



ESSAYS ON ARCHÆOLOGICAL
SUBJECTS.

XIII.

ON THE ANCIENT MAP OF THE WORLD PRE-
SERVED IN HEREFORD CATHEDRAL,
AS ILLUSTRATIVE OF THE HISTORY OF GEOGRAPHY
IN THE MIDDLE AGES.

IN the final breaking up of the Roman Empire, polite literature suffered much more than science. While there were few, if any, of the barbarians who established themselves in the Imperial provinces, capable of appreciating the pure models of composition bequeathed to them by the classic writers, many, excited by the novelties offered to their view on every side, were seized with an ardent thirst after knowledge. We know with what avidity the sciences of the Greeks and the Romans were taken up by the Arabian conquerors, who subsequently gave to them an extraordinary development. In the west, during several centuries, the knowledge received from the Romans made little or no advance; and almost the only works on science, previous to the eleventh century,

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were little better than compendiums and school-books, such as the writings of Isidore and Bede.

To people who were conquering and colonizing, no science would be more attractive than that of geography, especially when they were at the same time receiving a new faith, founded on events which had occurred in countries far distant from their own homes. Many circumstances which have escaped the ravages of time, show us how much attention was paid by the Germanic conquerors to geography in the dark ages immediately following the overthrow of the Western Empire. Even the song of the bard appears to have been most welcome when it told of the different countries through which he had wandered. The fragment which has been published, under the title of the *Traveller's Song*, is one of the most remarkable relics of early Anglo-Saxon poetry. At a later period than that to which this piece evidently belongs, in the beginning of the eighth century, we learn from the letters of Boniface that, among the manuscripts then brought continually from the continent into this island, our Anglo-Saxon forefathers were particularly desirous of possessing treatises on cosmography.

There are extant two treatises on geographical science of a somewhat remarkable character, belonging to the earlier period of the middle ages. The first of these pretends to have been written by a "philosopher" of Istria named Ethicus, in a strange language, of which the alphabet is given at the end, and to have been translated or re-written in Latin by the celebrated St. Jerome, which would carry it back to the fourth century of the Christian era. But the barbarous Latin, totally dissimilar from the style of

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St. Jerome, seems to condemn this account as a mere fable. It is, however, a work of great antiquity; for the age of manuscripts still preserved carries it back as far as the eighth century, and various points of internal evidence seem to fix it to a still more remote period. Its pretended author, Ethicus, is represented as a great traveller in search of geographical knowledge: at one time we find him penetrating into the depths of Asia; at another, exploring the Western Ocean, and almost reaching America—he alludes apparently to the peak of Teneriffe; and then again we find him wandering through the Britannic isles, and extending his researches to the northernmost parts of Europe. Whether he really visited the places thus described may be considered as a matter that admits of great doubt; but, concealed under an affectedly poetical but barbarous style of writing, often unintelligible, we perceive traces of geographical knowledge which we should little expect; and it is by no means improbable that in Spain he may have picked up stories of the adventures of some of the daring navigators of its western ports, whom storms or their own bold curiosity had carried out into the trackless ocean,—the extent and bounds of which were then wrapped in fearful obscurity. The cosmography of Ethicus appears, by the number of manuscripts written in this country, to have been extremely popular in England from the eighth to the eleventh (and even to the twelfth) century; but it is as yet inedited, although an excellent edition is preparing by one of the most learned geographers of the present day, M. D’Avezac of Paris.*

In the kingdoms founded by the Goths in Italy

* This has since been published, with a very learned dissertation.

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and in Spain, literature and science were extensively cultivated by men who rather affectedly took to themselves the Greek title of “philosophers.” Unfortunately nearly all their writings have perished amid the convulsions of a succession of wars, during which the Goths ceased to exist as a people. It was probably to one of these “philosophers” that we owe the so-called cosmography of Ethicus. Another of these Goths, who is generally considered as having lived at Ravenna, the capital of the Gothic kingdom in Italy, and as having flourished in the seventh century, but whose name is unknown, has left us a much more intelligible treatise on geography, though written in equally barbarous Latin. A remarkable feature of the work of the Geographer of Ravenna, the title by which this writer is commonly known, is the number of other writers on the same subject, or (as he calls them) “philosophers,” who appear to have lived a little before his own time, who are cited by him, but who are otherwise totally unknown to us. In fact, it is through this writer alone that we are at all acquainted with the geographical literature of the preceding age. Among the rather numerous writers quoted by this anonymous geographer, are three “philosophers of the Goths” (*Gothorum philosophi*), whose names, Aithanarid, Edelwald, and Marcomir, at once evince the race to which they belonged. He quotes also frequently two Romano-African geographers, Probus and Melitianus; two Græco-Egyptians, named Cyachoris and Blantasis, who had travelled to the south of Egypt in search of knowledge; two Persians, who had written “a picture of the universe” in Greek, and whom he names Arsadius and Aphrodisianus; two Greeks, Hylas and Sardonius;

