

be shown existing in this earlier Athens: it will defeat Atlantis, which at the time controlled, within the Straits of Gibraltar, Libya (i.e. Africa) up to the borders of Egypt and Europe as far as Tyrrhenia (i.e. Italy): it will restore freedom in the Mediterranean; but will subsequently be destroyed in a great natural cataclysm, which will also swallow up Atlantis. Plato's words are 'Some time later there were earthquakes and floods of extraordinary violence, and in a single dreadful day and night all your [i.e. the Athenian] fighting men were swallowed up by the earth, and the island of Atlantis was similarly swallowed up by the sea and vanished'. And that, incidentally, he adds, is why navigation in the Atlantic is hindered by mud just below the surface, 'the remains of the sunken island'; an extraordinary view which recurs in Aristotle and for which I can give no rational explanation. There is some independent evidence for a belief (possibly based on early Carthaginian voyages) that the Atlantic is shallow, but it remains hard to account for, though it may have suggested the location of Atlantis to Plato.

But that is not all that Critias proposes. Timaeus is to start with an account of the origin of the cosmic system, bringing the story down to man; and as we know from *Critias*, Hermodotes, the third of the trio, is to finish off, after Critias has told the story of Atlantis, with a further contribution whose subject remains unspecified. I don't think it has been sufficiently noticed what an odd procedure this is. In reply to his comparatively simple question, 'Will my ideal state work?', Socrates has inflicted on him an extremely complex account of the physical world, followed by a piece of imaginary history, followed by an unknown tertium quid. And I think it helps to understand Atlantis if we consider this oddity. It has, I suggest, two causes.

1. The Greeks had a bad sense of time. That is what the Egyptian priest in *Timaeus* (to whom we shall return) means when he says, 'you Greeks are all children'; Greek tradition and Greek memory are, he explains, comparatively short. And

APPENDIX ON ATLANTIS

It is in the *Timaeus* and *Critias* that the story of Atlantis, whatever its historical origins, first makes its appearance in literature.

The *Timaeus* opens with Socrates recalling a conversation that had taken place on the previous day. In that conversation he had described an ideal society very like that of Plato's *Republic*. Very roughly, the social and political provisions of the *Republic* are recalled, the rest of it omitted. And the conversation so referred to cannot be the *Republic* itself, because the *Timaeus* and *Republic* are supposed to take place on festivals that are two months apart: a fairly clear indication by Plato that the *Timaeus* and *Critias* are not to be linked any more closely to the *Republic* than he actually suggests. There is of course some controversy about the relative dates of the three works. The *Republic* is certainly a work of Plato's middle period. The date of the *Timaeus* has been disputed. Let me merely repeat here that I accept the traditional view that it was written in the later period of his life, though precise dating is hazardous. The main point is that the summary we meet in the early part of the *Timaeus* is not an indication of a close connexion, but of a deliberate glance back to an earlier work, some of the features of which are picked out for purposes of the later dialogue.

After recalling his ideal society in outline Socrates says that he has always been bothered because he can't make it come to life. It is a pretty picture; but would it ever work? It is here that his three companions come in; they are to 'provide a sequel' to what he has described by showing his ideal state in action, 'war' being one of the actions specified.

It is in this context that Atlantis is introduced. Critias proposes to retell an old story, originating with Solon, of a war fought by an earlier Athens against a great power based on an island - Atlantis - in the Atlantic. Socrates' ideal society will

though the Greeks, both philosophers and others, were interested in origins, they seem to have been curiously lacking in their sense of the time-dimension (there is something about this from a slightly different point of view in Toulmin's *Discovery of Time*). What is more, in so far as they thought of the past they seem to have thought in terms of degeneration from a perfect primitive state or of cyclic repetition. The idea of degeneration we meet in the *Republic*, Book VII: the idea of cyclic repetition in the *Politics*. And in the *Timaeus* again we have the notion of periodic destructions by natural cataclysm, followed by a slow redevelopment of civilization – a notion that recurs once more in Aristotle. Plato is grappling again in *Timaeus*, *Critias* and *Hermocrates* with this problem of development in time, and Atlantis is *part* of one *phase* in it. (Incidentally I very much doubt whether much idea of historical determinism is to be found in him, as Sir Karl Popper suggests. Plato simply didn't think in those terms.)

