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The Alleged Phoenician Circumnavigation of Africa

*Considered in Relation to the Theory
of a South African Ophir*

THE surprise with which many people accepted Mr. Randall-MacIver's demonstration that the great age of Zimbabwe had been taken for granted rather than proved shows how easily a theory may win popular acceptance if it appeal, as did the theory of a South African Ophir, to popular sentiment, and may add force to the suggestion to be advanced in this paper, that the legend of a Phoenician circumnavigation, attractive as it certainly is, has little in it beside this attractiveness to justify its wide acceptance in modern times.¹ For undoubtedly the famous story, told by Herodotus, that certain Phoenicians in Egyptian employ succeeded, some six hundred years before Christ, in sailing all the way round Africa, has been acquiring strength in its progress through what we are accustomed to consider a critical age. When, for instance, we find, in the vast German *World's History*, published

¹ A brief abstract of the following paper appeared in the *Geographical Journal* for September 1906, and evoked some criticisms, to which its author hopes that the full text of the article will be found to have, in anticipation, supplied an answer. The article was written before the results of Mr. MacIver's inquiries into the age of the South African ruins had been made known, and therefore when the believers in the high antiquity of these ruins were more numerous than they are now or are ever likely to be again.

in an English form by Mr. Heinemann, 'the celebrated circumnavigation of Africa under Necho II in 608 B.C.' mentioned simply as 'a feat which throws the most vivid light on the boldness and skill of the Phoenician mariners'² who performed it, we see how a story, from having been accounted by some an idle fable, by others at best a not impossible tradition, may end by establishing itself as a sober narrative of unquestioned fact, without the advancement of a single new argument in its favour.

Now it will hardly be doubted that the favour bestowed of late on the ancient legend is due, at least in part, to the belief that it in some way confirms, or is itself confirmed by, the fashionable theory that Solomon got his gold from South Africa. We find the story accepted by such upholders of this theory as Dr. Carl Peters,³ Messrs. Hall and Neal,⁴ and Dr. A. H. Keane.⁵ But in this matter modern criticism seems to me strangely at fault. The very existence of the Phoenician legend, even if we regard it as a fable, is a difficulty in the way of those who would claim a pre-Hellenic antiquity for the South African ruins and gold mines; while if, as Dr. Peters assures us, 'the account' of Herodotus 'is in every way trustworthy,' then the difficulty becomes much stronger; for it must be borne in mind that by 'the account of Herodotus' we have no right to understand anything but the story actually to be found in that historian's works. That the Phoenicians might have circumnavigated Africa, if supplied by the resources of Sofala and aided by long acquaintance with southern winds and currents, may—or may not—be true. But that, under these conditions, they did so not a particle of historical evidence suggests.

All that we know, if indeed we know anything, of the Phoenician expedition is contained in one passage of Herodotus, who is supposed to have made his travels in Egypt, where presumably he heard the story, about 450 B.C. This famous passage is much more familiar to most of us than its context, which, however, is not unimportant. Herodotus cites the story merely as evidence for a theory advanced by himself—that Libya, as he calls Africa, is not so large as Europe, being of comparatively small extent from north to south. What follows I shall quote in the English of Rawlinson, a believer in the legend, and therefore not to be suspected of any bias in my favour.

As for Libya, we know it to be washed on all sides by the sea, except where it is attached to Asia. This discovery was first made by Necho the Egyptian king, who on desisting from the canal which he had begun

² Vol. ii. p. 590.

³ *The Eldorado of the Ancients*, p. 317.

⁴ *The Ancient Ruins of Rhodesia*, p. 29.

⁵ *The Gold of Ophir*, p. 94; *Geographical Journal*, xxvii. 338. Dr. Keane has since (in the number for October 1906) disclaimed reliance on, while he avows belief in, the Phoenician legend.