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and two Romans, Lallianus and Castorius. The last of these is the writer whose authority the geographer of Ravenna follows most largely. All the works of the schools represented by these names are now lost.

The treatise of the geographer of Ravenna, divided into five books, consists, in a great measure, of lists of towns in each country; and from the way in which they are given, his authorities seem often to have been maps or geographical tables like those of Ptolemy, whom also he quotes. But he has mixed the names together in so confused a manner, that, joined with the corrupt orthography, this has rendered it almost impossible now to identify many of them, although we can have no doubt that such places did exist. In Britain especially, where his list is remarkably full, he seems to have run his eye backwards and forwards in so careless a way, that he has in several instances repeated the name of the same place, as though he had found it in different parts of the island; and it is not at all improbable that he may have so far wandered beyond the limits, as to import into Britain two or three towns from the opposite coasts of Gaul and Germany.

In the writings of this geographer we meet with those theological prejudices which were beginning to trespass on the scientific discoveries of the Greeks and Romans. He shows an unwillingness to speak of any but known countries; and he evidently had no distinct conception of the form of the globe. He will not even allow, with the majority of the geographers who had gone before him, that the earth was entirely surrounded by the sea. For, says he, if such were the case, where should we find Paradise, which

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the holy Scripture describes as lying in the east. He therefore states as his opinion, founded on the authority of St. Athanasius, that beyond India lay a trackless desert of unknown extent, which no mortal was permitted to pass, beyond which lay Paradise, forming the extreme east. From Paradise, as he believed, sprang the four rivers—Geon, Physon, Tigris, and Euphrates; and he could only be induced to accord any credit to the “gentile” philosophers who believed that the two latter rivers had their rise in the mountains of Armenia, on the supposition that they had come thither from Paradise by an invisible course. He believed that the ocean which washed the extremities of the earth with its waves was bounded at an unknown distance by lofty mountains, behind which the sun dropped at night as into a pit, passing under the earth to rise next morning in the east.

Barbarisms like these had already been introduced into science in the east by the Christian ascetics. An Egyptian monk of the earlier part of the sixth century, named Cosmas, and termed, from the presumed fact of his having travelled into India, Cosmas Indicopleustes, has left us a treatise on geography, which he designates by the title of *The Christian Topography of the World*, intimating thereby that it was the only system which conformed with the notions of orthodox Christianity. A system which he combats as most heretical and absurd, was that which gave to the earth the form of a globe, and which had been held by the “heathen” philosophers. He describes it as a vast oblong plain, surrounded by an immense wall which supported the blue vault of the firmament. He believed, like the geographer of Ravenna, that the sun set behind a great mountain. If we overlook the gross errors of his system, the treatise of

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Cosmas gives us some slight glimpses of the condition of countries which were soon afterwards lost sight of by the Christian world for several centuries.

The treatise of the geographer of Ravenna seems to have been totally lost to the world until the manuscript was discovered and printed in the seventeenth century; and the cosmography of Ethicus, although evidently much read, appears to have had very little influence upon geographical science in succeeding ages. For we find that the books on this subject down to the twelfth century are almost all founded on Pliny, Solinus, and Isidore. Even at the end of the tenth century, the text-book on geography in England was the metrical *Periegesis* of Priscian, a translation from the Greek *Periegesis* of Dionysius.

