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Editorial

EASTER this year, in Jerusalem, was a particularly pleasant experience, not only because of the kind hospitality of the British School of Archaeology there, under its new Director, Mr Basil Hennessy, and the friendly chaperonage of the former Deputy Director, Mrs Crystal Bennett, who took us to Jericho and Petra and made us do that splendidly rewarding and never-to-be-forgotten walk from Nassal's Camp via Beidha to Wadi Musa. And, incidentally, readers will be glad to know that we have been promised articles for ANTIQUITY by Mr Hennessy on his discoveries at the Amman airport, by Mrs Bennett on her excavations at Umm-el-Biyara, and a summary by Mrs Diana Helbaek (née Kirkbride) of her several seasons' work at the fascinating early village of Wadi Beidha.

It was also an exciting experience in that all the Easters coincided this year which made Easter Morning in the Holy Sepulchre an aural palimpsest of religions et moeurs; and also coincided with the return of pilgrims, mainly Turkish, from Mecca. In the journey from Jerusalem to Petra we must have met well over 200 Turkish buses-old and decrepit, stuffed with people, the roofs piled high with bedrolls and all else including kitchen stoves: it was a moving sight to see a bus come to a stop at the hour of prayer and disgorge its contents into the sand of the desert-a moment later 50 to 70 black-clad and red-bearded figures were prostrating themselves at the roadside. The embussed Hadj is indeed a fascinating spectacle.

Along the new motor-road to Petra there are signs, as one approaches, saying how many miles to 'the rose-red city'. And so, finally perpetuated in the road-signs of the Hashemite Kingdom of Jordan, is that oft-quoted line from Burgon's Newdigate Prize poem, *Petra* (Oxford, 1845). Actually the couplet deserves quotation to explain the real context:

Match me such marvel save in Eastern clime, A rose-red city—'half as old as Time'!

Many who repeat the tag-phrase forget that Burgon put 'half as old as Time' in quotation marks, and this was because he was quoting it from the poem of his older friend Samuel Rogers. The dates of Samuel Rogers were 1763to 1855: he was an entertaining and amusing character (as surely anyone would be who is described by the *D.N.B.* as 'originally Welsh with a dash of French blood'), and apparently the phrase first appeared in his poem *Italy. A Farewell* (ii.5):

By many a temple half as old as Time.

Burgon, whose dates were 1813-88, appropriated it in his Newdigate poem, very properly, as a quotation, which was good of him as he seems to have been a tetchy character, once describing Oxford in words that might have come from a modern Franks or Annan, as 'an infernally illgoverned place', and, what was more, full of librarians 'knowing and desiring to know nothing of what was under their charge'. It was Burgon who, in a sermon in New College Chapel in 1884, denounced the education 'of young women as young men' as 'a thing inexpedient and immodest'. Small wonder that the D.N.B. refers to the difficulty he had with his Chapter, when transferred to be the Dean of Chichester, 'owing to his brusquerie'.

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Rogers, and Burgon after him, were reflecting in their poems the general view of the shortness of the world and of man; that shortness defined by the date 4004 in the margins of the Authorized Version of the Bible. This date, and the 6,000 years of the past, had been codified in the 17th-century writings of Ussher and Lightfoot. Ussher's work appeared in English in 1658 under the title of *The Annals of the World Deduced from the Origin of Time and continued to the beginning of the Emperour Vespasian's Reign and the total Destruction and Abolition of the Temple and Commonwealth of the Jews*, in which he says:

I encline to this opinion that from the evening ushering in the first day of the world, to that midnight which began the first day of the Christian era, there was 4003 years, seventy days, and six temporarie howers.

And he decided that man was created on the sixth day, a Friday, and October the 28th.

John Lightfoot's book had come out 16 years before, in 1642, with the fascinating title of A Few, and New Observations upon the Booke of Genesis; the most of them certaine, the rest probable, all harmlesse, strange, and rarely heard of before, and it is in Chapter I that these oftquoted words occur:

Thirdly, the Resurrection is taught by the Creation and the end of the world from the beginning, for *God* that made that to be, that never was, can much more make that to bee, that hath been before, namely these our bodies, Heaven and Earth, Center and circumference created together in the same instant, and clouds full of water, not such as we see made by evaporation but such as are called the Windowes or Cataracts of *Heaven* . . . created in the same instant with them . . . Man created by the *Trinity* about the third houre of the day, or nine of the clocke in the morning.