between the Nile and the Arabian Gulf, sent to sea a number of ships manned by Phoenicians, with orders to make for the Pillars of Hercules, and return to Egypt through them, and by the Mediterranean. The Phoenicians took their departure from Egypt by way of the Erythraean Sea, and so sailed into the southern ocean. When autumn came, they went ashore, wherever they might happen to be, and having sown a tract of land with corn, waited until the grain was fit to cut. Having reaped it, they again set sail; and thus it came to pass that two whole years went by, and it was not till the third year that they doubled the Pillars of Hercules, and made good their voyage home. On their return, they declared—I for my part do not believe them, but perhaps others may—that in sailing round Libya they had the sun upon their right hand. In this way was the extent of Libya first discovered. Next to these Phoenicians the Carthaginians, according to their own account, made the voyage. For Sataspes, son of Teaspes, the Achaemenian, did not circumnavigate Libya, though he was sent to do so.⁶

I have continued the quotation rather further than is usual, in order to bring out a point which is generally overlooked. Herodotus seems to mention, or rather to hint at, more than one circumnavigation; his followers seem to understand him as speaking only of one. And, indeed, a Carthaginian circumnavigation cannot easily be accepted; for if Rawlinson, in the last two sentences quoted, rightly interprets a rather ambiguous passage,⁷ we must understand that there was a Carthaginian success, and perhaps also that it was later than the failure of Sataspes, who, as Herodotus goes on to tell us, lived in the reign of Xerxes (485–465 B.C.) It may therefore have taken place even within the lifetime of Herodotus himself. Surely it is strange that so recent an adventure should have passed, as it must, almost immediately into complete oblivion.

How too are we to reconcile such a story with the history of Hanno's voyage down the West African coast, of which a very remarkable narrative has come down to us in a Greek translation? One can hardly read this fascinating story without perceiving that,

⁶ Herod. iv. 42. Λιβύη μὲν γὰρ δημοῖ ἐωνυτὴν ἐοῦσα περίρρυτος, πλὴν ὅσον αὐτῆς πρὸς τὴν Ἀσίην οὐρίξει· Νεκὼ τοῦ Αἰγυπτίων βασιλέως πρώτου τῶν ἡμεῖς ἴδμεν καταδέξαντος. Ὅς ἐπεὶ τε τὴν διώρυχα ἐπαύσατο ὀρύσσω τὴν ἐκ τοῦ Νεῖλου διέχουσαν ἐς τὸν Ἀράβιον κόλπον, ἀπέπεμψε Φοίνικας ἄνδρας πλοίοισι, ἐντειλάμενος ἐς τὸ ὀπίσω δι' Ἡρακλεῖων στηλῶν διεκπλέειν ἕως ἐς τὴν βορρῆην θάλασσαν, καὶ οὕτω ἐς Αἴγυπτον ἀπικνεῖσθαι. Ὅρμηθέντες ὦν οἱ Φοίνικες ἐκ τῆς Ἐρυθρῆς θαλάσσης, ἔπλεον τὴν νοτίην θάλασσαν. Ὅκως δὲ γίνοντο φθινόπωρον, προσίσχοντες ἂν σπείρεσκον τὴν γῆν, ἵνα ἐκδύστω τῆς Λιβύης πλέοντες γινοῖατο, καὶ μένεσκον τὸν ἄμνητον· θέρισαντες δ' ἂν τὸν σῖτον, ἔπλεον ὥστε δύο ἐτέων διεξελθόντων, τρίτῃ ἔτει κἀμψαντες Ἡρακλεῖας στήλας, ἀπίκοντο ἐς Αἴγυπτον. Καὶ ἔλεγον, ἐμοὶ μὲν οὐ πιστὰ, ἄλλω δὲ δὴ τεφ. ὥς περιπλῶντες τὴν Λιβύην, τὸν ἥλιον ἔσχον ἐς τὰ δεξιὰ. Οὕτω μὲν αὕτη ἐγνώσθη τὸ πρῶτον. Μετὰ δὲ, Καρχηδόνιοι εἰσι οἱ λέγοντες. Ἐπεὶ Σατάσπης γε ὁ Τεάσπιος, ἀνὴρ Ἀχαιμενίδης, οὐ περιέπλωσε Λιβύην, ἐπ' αὐτὸ τοῦτο πεμφθείς.

⁷ Gaisford's interpretation—*cognovisse se circumfluat esse Africam*—seems correct. Of course this practically amounts to the same thing as Rawlinson's amplification. An opposition between τὸ πρῶτον and μετὰ δὲ is clearly intended.

whether it be history or fable, it represents the expedition as venturing into an unknown world, of which the Carthaginians did not as yet know the secrets. Hanno therefore, we must suppose, had not heard of the Carthaginian circumnavigation. But Hanno's voyage cannot be proved to have been made before the beginning of the fourth century; that is to say, we are not sure that it was even as early as Herodotus. When can a Carthaginian circumnavigation have taken place which was either later than Hanno or had been forgotten before his time, though it was later than Necho, and was still remembered in the time of Herodotus?

