."

Exodus XXV:22: "And there I will meet with thee, and I will commune with thee from above the mercy seat, from between the two cherubims which are upon the Ark of the Testimony..."

II Kings XIX:15: "which dwellest between the cherubims."

The link between god on earth and god in the sky, suggested by Heraclitus and the Delphic oracle, may appear in *Psalm XVIII:9 & 10*: "He bowed the heavens also, and came down; and darkness was under his feet. And he rode upon a cherub, and did fly; yea, he did fly upon the wings of the wind."

In *Exodus XXV:10 & 11*, we learn that the ark is made of wood, overlaid with gold, and in verse 17 that the mercy seat is

of pure gold. "And thou shalt overlay it with pure gold, within and without shalt thou overlay it, and shalt make upon it a crown of gold round about." *Exodus XXVI* contains references to the use of silver for some of the ark's equipment.

The use of gold, and some silver, could perhaps be the origin of the later use of the word *electrum* to denote a metal. In any case gold and silver are excellent electrical conductors.

The ark operated best on a foundation of stones. The Roman augur, too, used a stone for an earth contact. That the fire in sacrifice was 'ethereal' fire, not ordinary fire, is suggested by the fact that water and blood were used to drench an altar and its foundation. This would increase conductivity, and Elijah used this technique. He took twelve stones for an altar, made a trench, and poured twelve barrels of water on the burnt offering, so that the water filled the trench [4]. "The fire of the Lord fell and consumed the burnt sacrifice..." [5]. Compare the report by Plutarch on the death of the Pythia, after much extra water was poured over a goat unwilling to shiver.

We now have an explanation of the word '*enelysios*' for a place struck by lightning. It is sacred, because Zeus Kataibates, Zeus who descends, is god, '*el*', in it, as in the tomb of Semele in Thebes.

There may be other instances of '*el*' in Greek and Latin. Samothrace, the home of electrical experiments, is referred to as "*Elektria tellus*" (Valerius Flaccus 2:431).

'Elysium' seems a possibility, but there is also the 'destination' idea derived from the future tense *eleusomai* of the verb *erchesthai*, to come.

Elakata means wool, on a distaff, *elakate*. *-akate* suggests *akamatos*, tireless. Wool has long been recognised as having some special significance; it may be the clouds from which a god, or heavenly body, appears.

Alauda, lark may be 'great songstress', from *al*, high or great, and *aude*, voice.

Alcis, or Alci, was a deity, or deities, of the Naharvali, a German tribe mentioned by Tacitus, *Germania*.

The Hittite god Alalu was the god who was displaced by Anu, who is the Hittite equivalent, in this context, of Ouranos. *Elektrophaes*, gleaming like amber, occurs in the *Hippolytus* of Euripides, line 741.

Elipharmakos is a plant for staunching blood.

Before we leave the *Psalms*, here are two more quotations:

Psalms LXVIII:4: "Extol him that rideth upon the heavens by his name Jah, and rejoice before him." I suggest that here we have a link with one of the Titans, Iapetos. The Greek verb *petomai* means fly, so the name Iapetos probably means 'Ia who flies'.

Psalms XXIX:7 has: "The voice of the Lord divideth the flames of fire."

When the ark was producing a visual display, there would be sound effects. It was regarded as an oracle; "towards the oracle of thy sanctuary..." [6]. Any student of speech or singing knows that if one whispers the English vowels slowly in succession from E to U and back changes of pitch of the whispered notes are inevitable. The reader is invited to try this, portamento, several times. The resulting whispered sound is 'Yahweh', a tolerable sound representation of a sine wave such as characterises alternating current.

Such a sound must not be intoned casually. There was a fear that electrical shocks or lightning strikes might result. Sympathetic magic will be discussed in later chapters dealing with the Greeks and the Egyptians.

The Romans called certain days of the year *fasti*, other days *nefasti*. Public business was not performed on the unlucky days, *dies nefasti*. *Fas* means 'right', and is linked with the verb '*fari*', to speak. *Dies fasti* may have been favourable days, on which the god was present and spoke.