Ussher and Lightfoot were writing in the middle of the 17th century; the Authorized Version of the Bible bore the date 4004 B.C. when it was published in 1611, but all this was reflecting an older climate of thought, for William Shakespeare in *As You Like It* (1600) makes Rosalind say (Act IV, Scene 1):

The poor world is almost six thousand years old, and in all this time there was not any man died in his own person, *videlicet*, in a love-cause.

The last word on the 'half as old as Time' tag must go to Sir Thomas Kendrick. In 1920 he and the late Louis Clarke went to a lecture in Oxford on Petra; coming away, he suddenly declaimed, on the steps of the Ashmolean:

The dating 'half as old as Time' You must reject in toto It represents that horrid crime Ignotum per ignoto.

In giving us permission to print this delightful and typically Kendrickian verse, the author adds 'It was a flop with Louis. That is to say it was not followed by one of our frequent, exulting returns to our digs and Louis's famous cry as he pushed the front door open, "Mrs Patey, CHAMPAGNE!"'. Earlier, in a comment on the tag, he wrote, 'You know it also, no doubt, in a recent revived form, "Balham", by Peter Sellers:

Balham is

set square upon the Northern Line and half as Gold-ers Green.'

T T

Shakespeare and Sir Thomas Browne were merely reflecting the widespread view of the shortness of the human past. The development of the idea of a past of 6000 years has been clearly and concisely set out by Stephen Toulmin and June Goodfield in their most interesting book *The Discovery of Time* (for details see Book Chronicle, p. 246), the third volume in their series 'The Ancestry of Science'. They explain the origins of the view in Eusebius who

began his chronicle with Abraham, diplomatically evading the more serious intellectual problems raised by *Genesis*. The omission was made good by his Latin translator, Jerome, who counted 2242 years from Adam to the Flood, and 942 from the Flood to Abraham—though later he revised these figures to 1656 and 292. With Jerome's additions, the chronology of Eusebius provided the numerical time-scale on which, from then on, historians in the Western world founded their dating-system.

Toulmin and Goodfield go on to point out, however, that it was not the Eusebius-Jerome calculations that were responsible for the world of 6,000 years being generally accepted, but the pre-Eusebius *Chronographia* of Julius Africanus. To quote from *The Discovery of Time* again:

Julius took from Jewish literature the idea of a 'millennium'—the thousand-year-long Kingdom of the Messiah which prophecy declared would end the history of the world—and used it as a symbolic key for interpreting Old Testament chronology. On this interpretation, the whole of history corresponded to a cosmic week, each of whose days lasted a thousand years. (The justification for this step was found in the words of Psalm 90, verse 4, 'a thousand years in thy sight are but as yesterday'.)

Luther certainly took 4000 B.C. as the date of creation, but while he liked that round figure, there was support for other dates such as 4032, 4004, 3949 and 3946. The astronomer Johann Kepler alleged that he detected an error of four years in the chronology of the Christian era, on the basis of comparing the New Testament dating of the Crucifixion with the established cycles of solar eclipses: and it was the acceptance of this by Ussher and Lightfoot and others (because the Authorized Version was pre-Ussher and pre-Lightfoot) that produced the date of 4004 B.C. which became as Toulmin and Goodfield say 'the authoritative starting-point of orthodox Anglican chronology'.

Sir Walter Ralegh's date for the creation was 4032 B.C. which makes the life-span of the 6,000year world end in 1968. We thus have two years to go; but the Editor of ANTIQUITY wondered recently whether he could count on that, for on 30th May of this year he received a copy of John Corcoran's *The Young Field Archaeologist's Guide* (reviewed by C. W. Phillips in this number, p. 244) and was surprised to find himself described on the back of the jacket as '*The late* Glyn Daniel'. We then realized that the book was not due to be published until 8th June, and wondered whether Bell and Sons had received prior advice of our demise. The days to 8th June passed slowly, but all was well. As the American Samuel Langhorne Clemens, who wrote under the name of Mark Twain, said in his famous cable from Europe to the Associated Press, 'The report of my death was an exaggeration.'