But perhaps Bunbury⁸ is right in thinking that the Carthaginians of Herodotus are to be understood only as asserting that Africa can be sailed round, not that they had actually so sailed. In this case too it is clear that the evidence on which they relied, whether it were strong or weak, whether it were only that of Necho's men, as Bunbury, rather strangely, supposes, or of others, must, in the opinion of Herodotus, have been obtained not earlier than Necho's time. Either then it had been forgotten by the time of Hanno or, if earlier than Hanno, was subsequently forgotten, while the lesser effort of Hanno himself was remembered. The word *περίπλους*, applied to coasting voyages like Hanno's, means literally 'circumnavigation'; and Pliny, probably from a misunderstanding of the word, supposed Hanno himself to have sailed round Africa.⁹ This we know to be false, and possibly there may have been no firmer a foundation for the Phoenician story, which is not nearly so circumstantial as Hanno's. In any case why should we hasten to accept what Herodotus says about the Phoenicians, when we refuse even to listen to what he says about the Carthaginians?

If we now turn to the story itself, a grave difficulty at once arises. Had a genuine report of a real circumnavigation been brought back, it could hardly have failed, one would think, to impress upon men's minds the vast size of Africa, and particularly its prolongation into a very remote south. The report which reached Herodotus confirmed or perhaps originated his belief that Africa was no very large country, its southerly extension being so small. And it must be remembered that this conception, gradually modified indeed by increasing experience, was, until Ptolemy's time, that of nearly all Greek geographers. Strabo knew the eastern coast, by report, as far as Cape Guardafui, the author of the *Periplus Maris Erythraei* at least as far as Zanzibar.¹⁰ But each of these authors believed, as Herodotus had done, that just beyond the point at which his own knowledge

⁸ *History of Ancient Geography*, i. 289 sqq.

⁹ Plin. *H. N.* ii. 67.

¹⁰ The arguments of Dr. Keane (*The Gold of Ophir*, pp. 127-9) and of Dr. Peters (*Eldorado of the Ancients*, pp. 312, 313) to prove that the Menuthias of the *Periplus* was Madagascar seem to me far from convincing.

ended the coast would be found to turn westwards and run in that direction towards the Pillars of Hercules. It is surely an amazing thing, if a voyage round Africa was ever accomplished, that it should not have given rise to any sort of a tradition as to the true shape and great size of that continent. Had it done so it could hardly have been cited, only a century and a half after its accomplishment, in support of a theory which it should have rendered once for all untenable.

Here I would, for the first time, call attention to what seems to me an inconsistency in those who, while upholding the Phoenician legend, at the same time require our belief in a much earlier commerce of Semitic mariners with auriferous South Africa. To account for the profound ignorance of Greek geographers as to the very existence of such a region we must suppose that this commerce had ceased before Hellenic times, or at least had been kept secret with extraordinary success. Surely an Egyptian expedition in 600 B.C. would have gone far to revive memories of the past or to throw a light on the present.

Other difficulties now present themselves. One, as we know, was obvious to Herodotus himself. His disciples, on the other hand, have tried to explain away just that part of the story on which his own faith was doubtless founded. For we shall find those who accept, or profess to accept, the story of Herodotus rejecting, or passing lightly over, what to him was an essential part of it, namely, the fable of the autumnal harvests; while, as will be shown, they spoil the story thus reconstructed by accepting that part, namely, the account of a sun seen on the right hand, which the historian himself rejected.