It is surprising how little improvement had at this time been made in geographical science as taught in the schools, when we consider the many distant voyages which had been made by Anglo-Saxons in search of knowledge, and the eagerness with which accounts of distant lands had been grasped at. With the seventh century our forefathers began to pay frequent visits to the east, and several narratives of travels have been preserved. In the year 825, an Irish monk in France, named Dicuil, published a treatise on geography, under the title of *De Mensura Orbis* (Of the Measure of the World), which was still based on Pliny, Solinus, Orosius, Isidore, and Priscian; but Dicuil has inserted in it original information, gathered on the one hand from a traveller who had visited Syria and Egypt a little before the year 767; and on the other hand, from some clerks who had sailed among the northern islands of Scotland, and had even reached Thule or Iceland about the year 795. When king Alfred translated the historical work of Orosius, he

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inserted into the prefatory description of the world an account of central and northern Europe as it then existed, and very exact original information relating to the coasts of Scandinavia, which he had obtained orally from two northern navigators, Ohthere and Wulfstan. The royal translator is also said to have sent out messengers to distant India, who returned with many curiosities; and who, if the relation be true, must have delivered to the king an interesting account, the loss of which is in the highest degree to be regretted. I look upon it that there was no impossibility, or even great difficulty, in such a journey in the peculiar state of political relations, when the empire of the Arabs was at its highest point of grandeur. Expeditions like these, we should naturally think, ought to have added to the knowledge previously in existence; yet ages afterwards we still find the popular system founded as before on the older Roman treatises, and even the Roman names preserved at a time when they can only have existed in books. It is impossible now to say how far the teachers in the schools explained orally these ancient denominations and descriptions according to their modern names, and what instruction was there given on the modern state of things.

In the earlier mediæval schools, teaching appears to have been a mere lecture, in a great measure grammatical, on one popular text-book, from which masters and scholars, from generation to generation, ventured rarely, if ever, to depart. The commentary of Bridferth of Ramsey, on the scientific writings of Bede, represents this course as pursued in the monastic school at Ramsey in the tenth century. Bridferth was, however, a man rather in advance of his age, and we find him sometimes appeal-

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ing to experiment in his teaching. He was educated in some of those schools on the continent which were then paving the way for a more solid extension of learning and knowledge, which, towards the end of the eleventh century, received a sudden and extraordinary development, in the midst of which arose those remarkable institutions of the middle ages, the universities. The Christian scholars of the west were now no longer satisfied with what was to be derived from their old text-books, or with the ordinary routine of learning which had been so long persevered in; what they could not find at home, they sought in distant lands, and among the Arabs of Spain and of Syria they found not only new elements, but they imbibed new principles of study, and new views as to its objects, which had a powerful effect on the progress of science in future ages. The science of the Greeks, as the empire sank into intellectual imbecility, was received and cherished by the Arabs, and they in their turn, as the empire of the Koran began to totter, handed it over to another race, in whose hands it ultimately led to that grander development which it has taken in modern times.

It was in the midst of that great intellectual blaze which distinguished the twelfth century, that the first decidedly new element was introduced into geographical science in the west. The Arabs, like the barbarian conquerors of Western Europe, had derived their first principles of geographical knowledge from the treatises of the ancients; but they adopted and preserved Ptolemy, and probably some of the other writers who were used by the Gothic "philosophers," and had been exchanged in the west for mere elementary treatises. The Arabs, moreover, who had

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applied themselves to all the sciences with extraordinary ardour, were, by the great extent of their conquests, placed in a peculiarly advantageous position for extending and improving their knowledge in geography. They were, thus, far in advance of the Christians of the west; who, from their intercourse with them, derived not only new knowledge, but a new energy in the pursuit of science, and above all, they adopted that practical skill in astronomical observations, which soon dispelled the superstitious ignorance which had previously clogged their steps.

The Anglo-Saxon scholars understood perfectly well that the earth was a globe. They considered it to be the centre of the firmament, which they imagined to be an immense concave surface, on which the stars were in some way or other attached. Two stars, the north polar star and the south polar star, directly opposite to each other, were the axles upon which the firmament turned its endless round. The Anglo-Saxon *Manual of Astronomy*, composed by Alfric, tells us that, “the firmament is always turning round about us, under this earth and above, and there is an incalculable space between it and the earth. Four-and-twenty hours have passed, that is one day and one night, before it is once turned round, and all the stars which are fixed in it turn round with it. The earth stands in the centre, by God’s power so fixed, that it never swerves either higher or lower than the almighty creator established it.” The notion was, that all the continents and islands known to us as inhabited, belonged to one of five zones, that it was divided from another equally temperate zone inhabited by the antipodes, by a torrid zone, the heat of which rendered it impossible for human beings to pass from one temperate zone to the other. Each