2. Plato was always plagued by the contrast and conflict of the ideal and the real. With all his greatness he had about him more than a dash of the don and the doctrinaire, of the man who *knows* and the man who will not learn that life simply isn't like that. Had he not in the *Republic* answered James Thurber's question 'Is Sex Necessary?' with a pretty emphatic No: yet here were men and women carrying on just as before. And more seriously, his attempts to put principles into practice, for example in Sicily, seemed always to founder on the rock of human nature that would not tolerate them. I think that in this trilogy we have another attempt to grapple with this problem of the ideal and the real. The *Timaeus* gives the religious and philosophical background; the *Critias* a version of earlier history: while the *Hermocrates* was to have brought the story down to the present and grappled with present realities. And perhaps the abandonment of the design had something to do with events in Sicily. There Plato had tried to intervene in the real world, and in Dion had hoped to see a philosopher-king; but in the real and harsh world of Syracusan politics the same

Dion became an armed revolutionary. It is difficult to be sure because of dates; the fact that Hermocrates is commonly identified with the fifth century Syracusan prominent in the war against Athens is surely not without significance. But may Plato not have felt that he must begin all over again, abandoned his trilogy and turned to the *Laws*, which (as Cornford pointed out) covers much of the ground to be expected in the *Hermocrates*?

Atlantis, then, is part of a middle episode in an attempt to grapple with the problems of human history and the ideal and real in human society. Let us now look at the account in the *Critias* in more detail and then consider some of the questions it raises.

First the alleged origin of the story. Critias says he had it from his grandfather, who in turn had it from his father Dropides, who had it from Solon, who heard it when he was abroad on his travels in Egypt. To the credibility of this I will return: for the moment I will merely say that it is chronologically possible, if you put the dramatic date of the dialogue at about 425 B.C.

The story is one of a great and successful war waged by antediluvian Athens (Athens before the catastrophe which overwhelmed them both) against Atlantis. There is a brief description of Athens. The land and countryside is more extensive and more fertile than it is today, after successive cataclysms have eroded the soil. The institutions are those of the ideal society described by Socrates, with the Guardians (Plato uses the term) living on a rather less bleak and rocky Acropolis. This, with the introductory conversation, brings us more than a third of the way through the fragmentary *Critias*; but in what remains we have had a fairly full description of Atlantis, because when he breaks off in mid-sentence Plato has finished his account of Atlantis, and is about to describe the process of degeneration in the Atlanteans which brings them, as a punishment, into conflict with Athens. He has therefore little more to tell us about Atlantis itself – the rest of the *Critias*

Gibraltar, in the Atlantic. There are other islands in the Atlantic too, and Plato speaks as if the Atlantic were itself enclosed by land which was accessible from these islands. One probably ought not to draw conclusions about Plato's geographical views; but one is reminded of the 'true surface of the earth' in the *Phædo*, on to which a land-girt, island-studded ocean with the Mediterranean as an offshoot would fit well enough.

To return to the geography of the island. We have seen that it is large, and a good deal of it is mountainous. It has lavish mineral resources (including orichalc), plenty of timber and all kinds of animals (including elephants); and it is generally very fertile. It is longer than it is broad and its longer sides face north and south. In the middle of its southern side is an oblong plain 'said to be the most beautiful and fertile of all plains'. This plain is bounded on its seaward side by high cliffs and its natural dimensions are roughly 3,000 stades¹ by 2,000 stades. Irregularities in its rectangular shape have been rectified artificially by a ditch dug round it for purposes of irrigation in the form of a rectangle of 3,000 × 2,000 stades. This ditch or canal is a stade wide. Cross ditches are dug at intervals of 100 stades from the landward to the seaward limb of the ditch; and channels also connect these cross ditches. Plato is a bit vague about these channels; he says that 'the whole complex was used to float down timber from the mountains and to transport seasonal produce'. And it is tempting to envisage the whole system as a vast chequer board. But Plato is not definite and makes a mistake in his mathematics, failing to allow for the width of the cross ditches in his calculations. Yet the pattern must surely have been symmetrical, and the chequer board is the easiest assumption. The only other thing worth noting here is that the mountains surrounding the plain are said to be large and beautiful, with a large and wealthy population and abundance of timber and other natural resources.

But what Plato is most interested in and spends most time

1. A stade is very slightly less than a furlong.

would have been concerned with the degeneration of the Atlanteans, the war with Athens and the final catastrophe, about which all we have is the brief summary in the *Timæus* to which I have already referred.

The account starts with pure myth. When the gods divide up the Earth between them, Atlantis falls to Poseidon. There are already some inhabitants (called earth-born) and (inevitably, one feels) Poseidon falls in love with Cleito, the daughter of two of them. The result is five pairs of twins. They and their naming and the allocation of Atlantis between them take up a rather tedious passage; the only point of importance is that the dynasties they found rule their respective parts of the island absolutely. 'Each of the ten kings had absolute power, in his own region only, over persons and in general over laws, and could punish or execute at will.' And that's about all the politics there was in Atlantis: no question of participation.