Of this wonderful voyage, the most wonderful perhaps ever made by man, if it really took place, Herodotus tells us three things—that the expedition lasted into the third year, that it supported itself by raising crops from seed which it carried with it, and that it reported having the sun on the right hand, a statement which is usually, if rather boldly, interpreted to mean that the noontide sun was seen in the north. On the first point much has been written, but the question whether the time assigned is too long or not long enough depends for its answer entirely on the view taken as to the second point. Herodotus clearly believed much time to have been taken up with the harvest operations, and it is here that the wide divergence becomes apparent between the historian himself and the professed believers in his narrative. He, having no suspicion that there existed any of the vast regions which we now call South Africa, imagined his Phoenicians, so soon as they had emerged from the Red Sea, to have entered immediately upon an unknown and inhospitable, though comparatively short stretch of coast-line. They, knowing the vastness of

the country, have felt themselves obliged to argue that it was not unknown and inhospitable, and in fact have shown a strange unanimity in maintaining that South Africa not only existed, but was already a well-known and frequented region, the trade with Sofala having been carried on since Solomon's time. Modern writers on Zimbabwe push back the beginning of this traffic to an age still more remote.

Now the most curious part of this argument is not that its upholders insist upon knowing more than Herodotus about a story for which no authority whatever, save that of Herodotus himself, exists; it is that they should agree in taking his supposed mention of a northerly sun as a confirmation of his story, whereas, if we accept the theory of an already established South African trade route, it ceases at once to have any force at all. The only reason for attaching any importance to this statement lies in the supposition that it could not have been invented. 'Who does not feel,' cries Heeren,¹¹ 'how impossible it was for them to have imagined this fact?' Yet Heeren has just been arguing that the Phoenicians must have had an acquaintance with South Africa of such long standing as to have made them fully conversant with the proper seasons for sowing and reaping. Why then should any call upon their imagination be required? At Sofala, in latitude 20° south, the midday sun is to be seen in the north for much the greater part of the year; and it is impossible to suppose that people who traded regularly with that port did not know this. If the Phoenicians really came back from the far south to startle the world with the tale of a northerly sun it shows very clearly that they can never have been to the far south before.

Since, therefore, this tale of the sun, even if we regard it as fiction, goes against the theory that the world had long been familiar with the phenomena of the southern hemisphere, it is singular that those who strongly advocate that theory should extend their protection to the Phoenician legend. What they feel, no doubt, is the difficulty of admitting that so much which must have been common knowledge in the time of Solomon can have entirely disappeared from the world by the time of Necho; and they have failed to perceive that the story of the expedition, in the only form in which it is told, rather necessitates this admission than avoids it. But to earlier, perhaps more diligent inquirers, such as Rennell, the main reason for presupposing an acquaintance with Sofala was the great difficulty, which we have now to consider, of explaining otherwise how the expedition obtained its supplies. For it was—and is—clear that the explanation given by Herodotus will not do for us. To Vincent, that careful historian of ancient commerce and navigation, this difficulty appeared insuperable. He

¹¹ *Researches*, ii. 76 (English transl.)

points out¹² that no other expedition of the ancients, even if we accept the dubious story about Scylax, ever went near attempting so enormous an enterprise as the circumnavigation of Africa would in reality have been. It was for lack of provisions that Hanno turned back, before a quarter of the distance had been traversed.

To Herodotus, who had no conception of its magnitude, the duration of the journey, which he gives as between two and three years, would doubtless have seemed impossibly great, had he not been furnished with an explanation which accounted at once for the time consumed and the power of holding out for such a time. The Phoenicians, he says, carried seed with them, and sowed it wherever they might be when the right season came round, waiting at the spot until the harvest could be reaped. But if to Herodotus such a story seemed probable, it was surely just because no real description of the African coasts, such as the Phoenicians ought to have brought back, had reached him. Can we, with the experience of the nineteenth century, pretend to regard the story, with Dr. Peters, as 'in every way trustworthy'? Rennell's treatment of it¹³ shows plainly enough that to him, a hundred years ago, it appeared, in its unedited form, incredible. It is indeed a strange thing that he should be cited as a great authority who has accepted the narrative of Herodotus. As a matter of fact Rennell himself, and not Herodotus, is the sole author of the story which he offers to us as probable.