The real question is how 'late' can one become in archaeology? We still get letters addressed to O. G. S. Crawford, and, despite repeated notices and reminders, some subscribers, with a touching faith in immortality, still pay their subscriptions to him personally. It is obviously never too late.

The Discovery of Time is full of good things for those interested in the development of archaeology and the conceptual basis of ancient history, quite apart from its documentation of the 6,000-year world. It rescues for those of us who have not read Avicenna, or A. M. Afnan's book on that Islamic scientist, the following remarkable passage:

Mountains may be due to two different causes. Either they are effects of upheavals of the crust of the earth, such as might occur during a violent earthquake, or they are the effect of water, which, cutting itself a new route, has denuded the valleys, the strata being of different kinds, some soft, some hard. The winds and water disintegrate the one, but leave the other intact. Most of the eminences of the earth have had this latter origin. It would require a long period of time for all such changes to be accomplished, during which the mountains themselves might be somewhat diminished in size. But that water has been the main cause of these effects is proved by the existence of fossil remains of aquatic and other animals on many mountains.

And this was written round about 1000 A.D.— 800 years before Hutton and Strata Smith and Buckland and Lyell!

When Toulmin and Goodfield come to the rôle which archaeology has played in the development of man's idea about the time of his own and the world's past, their touch becomes unsure—and we are not prejudiced by the fact that they recommend for further reading 'A Hundred Years of Archaeology by Grahame Clark'! The Rosetta Stone is a trilingual not a bilingual inscription; Layard excavated Nimrud, not Nineveh, although admittedly he thought he had and his books are called The

Monuments of Nineveh and Nineveh and its *Remains*; and it is a pity to insist that it was only Boucher de Perthes who 'compelled official science to change its mind' about the antiquity of man. What about Pengelly and Brixham, and what about John Frere? It is always intriguing to remember that when they published their acceptances of the antiquity of man in 1859, neither Prestwich nor John Evans had forgotten Frere's famous letter to the Society of Antiquaries in 1797. It is sad that Toulmin and Goodfield have missed that telling phrase in Frere's letter 'beyond that of the present world'---the world of Eusebius, Julius Africanus, Shakespeare, Sir Walter Ralegh, Ussher, Lightfoot, Samuel Rogers and Dean Burgon. And it is strange that they make no mention of the techniques of geochronology and most of all none of carbon-14 dating; here science and archaeology have provided a firmly dated past, so different from the biblical calculations of the 6,000-year world, and the guesses of Buffon and Lyell. At last, since Willard F. Libby, man has discovered time.

But these are minor criticisms of a major work of synthesis which, like Collingwood's The Idea of History and Lucien Febvre's Geographical Introduction to History, must be read by all students of antiquity. Although the authors do not distinguish, as Loren Eiseley did in his Darwin's Century, between Darwin's 'light' and his 'much light', to be thrown on the origin of man and his history, they are sound and sure in the place which The Origin of Species had in the development of 10th-century thought. Many archaeologists still go on repeating that Darwin had a considerable effect on the origins of archaeology and prehistory. As Toulmin and Goodfield rightly say, 'the Origin of Species was a late phase in a more extended intellectual operation, which brought the new historical categories to bear on one particular awkward case'.

And it is particularly refreshing to hear from two authors who have worked for so long on these problems and for many years under the aegis of the Nuffield Foundation Unit for the History of Ideas (now no longer in existence), their views on human history: after the establishment of modern historical criticism and Darwinian theory, it would be naive to suppose any longer that history represents a *single* process or one with a demonstrable *direction*. If there is a key to the understanding of all history, it consists in recognizing not its single-directedness but rather its multiple opportunism.