When we come to the description of the island we must remember the story of which it is a part. Atlantis is to be a *great* power; the story requires it. Until degeneration it is not a *bad* power – it is, so to say, a hero turned villain, and we are concerned with its heroic phase. And because it is powerful and, initially, approved of, and because it will eventually be defeated and disappear, it will be all to the good if some of its features are strange and unusual. It will have an element of the wonderful about it, or if you prefer the modern term, it will be the first exercise in the art of science fiction. So the temple of Poseidon is a bit outlandish to look at (*βαρβαρικόν*): so the country's livestock includes elephants, then comparatively unknown, this being their second mention in Greek literature: so there is a completely unknown and imaginary metal in use, orichalc.

But we must go on with the description. After begetting his twins and enclosing Cleito's original home with rings of water and land (to which we will return) Poseidon fades out, though he remains tutelary god. Atlantis itself is a large island, 'larger than Libya and Asia combined', opposite the Straits of

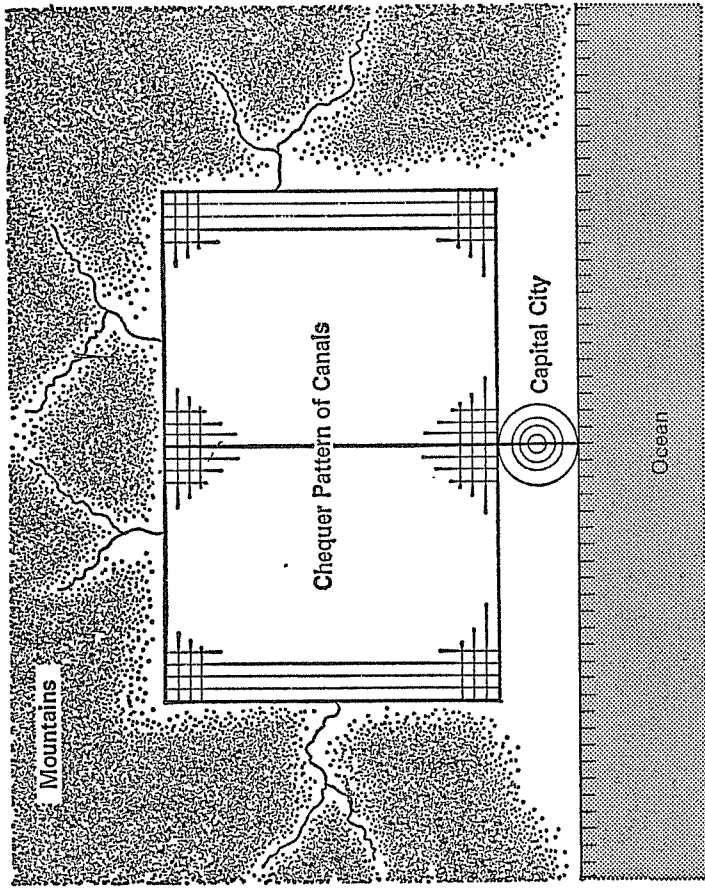
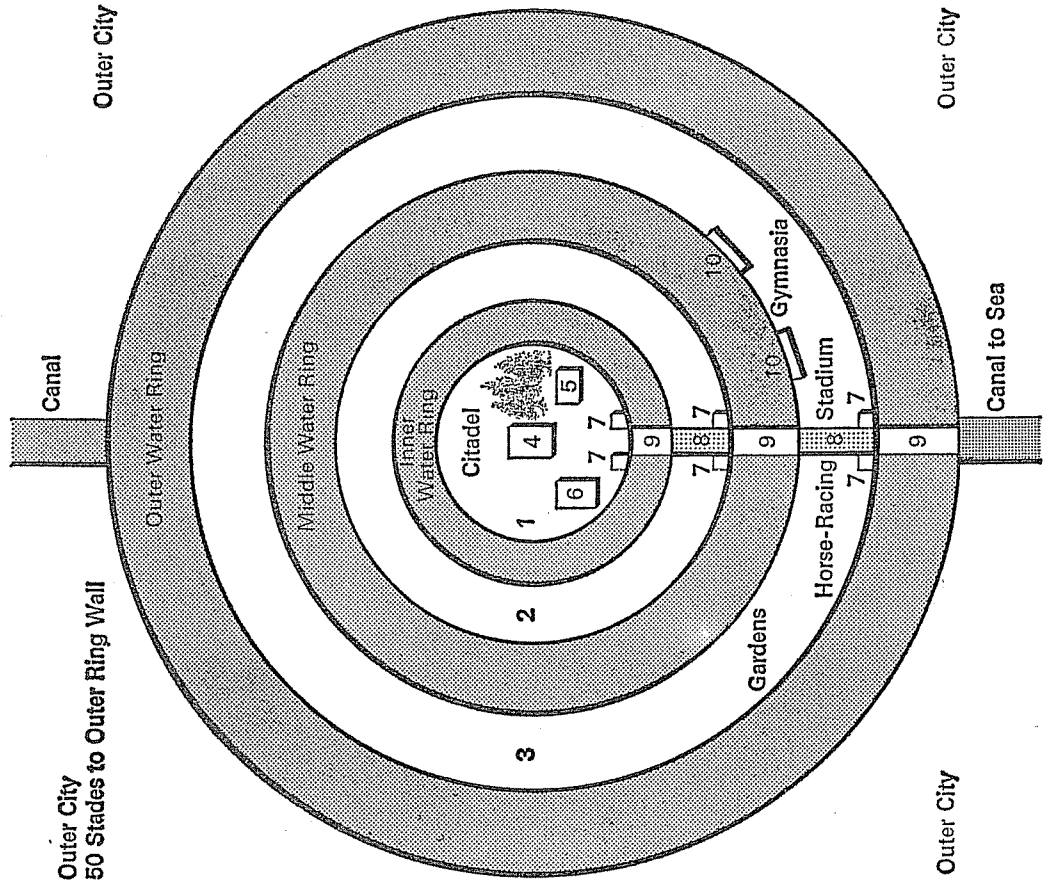