Admitting that, even as referring to regions where the interval between seed-time and harvest might be only three months, there were difficulties in the narrative, he proceeded to evade them by a mistranslation. What Herodotus does say is that, wherever the Phoenicians *might happen* to be when autumn comes round, there they would halt, &c., plainly implying that there were more harvests than one. What Rennell makes him say is that 'on the approach of autumn they landed in Libya and planted some corn in the place where they happened to find them selves.' And on this mistranslation he founds the inference that only one harvest is recorded in the history. Possessed by this idea, and feeling the necessity of showing that the best part of the journey was already over before even this harvest was undertaken, Rennell constructs his own story of the expedition, which is briefly as follows—how contrary in spirit to that of Herodotus the reader can judge for himself. The Phoenicians, he says, already conversant with the winds and currents prevailing at different seasons on the east African coast, started from Egypt late in July, entered the Indian Ocean at the end of October, and proceeded easily to the well-known port of Sofala, departing thence—such were then the resources of

¹² *Commerce and Navigation of the Ancients in the Indian Ocean*. ii. 195.

¹³ *Geographical System of Herodotus*, p. 673.

a place absolutely unknown to any Greek geographer—as well virtualled as when they set out. Reaching the southern tropic at the end of January, they found no difficulty in rounding the Cape and following the west coast northwards, by the aid of the Atlantic south-east trade wind, with which they seem to have been already acquainted. They thus reached the equator by October, in time to catch what, according to Rennell, is the only wind of the year that would serve to help them westwards along the Guinea coast. About March, and somewhere in Senegambia, they halted to await their one harvest, ‘*a harvest either of their own raising or (what is more likely) the ordinary harvest of the people of the country.*’ The words which I have italicised make plain how little of Herodotus there is in this story of Rennell’s. Though professedly based on the historian’s statement—mistranslated, indeed—about the harvest, it ends by throwing doubt on that very statement, by deliberately, in fact, demolishing its own foundation. The final suggestion, that the one harvest reaped sprang not from the sea-borne Phoenician grain, but from the hypothetical seed of some agricultural natives of West Africa, shows, perhaps as plainly as any flat denial, how incredible to Rennell was the story which Herodotus, if we condescend to refer to him, will be found to have actually related.

We have had a century’s more experience of African coasts and African climates than Rennell, and are we really more ready than he to accept this story? In what fever-haunted mangrove swamp, on what burning karroo did this band of pioneers introduce the agricultural methods of their temperate home, with such easy and immediate success? How did they protect their little crop from the trampling of elephants, the depredations of baboons, the pilfering of strange birds, from springbok and locust; or themselves from mosquito and malaria, from the attacks of fierce and crafty human foes? As to all such adventures, which one feels that Hanno the Carthaginian would not have failed to relate, nor Herodotus the Greek to repeat, the Phoenicians seem to have kept silence. How too did they overcome the difficulty of determining at what time the precious seed should be committed to an alien soil? Herodotus, unacquainted with a tropical world, naturally accepted the statement that they sowed their seed ‘when autumn came.’¹⁴ We know that they must have passed through equatorial regions in which the seasons of our northern world have no existence, through an Antarctic temperate zone where they reappear, but in months of the year opposite to our own. How many autumns did they count on this long, long voyage, during which they crossed the

¹⁴ As Bunbury (*Hist. of Ancient Geography*, i. 292, note) well remarks, the story of Eudoxus, in Strabo, ii. p. 100, proves that this method of obtaining supplies recommended itself naturally to an ancient explorer, and might easily, therefore, be ascribed to the Phoenicians by a romancer.

equator and each of the tropical circles twice? Is it not remarkable that a crew of farmers should have brought back no notice of an inverted year, unless we are to recognise such in the doubtful allusion to a northerly sun?

This allusion is the most curious statement in the story of Herodotus, the one, it has been well said,¹⁵ which, while it made him doubtful, has caused his critics to lay doubt aside—the statement that the Phoenicians reported the sun on their right hand. I must again point out that, if this be taken, as it usually is, for proof of a genuine observation of the noontide sun at the Cape of Good Hope, it should also be taken as a proof that the observers had not been so far—nor indeed anywhere nearly so far—south before. In people already accustomed to the traffic with Sofala a northerly sun would have excited no surprise whatever.

But does Herodotus really speak of a northerly sun? It seems to be, and to have been,¹⁶ generally agreed that he does. Even Vincent, who entirely disbelieved the Phoenician legend, mentions their report of ‘the shadow falling to the south,’ just as if Herodotus had actually used any such words. Is it, I ask with some diffidence, quite so certain that Herodotus really meant his expression to be so understood? What he makes the Phoenicians say is that they had the sun on their right hand, not at a particular point of their voyage, but ‘in sailing,’ or apparently all the time they were sailing, ‘round Libya.’ This was more than he could believe, though he thought apparently that the credulity of others might go so far.