The Greek *thespesios* means 'divinely sounding', of the voice. It is used of the Sirens [7], and of the voice of a minstrel [8]. It also means ineffable, that which can be spoken only by god. It can mean marvelous. [9]. *Thespiodos*, prophetic, is applied to persons, and also is used by Aeschylus, *Agamemnon* 1134, with *phobon*, fear.

The divine sound was associated with the wind blowing in trees, as at Dodona; against a statue, e.g. that of Memnon at Thebes, and in the prophetic grotto at Egyptian Thebes [10], sounding like a lute string.

At the oracle of Zeus at Dodona, prophecy was associated with the sound of brazen gongs, oak leaves rustling in the wind, with the cooing of doves, and with the sound of the water of the sacred spring. The possibility that the priests, the Selli, had to maintain good earth contact by never washing their feet, suggests that electrical forces were involved, and this theory is strengthened by the fact that there was a circle of tripods touching each other, round a sacred oak, itself having associations with Zeus Kataibates, Zeus who descends.

The ship Argo was built partly of timber from Dodona, and spoke. Mopsus, one of the Argonauts, was traditionally linked with Deucalion, the flood survivor, and founded an oracle at Claros in Asia Minor.

There is an interesting similarity between the Greek *omphe*, divine voice, and *omphalos*, a stone found at Delphi and elsewhere, which may represent the stone that Kronos devoured, thinking that it was the infant Zeus.

In general, sounds were important in Greek religion. *The Bacchae*, line 156, mentions "*barubromon hupo tumpanon*" to an accompaniment of deep sounding drums to the song, dancing, and flutes. Baines, in *Woodwind Instruments and their History*, gives instances of flutes and drums being sacred in themselves, as well as the music which is produced from them.

There is a reference to *elektron* in Pliny: "*Chares vero (sc.dixit) Phaethontem in Aethiopia Hammonis neso obisse, ibi et delubrum eius esse atque oraculum electrumque gigni*" Chares has said that Phaethon perished in Ethiopia in the island of Hammon, and that there is a shrine of his there, and an oracle and *electrum* are created [11]. Note the present tense of *gigni*: 'are created'. not 'have been created'.

Instances of *elektron* and Yahweh:

Iliad XIX:398: Automedon takes the reins, and behind him goes Achilles, shining like *elektor* Hyperion, the bright sun.

Homeric Hymn to Artemis: "I sing of Artemis of the golden spindle (*chryselakaton*)."

Frazer, *The Golden Bough* 60, says that "Holiness, magical virtue, taboo, or whatever we may call that mysterious quality which is supposed to pervade sacred or tabooed persons, is conceived by the primitive philosopher as a physical substance or fluid, with which the sacred man is charged just as a Leyden jar is charged with electricity; and exactly as the electricity in the jar can be discharged by contact with a good conductor, so the holiness or magical virtue in the man can be discharged and drained away by contact with the earth, which on this theory serves as an excellent conductor for the magical fluid. Hence in order to preserve the charge from running to waste, the sacred or tabooed personage must be carefully prevented from touching the ground; in electrical language he must be

insulated, if he is not to be emptied of the precious substance or fluid with which he, as a vial, is filled to the brim."

It is interesting to reflect, at the time of writing (1987), on how close Frazer came to an electrical theory of magic and divination.

Old Testament, I *Kings* VII:29: (Phoenician work for Solomon's temple) "On the borders were lions, oxen, and cherubims."

We have seen the possibility of a connection between *El* and Elysium. In *Odyssey* IV:561 ff., Proteus prophesies to Menelaus: "You will not die in Argos, but the immortals will send you to the Elysian plain at the ends of the earth, where dwells red-haired Rhadamanthus, where life is easiest for men, with no snowfall, no violent storm or rain, but Ocean sends always the sweetly sounding breezes of Zephyrus to restore men."

Hesiod, *Works and Days* 171: The demi-gods dwell in the Islands of the Blest at the ends of the earth. They live free of sorrow in the Islands of the Blest along deep-swirling Ocean, blessed heroes

Pindar, *Olympian* II:71: The righteous go to the Tower of Kronos where the breezes blow round the Islands of the Blest.

Euripides, *Hyppolytus* 732: The chorus wish that they were under the lofty cliffs, that a god would change them into birds, that they could rise up, over the shores of Eridanus, where the thrice-sad daughters of Phaethon shed amber-gleaming tears.