FIGURE 8



Key

- 1 Central island
- 2 Smaller ring-island
- 3 Larger ring-island
- 4 Shrine
- 5 Springs
- 6 Palace
- 7 Towers and gates
- 8 Covered channels
- 9 Bridges
- 10 Docks

FIGURE 9

describing is the capital city itself, and more particularly its inner citadel. At the central point of the citadel is the original home of Cleito and Poseidon. This is a low hill about 50 stades inland. An outer wall, circular and with a radius of about 50 stades, surrounds it. And the city is therefore thought of as a circle, lying between the seaward irrigation canal and the coast and touching both tangentially. Its outer wall is densely built up with houses but that is all we hear about it.

This part of Plato's description is shown in Figure 8. It assumes a checker-board pattern for the canals; and notice that the irrigation system has its outlet to the sea through a canal that runs through the city. The inner citadel is shown as a series of small rings at the centre, and it is that inner citadel that Figure 9 illustrates. Its basic form was determined by Poseidon who ringed the small hill where Cleito lived with two rings of land and three of water; but its equipment and buildings are the work of the inhabitants.

Details are as follows:

The breadth of the rings of land and water is 3 + 3, 2 + 2, and 1 stade, and the central island is 5 stades across (is it significant that this gives a total of $27 = 3^3$?). Each land ring is surrounded by a wall; ring 1 is plated with orichalc, ring 2 with tin, ring 3 with bronze. The water rings are *bridged*, and the land rings *pierced* by roofed underpasses for triremes. These are shown as rather awkwardly coinciding at their ends: which does not so much matter for the underpasses, but is awkward for the final bridge whose outer end must coincide with the inner end of the *canal to the sea*, which leads out of it and to which corresponds a *canal leading to the irrigation system*. To finish off these features of general lay-out the bridges have *guard-houses* at their ends (7: it is not clear whether at both ends or one) and we are told that each ring and the central island is appropriately garrisoned. Stone for building is quarried from rings and island and pairs of underground docks constructed in the process (10).

The *central island* contains

6 The royal palace.

4 Shrine of Poseidon and Cleito plus temple of Poseidon, 'rather outlandish', and surrounded by a golden wall.

5 Baths, supplied by hot and cold springs (separate accommodation for royalty, commoners, women and horses), and the grove of Poseidon. The ring-islands have temples, gardens, gymnasia and barracks; and the outer, larger island has a horse-racing stadium running all round it.

One should perhaps add in conclusion:

1. That there is a military organization that is a sort of cross between Sparta and Homer: *Sparta*, in that the land is distributed in allotments (*κλήροι* 119A) which carry an obligation to military service; *Homer*, in that chariots are still the major weapon of war.

2. That control is in the hands of the ruling dynasty (descendants of the twins) who have as we have seen absolute power, and who meet periodically for consultation which takes place with a lot of ritual, a lot of dressing up, and the catching of a bull followed by its ritual sacrifice.

What are we to make of all this?

We must remember Plato's purpose - to describe a rich, powerful and technologically advanced society to serve as an opponent of his ideal Athens. He had a fertile imagination and in Atlantis produced (I have suggested) the first work of science fiction. And (using that description in its widest sense) his Atlantis has been widely influential; he certainly started something. But we must be very careful about reading meanings into his narrative. Some things are clear enough. Hippodamus had already planned cities, and Plato's mathematical predilections would naturally make him choose a symmetrical plan for his canals. Anyone who has studied the *Timaeus* knows his obsession with circles (which are the governing force in the universe and in the human head) and cannot be surprised that the shape of his city is circular - no need to look for Babylonian influences as some have done. Indeed once you start on interpretations and influences it is hard to stop. Perhaps

history of Atlantis" or "The Carians of Homer are the same as the Caribs of the West Indies".¹

And Bramwell tells us that the theosophists and occultists have had their say about Atlantis as well. Nor need you, if you don't like it, stick to the location in the Atlantic; the hunt for alternative sites is all part of the game.