It will be allowed that to have the sun on the right hand is no very unusual experience in any part of the world. To account for its being incredible, or even surprising, to any one we must assume that the observers are to be understood as having seen the sun there either always or at some time when one would have expected it to be elsewhere. The language of Herodotus seems in itself to imply the former alternative. For in their literal sense his words certainly suggest that, during the whole of their voyage round Africa, the Phoenicians saw the sun to their right—never to their left, as it should have been in the mornings as they sailed southwards, in the evenings as they sailed northwards. Such a tale, it may perhaps be said, would be too extravagant for any one to believe. Herodotus at any rate did not believe it. Yet I cannot think it wholly impossible that this may really have been what the informants of Herodotus intended him to believe. It seems extravagant to us, and would have seemed so to Greeks of the scientific age, but Herodotus was born before that age. He

¹⁵ Mannert, *Geographie der Griechen und Römer*, i. 20.

¹⁶ It will be seen from a comparison of Rawlinson, *Herod.* i. 95, with iii. 33, note, that this critic did not understand the argument which he regarded as irresistible.

has himself discussed¹⁷ the possibility that the sun's southward movement in winter is due to the pressure of northerly winds. We have no reason to suppose that the Egyptians of his day, or of any previous day, were better informed. May not the pretended sanction of the Phoenician story have been given to some old-world legend, according to which Africa, the torrid continent, was the sun's retreat and abode, in such wise that whosoever could go round Africa would go round him?

If this idea be rejected—and perhaps no more can be urged in its favour than that it is the idea suggested by the actual unparaphrased words of Herodotus—we have to take up the second alternative, that Herodotus understood the sun to have been seen on the Phoenicians' right at a time when he, and presumably they, would have expected to see it somewhere else. Now mariners sailing from north to south, as the Phoenicians must have done at first, would expect to see the sun on their right at its setting. When sailing back from south to north they would expect to see it there at its rising. And when sailing back to the east from the Pillars of Hercules they would expect to see it on their right at noon. But when sailing from east to west at the south of Africa they might, if they were accustomed only to the northern temperate zone, expect to see it on their left at noon, and never full to the right at any time of the day. And this is why it has been assumed that we are to understand Herodotus as surprised at hearing of a noontide sun seen on the right hand, and therefore to the north, by mariners sailing from east to west. For by the inhabitants of northern climes, such as the Phoenicians, the Greeks, and ourselves, the sun is never seen in such a position; and it is supposed, possibly with truth, that a Greek of the early age in which Herodotus lived might be unable to conceive of its being so seen by anyone anywhere.

But granting all this, admitting that we are to understand the Phoenicians as reporting, to the amazement of Herodotus—and presumably of themselves, or they would not have reported it—that the sun at midday stood in the north, do we obtain any convincing or even suggestive evidence that the Phoenicians had been at the Cape? To me it seems certain that no such inference can be drawn. The argument of the believers is of course that a story which cannot have been invented must be true. But if we begin by admitting for the moment that the story could have been invented, does not its phraseology strongly suggest that it actually was invented? We have no right to assume that Herodotus does not correctly represent the language of his informants, and it seems strange that he, and probably therefore they, should mention a phenomenon which could have only occurred at one part of

¹⁷ Herod. ii. 24.

the voyage as if it had been occurring during the whole of it. 'In sailing round Libya,' he says, 'they had the sun upon their right hand.' But it was only while the Phoenicians were sailing from east to west that a northerly sun could be considered as on the right hand.¹⁸ We, who know the true shape of Africa, must perceive that only a very small part of the whole distance would really be traversed in an east to west direction. And half even of this small part would be in the Gulf of Guinea, north of the equator, where the sun at noon would have been seen rather more often in the south than in the north. If, as Rennell maintained, this part of the journey *could* only have been performed in the autumn, then the sun, during all that time, would have been on the *left* hand. But if we look at a map of the world as imagined by Herodotus we see at once that the expression, so far from being strange, is the most natural possible. For Herodotus certainly thought that the Phoenicians, on emerging from the Red Sea, turned at once to the west, and continued to sail in that direction till the Pillars of Hercules were approached and the circumnavigation for practical purposes was complete. His 'southern sea' meant undoubtedly a sea washing the southern shore of Africa, as his 'northern sea,' the Mediterranean, washes the north. Such a circumnavigator as he imagined, if the midday sun appeared to his right hand, would most naturally say that he saw it there 'in sailing round Libya.' But then such a circumnavigator as Herodotus imagined can never have existed. The expression, completely natural to a fictitious explorer, would hardly have been used by a real one.