This passage should be read in conjunction with the most thoughtful final paragraph of Professor J. R. Caldwell's Introduction to a fine collection of articles from *Science* published by the American Association for the Advancement of Science under the arresting title of *New Roads to Yesterday* (Book Chronicle, p. 232). Caldwell is commenting on the 20 articles that he is introducing and says:

The reader will find that these chapters disclose astonishing parallels in the development of the independent histories of the Old World and the New.... There is here no discussion of historical 'laws', although something is said about principles. . . . In general, however, we are probably still only approaching that level of analysis at which principles are discovered. . . . Perhaps there is only a finite number of social and historical processes behind the event of history. The multiple opportunism of Toulmin and Goodfield, the finite number of processes of Caldwell, and the possibilism of Febvre (even if modified to the neo-determinism or probabilism of Spate) provide, surely, the soundest basis for the understanding of man's most ancient past.

T T

All the English newspapers just before Midsummer carried the Ministry of Public Building and Works' notice that Stonehenge would be closed on Midsummer Eve and only 'the Druids' would be admitted. How long is this nonsense going to be sanctioned by a Department of State? There are no Druids to be admitted; the Druids died out centuries ago, and in any case, it has yet to be proved that they had anything to do with Stonehenge, although, admittedly, as Christopher Hawkes and Stuart Piggott have argued, if they were a native British priesthood of the last half of the 1st millennium B.C., there is a strong suspicion that they were heirs to, if not consciously performers of, the ancient religion that swayed the megalith builders.

But this is academic speculation. To commemorate this Midsummer, Andrew Duncan wrote a fine piece for The Weekend Telegraph (The Daily Telegraph, 17th June 1966) called 'The witches are ready for Thursday', in which he describes interviews with Dr Thomas Maugham, Chief Druid of the British Circle of the Universal Bond, and with Mr Ross Nichols, the Chosen Chief of the Order of Bards, Ovates and Druids-a breakaway group from the Universal Bond. 'We never recruit', said the Chief Druid. 'Our beliefs are compatible with all religions, but a real Druid doesn't believe anything. . . . He builds steadily on what he knows. . . . Advanced Druids are taught the philosophy of convenience. . . . The Druid believes in the continuous life.' Dr Maugham declined to give his age to Andrew Duncan but admitted that he had been a Druid in a previous existence. The Chosen Chief explained why the OBOD have left Stonehenge: they celebrated the summer solstice last year at Hunsbury in Northamptonshire and this year on Parliament Hill in London. Mr Nichols said he thought that Stonehenge was 'a polluted place. The Ministry of Works have put down a whole lot of gravel and it's surrounded with barbed wire.' Mr Duncan reveals that the witches, like the Druids, are split into separate groups, and that the Rollright Stones have declined in popularity with them because motorists passing along the road would lean out of their cars and shout 'Lovely night for the witches, then.'

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From one side of the lunatic fringe to the other. Professor Angelos Galanopoulis of the University of Athens believes he has located the site of Atlantis, and that the same catastrophe that destroyed Atlantis also destroyed Knossos and the Minoan civilization, accounted for the strange phenomena described in Exodus (like 'the rivers turning red') and enabled Moses and his followers to cross the Red Sea dry-shod. His theory is that during the 13th century B.C. a tremendous volcanic explosion set off air waves 350 times more powerful than those of a hydrogen bomb when the Greek island of Santorini was devastated: there, he says, was Atlantis, and this summer an expedition carried out by scientists from the Athens University and the Woods Hole Oceanographic Institute of Massachusetts will tests his theories by making excavations up to 60 ft. below sea-level. Santorin may prove more fruitful than Heligoland or the Atlantic itself: we shall know soon.

17 II

And from the black magic of Druids, witches and Atlantis to the white magic of science. Professor Luis Alvarez of the University of California has put up a proposal to 'X-ray' the Egyptian pyramids to search for chambers that have hitherto not been found. He estimated that the cost of the project, say for Chephren's Pyramid at Giza, might be £60,000. This project has now received the support of the United Arab Republic and we await the results of the experiment with great interest. We have asked Professor Alvarez to keep readers of ANTIOUITY informed, and also whether he thinks his techniques could be used in that green mysterious British pyramid, Silbury Hill. Sixty thousand pounds might be well spent in finding where there is a chamber in that great mound, if there is one at all. Flinders Petrie thought it an English pyramid and attacked it as he would have attacked an Egyptian pyramid, but with no results. Professor Alvarez and his team might have better results.