But none of this, bar the initial suggestion of a lost continent, has much to do with Plato.

2. The second type of reply can be called the *geological*. This attempts to keep within the bounds of fact by producing scientific evidence for the existence of an Atlantic continent at some earlier phase in the earth's history. There is a raised ridge in the Atlantic, running from Iceland to the South Atlantic, and surfacing at the Azores, Ascension Island and Tristan da Cunha; and some geologists have held that it is the remains of a landbridge between Europe and America. There are, in addition, quite a number of legends on the Atlantic seaboard about lands and cities engulfed by the ocean, which, it can be argued, indicate a thread of human memory going back to a great inundation. And there are of course problems of human origins, cultural parallels and distribution of flora and fauna which can be fitted neatly into a lost Atlantis, as Lewis Spence has done in his books on the subject.

But the geologists are not agreed: the time scales don't fit easily; legends of lost cities can be accounted for by known and comparatively minor shifts of coastline and sea level; and when Lewis Spence argues that the suicidal habits of the Norwegian lemming are due to a migratory habit directing it to lost Atlantis, fact has surely again been swallowed up in fantasy.

In any event all this again has little to do with Plato, or with his Egyptian priests, whose memory may have been long but whose records hardly stretched back into geological time. The latest summary of this particular argument by Galanopoulos and Bacon (who are quite capable of their own flights of fancy) runs as follows: 'There never was an Atlantic landbridge since

1. *The End of Atlantis*, p. 42.

Cleito's five pairs of twins are due to the importance of the decad. But the decad is commonly regarded as the sum of 1, 2, 3, 4: so why did Plato not give her a singleton, twins, triplets and quadruplets? Such speculations are profitless, whether they come from the learned, with elaborate parallels from Plato's other dialogues, or merely from cranks.

But Plato's Atlantis, besides starting a new literary form, has of course been the source of endless speculation. And that speculation has centred largely round the simple question, 'Did Plato invent Atlantis?' If he did then no further question arises. If not then what was his source?

Replies can be grouped into three categories, of which I must discuss the first two very quickly. They are dealt with fully in James Bramwell's *Lost Atlantis*.

1. *The crazy*. There is no doubt that a preoccupation with Atlantis often leads to a certain craziness, and you have to be on the look-out for this even in works of apparently serious scholarship. For learned articles, in their wealth of cross-references to other dialogues and their ingenuity of interpretation, can be almost as wide of the mark as explanations more naively crazy. The idea of a lost world or continent is an invitation to let the imagination run riot, and the number of books on the subject runs well into four figures (it has been estimated at 5,000). The first and perhaps the best known of the more recent in the series is Ignatius Donnelly's *Antediluvian World*, published in America in 1882. It supposes there to have been, as Plato said there was, a lost continent where the Atlantic now is, and to it and to its inhabitants attributes the origin of almost everything. Luce's summary is not unfair:

'There was once a land connection between Europe and America; ergo Atlantis. Primitive and cultured people all the world over have Deluge legends; ergo Atlantis. Peruvian and Mexican civilizations were as advanced as anything in the old world; ergo Atlantis. Having accepted all this one is in no mood to question such propositions as "Genesis contains a

the arrival of man in the world: there is no sunken land mass in the Atlantic: the Atlantic ocean must have existed in its present form for at least a million years. In fact it is a geographical impossibility for an Atlantis of Plato's dimensions to have existed in the Atlantic'.¹ And this judgement seems to be a fair statement of present geophysical opinion.

3. So we come to the third type of answer, the *historical*. First, how serious is Plato in his story about Solon and the Egyptian priests? Taylor, who spent a lifetime trying to prove that every word Plato wrote was an historical record, rather surprisingly says that we could hardly be told more plainly than we are by Plato's narrative that the whole story is a fiction. And yet it is precisely in this sort of detail - date, setting, relative ages, personalities - that Plato is often at his most realistic. The sequence Dropides - Critias/grandfather - Critias/grandson is chronologically possible. And I am prepared to go so far as to say that there may be *some* foundation in fact in Plato's tale. But what foundation? Again I would maintain that we cannot expect much detail and will probably mislead ourselves if we look for it. But Solon might have heard a story of a powerful island people overwhelmed by some natural disaster; and perhaps of its involvement at one point in an unsuccessful war, though I should be very hesitant about this, for Plato's ideal antediluvian Athens is clearly a deliberate fiction. The only other expectation which seems reasonable is that the story should be of a purely Mediterranean disaster in historic time.