It may be urged that the language is not that of the explorers themselves, but merely expresses the preconceived views of Herodotus or his informants. But even if it be so—and of course we have not a particle of evidence that it is so—there remains the great difficulty of explaining how there came to be such preconceived views, how a theory so erroneous could survive a voyage which should have refuted it once for all. The view of Herodotus may easily have been founded upon a fictitious narrative; it ought not to have been able to exist when once the true story had been told.

Let us now turn to the more important question, whether the story, sounding so much like an invention, could not have been invented. Was the mention of a noontide shadow falling towards the south, if made, of so startling and unexpected a character that it can only be explained now by supposing an observation actually made in the latitude of the Cape of Good Hope? Modern

¹⁸ The suggestion that 'on the right hand' was merely the usual Phoenician phrase to designate 'the north,' though unsupported by evidence, is hardly so impossible as Gosselin (*Recherches*, i. 204 *sqq.*) supposed. To the Arabs of a later day the *south* was 'on the right hand.'

critics seem to think so ; ancient critics, in such a matter perhaps the better judges, certainly did not. It is, for some reason, not generally understood that the sphericity of the earth is no modern discovery. The modern world in fact received the doctrine not from Copernicus, but from Ptolemy. The Greeks of the Alexandrian age perfectly understood how the apparent positions of the heavenly bodies were, or rather would be, affected by a great change in the observer's latitude. Yet no ancient critic seems to have been in the least impressed by a statement which so many in later times have found convincing.

The reason, I cannot but think, is that the modern scholar is generally less conversant than was the ancient with elementary astronomy. So curious a misapprehension as that of Rawlinson,¹⁹ who apparently believed the Phoenicians to have recorded the original observation that the sun had risen in the east, may be exceptional. But the statement of Larchner that after passing the line ' the Phoenicians must necessarily have had the sun on the right hand ' ²⁰ is, of course, quite untrue, and Grote ²¹ is one of the few among the upholders of the story who seem to have clearly realised that to see the midday sun in the north it is not necessary to visit the Cape, nor even to cross the equator. To see it there *always* one must indeed be south of the southern tropic ; to see it there *generally* one must be south of the equator. But merely to have seen it there proves no more than that the observer has been south of the tropic of Cancer. And so much had been accomplished, if by few or no Greeks in the time of Herodotus, yet by thousands of men belonging to races with which the Greeks had long been in contact.

The famous calculation by which Eratosthenes in the third century B.C. determined the approximate size of the earth was based upon a comparison of an Alexandrian dial with one at Syene, where an upright gnomon was reported to cast no noontide shadow at the summer solstice. To press such a fact into the service of science an Eratosthenes may well have been needed ; but the fact itself, that the midsummer sun was vertical at Syene, must surely have been notorious to the Egyptians for ages before the intrusion of the Greeks. Once it had been observed, as it must have been for many generations, that the short noontide shadows of Egypt became shorter and shorter as one went southwards, until in the neighbourhood of the First Cataract at midsummer they disappeared altogether, it would surely be within the reach of ingenuity to infer that if one went further south still the shadow would reappear, pointing now no longer to the north but to the

¹⁹ Rawlinson, *Herod.* iii. 33, note.

²⁰ Larchner, *Notes on Herodotus*, English version. The remarks of Cooley, Larchner's English editor, on the Phoenician expedition are very sensible.

²¹ Grote, *History*, part ii. chap. 18.

south. But in fact no ingenuity was required: the knowledge, and sometimes the dominion, of the Egyptians extended far to the south of Syene. Long before Herodotus was born it must have been known in Egypt that the summer shadows at Meroe fell to the south and not, as in Lower Egypt, to the north. Now the southern coast of Africa, wherever it might be, must certainly be further south than Meroe.