R R

We have already referred to the controversial articles of Professor Gerald Hawkins in *Nature* on the reason for Stonehenge. (ANTIQUITY, 1964, 166). He has now expanded these articles in a book boldly called *Stonehenge Decoded*, which is reviewed in this number by Professor Atkinson in an article entitled 'Moonshine on Stonehenge'. The *double entendre* of the title will be lost on no one, least of all Professor Hawkins. The main unhappiness of archaeologists about Hawkins is his ignorance of prehistory. We all feel disinclined to listen to a man who has not bothered to listen carefully to archaeologists and

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learn what they have to say. It is almost unbelievable that a book on Stonehenge by a University Professor should not include in its bibliography (and therefore presumably not in the Professor's reading) Piggott's The Neolithic Cultures of the British Isles, Giot's Brittany, and many another standard work on megaliths, while it bothers to include Thomas Hardy's Tess of the D'Urbervilles, Sibylle von Cles-Reden's ill-informed The Realm of the Great Goddess, and-believe it or not-Marcel Baudouin's La Préhistoire par les Etoiles. (Surely the ghost of Vera Collum should now be haunting Hawkins for not having included in his bizarre bibliography her dotty reports on Tressé and the Déhus.)

Let us, a glass of Perrier in the hand to preserve us from extravagance, look at one page of Hawkins's Stonehenge Decoded: that unhappy page 88. First we are told that the rows at Menec lead to 'an irregularly-shaped circle which encloses a gallery grave covered by a mound bordered by stone slabs. One tall menhir stands above the grave.' Completely inaccurate. Then that it has '13 rows in a column about 900 yards long and 140 yards wide . . . all three of the columns are oriented northeast-southwest.' Doesn't make sense. And then that 'the probable time of construction of these stone armies (sic) of the Morbihan region vary from considerably B.C. to a little A.D.'. But the dates of the Breton megaliths determined by C14 techniques have been published over the last few years in accessible publications like Radiocarbon and ANTIQUITY. And on the same solecistically rich page we are referred to megalithic sites in 'Crete and Greece'. Professor Hawkins does not tell us more about these, and here he is wise. For there are none.

Hawkins may be right about Stonehenge, and Palmer may be right about Knossos, but archaeologists initially dislike them because they rush at us like bulls, and we are very much pottery shops. What archaeologists have always welcomed is the informed, interested outside view—the outside specialist with something intriguing to say, like Sir Gavin de Beer or Sir Julian Huxley; or the non-professional with a new line, like Tom Lethbridge in England and Henri Eydoux in France. What archaeologists have always disliked is the men from other disciplines who think they can weigh in, and with a half-baked appreciation of the facts of ancient history, pronounce on complex matters of prehistorical archaeology. There is no closed shop in archaeology, no trade union. All we ask of those whose non-professional views we welcome is: Please do your homework.

One of our distinguished colleagues has done his homework, and the results may cause one of the most interesting reappraisals of barbarians in European prehistory that has ever happened. We sent Professor Fred Hoyle a copy of Stonehenge Decoded and said bluntly 'Is Hawkins right? His archaeology is shocking, but what about his astronomy?' Hoyle finds that while some of the detail of Hawkins's work is doubtful his fundamental thesis is right: he himself re-did all the necessary calculations (no computer required at all!) and his first conclusions will have been published in Nature before these words of ours, written in late July, appear in print. Hoyle is certain that great mathematical and astronomical discoveries were made by the builders of Stonehenge, and that an enormous cultural advance happened in barbarian north-western Europe in the second millennium B.C. He has agreed to set all this out for archaeologists in the December number of ANTIQUITY. It may be long and difficult ('I assume', says Hoyle, 'that your readers are reasonably good at trigonometry'), and when they have digested it, we hope to publish comments by Professors Hawkins, Atkinson and Thom, and perhaps also Dr Sadler of the Nautical Almanac Office of the Royal Observatory.

If there is any room left in the December number the Editor will write about the book edited by Dr St Joseph and to be published by John Baker on 19th September. He will relate this very important book to Raymond Chevallier's L'avion à la découverte du passé. But now he feels he needs something stronger than that delicious water which bubbles up so surprisingly champagnisée in the south of France.

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