The historical answer to which I now come was first suggested by K. T. Frost in 1913, in an article in the *Journal of Hellenic Studies* whose title indicates its thesis - 'The Critias and Minoan Crete'. Frost's thesis in short is that in the Atlantis story we have a *reminiscent* of Minoan Crete. Assuming the Solon story to be true, at least in essentials, he asks, in effect, to what powerful island civilization and its destruction could the Egyptian records have referred? We know that there was

1. *Lost Atlantis*, p. 75.

contact between Egypt and Minoan Crete, and Frost rehearses the evidence. And if our few extant Egyptian records have references to Crete may there not have been more in Solon's day? Atlantis is of course not in the Mediterranean. But, to an Egyptian, Crete was north-westerly, and the west was traditionally the place of fable and mystery, of the golden apples and the gates of Hades, and of Homer's Phaeacians, also sometimes regarded as a Minoan reminiscence; and these two factors are enough to account for the displacement. Again, we must beware of details. I don't really believe that the Atlantic mud is the quicksands of Syrtis; nor do Frost's other details convince. There may indeed be a Minoan cup showing a bull caught in a net; but I can see no real connexion between Plato's rather complex ritual and what we know of the bull of Minos.

But one key piece of evidence was not available to Frost. The great island in the west must be overwhelmed in a natural disaster; and we have today a suitably-dated disaster to fill the bill. In 1939 Professor Marinatos drew attention to the volcanic explosion which overwhelmed the island of Santorini, or to use its ancient name, Thera, in the fifteenth century B.C. and suggested that it might be responsible for the widespread destruction which took place in Crete at the end of the century, after which the island never recovered its former prosperity.

First, a distinction. There are two questions to be answered: 'Could Minoan Crete have been overwhelmed by earthquake and volcanic explosion?' and 'Could any inking of this have reached Plato?'

It is with the first of the two questions that I begin.

I have used the phrase 'volcanic explosion' because the eruption of Thera was no ordinary eruption like for example that which overwhelmed Pompeii. What it was like we know from the explosion of Krakatoa in the East Indies in 1883 (there have been similar explosions, one for example at Tambora in the same area: but Krakatoa is the best documented). In this sort of volcanic action it is not a matter of the mere

flow of lava and ash. There is an underground accumulation of volcanic matter (magma) followed by an explosion which blows a great hole in the earth. The results are pretty startling. The explosion of Krakatoa was heard in Western Australia, three thousand miles away: most of Krakatoa disappeared: clouds of volcanic ash turned day to night as far as 160 miles away, and caused particularly fine sunsets all over the world that year: there was a great tidal wave and at distances up to eighty kilometres away waves averaged fifteen metres high, while a small warship at anchor in harbour ended up two miles inland. It should be added that both Thera and Krakatoa lie on major fault lines, and that the 1883 explosion was preceded by 'six or seven years of earthquakes'.

You will notice that there are three main features in the process. The fall of ash, the tidal wave, and the associated earthquake which need not be precisely contemporaneous. That there was an explosion of this kind at Thera is unquestionable, and doubted by no one. Its antecedents and effects are more difficult to assess in detail. In Thera itself destruction was absolute. A great deal of it simply disappeared. On what remains there is clear evidence of Minoan settlement, and excavations are still in progress under Professor Marinatos. And the wider effects of the explosion have similarly to be assessed on a combination of seismological and archaeological evidence.

The earliest published investigation of Thera was by Fouqué, *Santorini et ses éruptions* (Paris 1879). He was concerned with the seismological and geological evidence; he did some excavation, but he wrote before Evans's excavations in Crete and what he has to say reads rather quaintly today. The most complete recent treatment from the seismological point of view is by two Americans, Ninkovich and Heezen (Colston Papers, 1965).

The date of the explosion seems to have been some time in the fifteenth century. Carbon 14 dating is never very precise,

but the consensus of tests that have been made points to such a date; and it has long been accepted by archaeologists that there was a general destruction of Minoan sites sometime in the latter part of the century. There is growing agreement that the two events - the explosion and the destruction - are connected; and both types of evidence point to the second half of the fifteenth century, though it is worth adding that the final explosion of Thera may have been preceded by a series of earlier eruptions and earthquakes of less intensity. (And here we may clear up a minor point. Plato talks of the destruction of Atlantis as having taken place nine thousand years before his day. But he had little idea of time and dating, as we have seen, and it is just possible that a misunderstanding of the original figures could have led to multiplication by ten; which would bring one back to about the date which we have just established.) But when we come to consider the extent of the final disaster, we learn that the caldera (or crater caused by the explosion) is four times larger at Thera than at Krakatoa. Simple multiplication is no doubt not permissible, but the figure gives some idea of the scale of the disaster. Let us look at the three features I have enumerated.