Aristophanes refers to Zeus Kataibates in his *Peace*, line 42. Trygaeus's slave, feeding a huge dung-beetle, his master's pet, says: "This must be the monster of Zeus Kataibates." There is a pun: 'Dio - Skataibates' = 'descending in the form of dung'.

We have mentioned already the use of stone as a foundation for the ark in *Old Testament*, I *Samuel* VI. In verse 11 we are told

that when it was returned, the Philistines laid on the cart the coffer with the mice of gold and the images of the emerods. Verse 19 gives a possible clue to this: "And he smote the men of Beth-shemesh, because they had looked into the ark of the Lord, even he smote of the people fifty thousand and threescore and ten men: and the people lamented, because the Lord had smitten many of the people with a great slaughter. And the men of Beth-shemesh said, Who is able to stand before this holy Lord God? and to whom shall he go up from us?"

I Samuel VII: 6 gives a hint of electrical technique:

"And Samuel said, Gather all Israel to Mizpeh; and I will pray for you unto the Lord. And they gathered together to Mizpeh, and drew water, and poured it out before the Lord, and fasted on that day, and said there, We have sinned against the Lord." (Mizpeh in Hebrew is an altar).

II Samuel VI:(David and all the chosen of Israel fetch the ark from Baale of Judah. They play before it on instruments of fir wood, cornets, and cymbals) Verse 6: "And when they came to Nachon's threshing-floor, Uzzah put forth his hand to the ark of God, and took hold of it; for the oxen shook it. And the anger of the Lord was kindled against Uzzah; and God smote him there for his error; and there he died by the ark of God."

After this accident, David was afraid of the Lord that day (verse 9) and the ark was taken aside into the house of Obed-edom.

The Greek threshing-floor, *aloe*, *halos*, or *dinos*, was sacred: *Iliad* V:499; Hesiod, *Works and Days*, 599.

II Samuel VI:12ff.: "And it was told king David, saying, The Lord hath blessed the house of Obed-edom, and all that pertaineth unto him, because of the ark of God. So David went and brought up the ark of God from the house of Obed-edom into the city of David with gladness. And it was so, that when they that bare the ark of the Lord had gone six paces, he

sacrificed oxen and fatlings. And David danced before the Lord with all his might; and David was girded with a linen ephod."

II Samuel XXI:20: The reference to giants, one of whom has twelve fingers and twelve toes, suggests mutations caused by radiation, and forms a coherent picture with our other information about the ark, and the special clothing and precautions taken by those who handled it. It may be relevant that at the start of this chapter we learn of a three year famine.

II Samuel XXIV:16 ff. contains further references to a threshing floor as a place with divine connections. In verse 15 we hear of a pestilence. Verse 16: "And when the angel stretched out his hand upon Jerusalem to destroy it, the Lord repented him of the evil, and said to the angel that destroyed the people, It is enough: stay now thy hand. And the angel of the Lord was by the threshing place of Araunah the Jebusite."

Verse 24 ff.: "So David bought the threshing floor and the oxen for fifty shekels of silver. And David built there an altar unto the Lord, and offered burnt offerings and peace offerings. So the Lord was intreated for the land, and the plague was stayed from Israel."

I Kings VI contains descriptions of the temple built for Solomon by Hiram. For the entrance of the oracle he made doors of olive tree (verse 31).

VIII:6: "And the priests brought in the ark of the covenant of the Lord unto his place, into the oracle of the house, to the most holy place, even under the wings of the cherubims."

Notes (Chapter Four: Amber, Ark, and El)

1. Homer: *'Iliad'* XIX:398
2. Homer: *'Odyssey'* XV:460
3. Homer: *'Odyssey'* XVIII:296
4. Old Testament: I *Kings*: XVIII:31
5. *Ibid.* Verse 38
6. *Psalm* XXVIII: 2
7. Homer: *'Odyssey'* XII:158
8. Homer: *'Iliad'* II:600
9. Herodotus: I:100; Aeschylus: *'Agamemnon'* 1154; Plato: *'Republic'* 365
10. Herodotus: II 57
11. Pliny: *'Natural History'* XXXVII:2:33

[Click here to view](#)
the next section of this book.