The mention of a northerly sun therefore, so far from furnishing a conclusive proof that the story in which it occurs is true, appears to have been really an embellishment ready to the hand of any romancer wishing to give the semblance of scientific truth to fiction. Or it may have been, and perhaps more probably was, inserted without conscious fraud, if we suppose that what one repeater of the story said might have been seen was by the next stated actually to have been seen. It is probably because the ancient critics, better instructed in astronomy than most of their successors, allowed no more weight to this passage than it deserves that belief in the Phoenician legend seems to have been confined in antiquity to Herodotus himself. And this general incredulity is the more noticeable because nearly all of the early geographers seem to have believed, with him, that Africa was encompassed by the ocean. Many of them indeed held that the equatorial region was too hot for man's existence, a theory, curiously long-lived, which could hardly have existed at all had Sofala really been known for long ages to civilised men; but it was probably not till the first century after Christ that any evidence existed to show that Africa reached even so far as the equator. It is remarkable that Posidonius (about 100 B.C.), who did not believe that the equatorial heat was insupportable,²² and did so thoroughly believe that Africa could be circumnavigated as to make a search for proofs that it had been circumnavigated already,²³ rejected the tale of the Phoenician expedition as lacking evidence. Posidonius certainly did not know, and almost certainly did not believe, that Africa's southern point lay beyond the tropic of Capricorn, so that any one sailing round it would of necessity see the noonday sun always in the north. But he did know that it lay far south of Cancer, and consequently that the sun might there at a certain season be seen in the north. Yet that the Phoenicians should have been represented as saying that they had seen it there does not seem to have struck him as remarkable, still less as conclusive.

May it be suggested that more than one enthusiast in a later age might have learnt a lesson from the example of this ancient philosopher, who, with a pet theory to be justified, had the self-control to reject a story which must have seemed ready made for its support? At least I cannot help thinking that the believers in an African Ophir,

²² Cleomedes, i. 6.

²³ Strabo, ii. p. 98.

if they should be convinced that the Phœnician legend tells, not for their theories, but actually against them, might be ready to subject the legend itself to a more searching criticism, which, as I have tried to show, it is little fitted to withstand.

I will conclude by recapitulating the main contentions advanced in this paper.

I. The story of the Phœnician voyage round Africa rests upon evidence which either is insufficient, as all ancient authorities seem to have thought,²⁴ or must be taken as justifying a belief in another circumnavigation which no modern authority upholds. The feat appears, when we consider the magnitude and novelty of the enterprise and the slender resources of ancient navigation, to be well-nigh impossible. It appeared possible to Herodotus because he did not realise its magnitude, and did believe that his Phœnicians obtained their supplies by a method which to modern writers seems so little credible that, even while professing to accept his story, they have generally rejected this essential part of it. The expedition did nothing to correct or prevent theories as to the shape and size of Africa, or as to the climate of equatorial regions, which it should once for all have rendered impossible. The one piece of evidence which is at first sight impressive, and has been pronounced conclusive, has really little or no weight. The common belief that a northerly sun could not have been invented has sometimes been encouraged by want of acquaintance with elementary astronomy and with ancient ideas thereof.

II. But if the story be accepted as true it tells strongly against the theory that Solomon and earlier Semitic princes brought gold from South Africa. For if we adopt the only version of it which has any authority at all, that of Herodotus, it shows plainly that all the knowledge of South Africa, its ports and its climates, which must have been possessed by the Phœnicians of Solomon's time had failed to descend to the Phœnicians of Necho's time. While if we consider ourselves at liberty to reject such parts of the story as tend to this conclusion—and the tale of the northerly sun, be it remembered, is one of those parts—we have to explain how so much of what must have been common knowledge in Necho's time had vanished utterly from the world by the time of Herodotus, and by the time apparently of Hanno, the Carthaginian.

III. While the acceptance of the Phœnician legend is almost fatal to the theory of a South African Ophir, its rejection can by no means strengthen the case in favour of that theory. The very existence of such a legend in a world to which the coast of equatorial Africa had been known for centuries would be in itself a mystery.

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²⁴ Of course no geographer who, like Polybius and Ptolemy, inclined to believe that southern Africa was joined to Asia can have put faith in the story of Herodotus.