First, the ash. Ninkovich and Heezen are able to quote the evidence of cores taken from the sea-bed, which show a wide-spread fall of volcanic ash, drifting on the heat storm produced by the combination of the explosion and the prevailing north-west wind, and so not affecting the mainland or much of the Aegean. But the fall in central and east Crete would have been considerable. If one takes Ninkovich and Heezen's figures for cores taken from the sea, it seems likely that there was an average fall of 20 cm, and probably in many places rather more. Such a fall would destroy all vegetation and make the affected area uninhabitable for a period up to a generation. Estimates of the tidal wave which must have occurred vary widely (from 50 to 600 feet): nor is it easy to be sure of its path. And the particular kind of destruction which archaeology has found seems unlikely to be due to flooding. It may be that the deep

water between Thera and Crete would absorb the shock; tidal waves run highest in narrow and shallow waters. On this factor therefore I can feel no certainty: there must have been a tidal wave, but its effects may have been restricted, though it is likely to have wrecked harbours and ships.

When we come to the third factor, the earthquake, we can again speak with more certainty. We have seen that it is generally accepted by archaeologists that there was widespread destruction in central and east Crete in the latter part of the fifteenth century. The type of destruction, the collapse of buildings followed by fire, is that caused by earthquake damage, and it seems reasonable to suppose that it was so caused, and that the explosion of Thera was associated with a major earthquake. The joint result was a devastation from which Minoan civilization never recovered. There was material and cultural decline and political domination by Mycenae.

That this was the general picture seems reasonably certain. It is more difficult to reconstruct events in detail but it may be that what happened was somewhat as follows. In the first quarter of the fifteenth century there was an eruption on Thera which destroyed the Minoan settlement there (archaeological evidence shows that the destruction took place before the final disaster in Crete). At about the same time there seems to have been some earthquake damage at Cnossos, necessitating considerable repairs though no major reconstruction. The subsequent period at Cnossos was that of the so-called Palace style of pottery, showing Mycenaean influence, and of the Linear B Tablets, which, being in Greek, again show Mycenaean influence, indeed perhaps domination, for a change of language is likely to indicate a change of political control. Perhaps the earthquake damage at Cnossos, even if not major, gave the Mycenaean the chance to extend their influence. The course of events in the middle and later part of the century is uncertain, and archaeologists are not agreed. But it seems easiest to suppose that the final destruction affected all sites alike, rather than that Cnossos alone in a measure survived (in archaeological

terms, to follow those who suppose that periods Late Minoan I B & II are contemporaneous). The latest dateable archaeological find from this period (an Egyptian seal at Hagia Triada) is dateable to the late fifteenth or early fourteenth century, and the commonly accepted date for the final disaster about 1400 B.C. Thereafter, as we have seen, the story is one of cultural decline and Mycenaean domination. Idomeneus at Troy is subordinate to Agamemnon.

The answer, therefore, to my first question, 'Was Minoan Crete overwhelmed by a natural catastrophe?' is Yes. I turn to my second question, 'Could Plato have had any inkling of this?' If we accept the Solon story as possible at all, then I think it is equally possible that it may have contained a reference to a powerful and highly civilized island in the west overwhelmed by earthquake and flood. The Egyptians were in touch with Crete and would be likely to hear something of the Thera catastrophe; and if Krakatoa is anything to go by they would have had some direct experience of its effects. (Australia is further from Krakatoa than Egypt from Thera). Nor does it seem to me in the least surprising that the story should occur only in Plato. By his own account it had survived as, so to speak, a bit of family gossip in Critias' family. There was nothing in the Greek mind or memory to connect it with Crete, and all Plato did (if he did anything) was to pick it up as something he could incorporate in his latest account of early human history. The details are all his own (there were no elephants in Crete), and any hunt for correspondence of detail between Atlantis and Minoan Crete is a wild goose chase. It is tempting, as one stands on the site of Phaestos, looking over the plain of Messara, to suppose that this is the low hill on which the citadel of Atlantis was built, that Phaestos was Atlantis and the plain of Messara (with suitable irrigation works) the 'most beautiful of all plains' described by Plato. But it is a temptation to be resisted. For Plato's purpose was not in any proper sense historical. He was concerned yet again with a conflict which plagued him (as in different forms it plagues us all) through-

out his life. At its deepest, most philosophical level it is the conflict between appearance and reality, between fleeting experience and eternal truth; at its political level it is the conflict between principle and practice, between what we think ought to be and what regrettably is. He had dealt with this conflict in the Republic, where we find the philosophical background, the principles on which society ought to be organized, and then in Books VII and VIII the regrettable-degeneration-into the world of politics we know. How far the historical form in which in the Republic Plato casts this degeneration is to be taken seriously, is a matter for argument. But he returns to the idea again in the *Timaeus*, *Critias*, *Hermocrates* trilogy. The *Timaeus* deals again with the problem of change and permanence, and brings it closer to the real world because it is concerned, for most of its length, with physical reality. The *Critias* deals, professedly, with an early period of human history, though it is history with a strong element of myth in it, witness the appearance of Poseidon and Cleito. Could the ideal ever have been realized? Yes, says Plato; and it would have defeated any opposition however powerful. Not (I think) a very convincing way of making Socrates' lay figures come to life. But it is what Plato did. In the *Hermocrates* he would surely have had to come to closer grips with the world of political reality, as he had in the *Timaeus* with the world of physical reality. Why did he break off with the job only half-finished? If Hermocrates the Sicilian had any link in his mind with Dion, perhaps sadness at seeing a potential philosopher-king engulfed in the harsh realities of political life made him reluctant to continue. More likely, he felt that the design of the trilogy was unsatisfactory, that the central problem of transferring political ideals to real life needed different treatment - treatment he attempted in the *Laws*. Atlantis was a by-product in the whole process, but one that has been to later generations an inspiration of doctrinal fancy and of fictional other worlds.

But if Atlantis was a by-product, one incident in a much

wider canvas, nonetheless it is not without its modern relevance. I have suggested that the *Critias* is the first essay in science fiction. For science fiction there seem to be two motives. First, the attempt to peer into the future and guess what man's growing control over nature may enable him to do. This motive, you will say, can hardly have operated with Plato. Yet if Atlantis is situated in the past, it is nonetheless a society with an advanced material civilization, a construction by the imagination of what man's ingenuity could achieve. There is a certain similarity. The other motive is, to put it unkindly, the wish to escape from reality. Most of us, if we are honest, know that much of what we read is read to relax the mind, to take it away from its preoccupations in a weary life and let it escape into another realm. We each have our particular choice. You may find your anodyne in sentimental romance or in a detective story. Some science fiction seems to find its outlet in sentimental romance, as in a story in which the hero first sees the heroine in a bubble-bath on board a space ship, with the proprieties preserved by the presence of two very scientific eagles. Plato was not given to that particular kind of escapism. But in the story of Athens and Atlantis he has yielded to escapism of another kind. For surely if you cannot see how your Utopia can ever work in the real world, it is mere escapism to project it either into the distant past or into the distant future. But many others have followed him down this particular escape route.

When men think about politics they tend to think either about the world as it is or about the world as they would wish it to be. The tension between these two opposite ways of thinking is probably needed if we are to retain any balance. But each of them has its dangers. If you look at life as it is you may well feel how fragile a thing political order is, something built up over the years with much care and sacrifice. You will become legitimist, traditionalist, conservative, prepared for change only on good pragmatic grounds. Yet society needs its critics, men cannot live without faith, without the burning

desire to right what they see as wrong. But in the real world good intentions alone are not enough; they harden easily into dogma and intolerance. Plato's *intentions* were admirable; and he could give a shrewdly realistic analysis that can fit painfully well in places today: if you want an account of the permissive society turn to the *Republic*, Book VIII – ‘the teacher fears and panders to his pupils . . . their elders try to avoid the reputation of being disagreeable or strict by aping the young and mixing with them on terms of easy good fellowship’. Yet in the *Republic* he sketched a society that is surely by any human standards intolerable, and the gap between it and the needs and possibilities of the human beings who must live and suffer in the real world is aptly symbolized by the rather desperate attempt in the *Critias* to pretend that it *could* exist and indeed *had* existed, but far away and long ago. This kind of pretence does no one any good; on the contrary it is the source of much human suffering, because it tempts us to sacrifice people to principles. Examples in our own time are ready enough to hand. I will content myself with a brief concluding reference to Milovan Djilas's book, *The Unperfect Society*. The word *unperfect* is used deliberately to contrast with what Djilas calls ‘the perfect, or classless society’, which is the goal, as I would say the illusory goal, of so many well-intentioned people today. And here is Djilas's own explanation, a fit comment on all Utopians from Plato onwards:¹

I need perhaps to explain here my use of the word ‘unperfect’, with which I seek to make a semantic distinction from the more common ‘imperfect’. As the chapters that follow will illustrate, it is my belief that society cannot be perfect. Men must hold both ideas and ideals, but they should not regard these as being wholly realizable. We need to comprehend the nature of utopianism. Utopianism, once it achieves power, becomes dogmatic, and it can quite readily create human suffering in the name and in the cause of its own scientism and idealism. To speak of society as imperfect

1. Milovan Djilas, *The Unperfect Society*, p. 2.

may seem to imply that it can be perfect, which in truth it cannot. The task for contemporary man is to accept the reality that society is imperfect, but also to understand that humanist humanitarian dreams and visions are necessary in order to reform society, in order to improve and advance it.