NOTES ON THE ANCIENT TOPOGRAPHY OF CORNWALL. Br R. N. WORTH, F.G.S., Corresponding Member.

An inquiry into the principal features of the ancient topography of Devon, lately resumed after having been for some time laid aside, was found to extend itself into Cornwall, and to lead up to conclusions differing widely from those which are commonly accepted. I have thought it advisable therefore to lay before the Royal Institution some notes on the results of my investigation. I do not anticipate they will meet either with immediate or general acceptance; but I have sufficient confidence in the method employed to believe that in the main they will hereafter be regarded as established. And I would point out in reference to the differences of opinion between previous investigators and myself, that the only "authorities," who can be cited as such in this enquiry, are the ancient topographers whose statements are in process of interpretation, and the accepted physical and archæological facts that have a bearing thereon. There is no reason, other than personal, why a writer in the last century should be better able to interpret the true meaning of words written many hundreds of years ago than an independent investigator of the present day; and on the other hand it is certain that the modern enquirer has the assistance of several lines of evidence unknown to his less fortunate predecessor.

The present paper is an attempt towards a solution of the vexed problems of the Ptolemaic geography of Cornwall; and of the still more difficult issues raised in the identification of the local names in the list of cities and camps of the Anonymous Chorographer of Ravenna.

The only places mentioned by Ptolemy that can have to do with the extreme West of England are :—

		Longitud	e.	Latitude.
Vexala estuary	 	16-0		53-30
Hercules promontory	 	14-0		53-0
Antivestaum promontory	 	11-0		52 - 30
also Bolerium				

Damnoniu	m promo	ontory	•••	• •	12-0		51-30			
a	lso Oerin	num								
Outlets of	the rive	r Cenic	on	• •	14-0		51-45			
Outlets of	the rive	r Tama	rus		15-40	-1	52-10			
Outlets of	the rive	r Isaca			17-0		52-20			
Outlets of	the rive	r Alæn	us		17-40		52-40			
Towns of the Damnonii—										
Voliba	• •	• •	• •		14-45	• •	52 - 20			
\mathbf{U} xela	• •	••		• •	15-0		52-45			
Tamare	• •		••	• •	15-0	• •	52 - 15			
Isca Damr				••	17-30	• •	52-45			
Second Au	.gustan I	legion.	•		17 - 30	• •	52 - 35			

Every one of these names has been diversely assigned. The Vexala estuary is generally regarded as that of the Parret, however, and the promontory of Hercules all but universally as Hartland Point Antivestaeum too has no very wide range of location, varying only between Cape Cornwall, the Land's End, and St. Ives. The Damnonian headland has been assigned to the Deadman, but is generally accepted as the Lizard. But for the fact that Ptolemy begins his survey of the southern coast with the Cenion, I should myself rather suggest the Start.

The rivers have given more trouble. The Cenion has been variously regarded as the Fal and Tamar; Tamaris as the Tamar and the Exe; Isaca as the Exe and the Wey; Alauna as the Exe and the Stour.

With the towns it is still worse. Tamare is Tamerton, Saltash, Tavistock; Voliba—Lostwithiel, Tregony, Bodmin; Uxella—Exeter, Lostwithiel, Crockernwell, Bridgwater;* Isca— Chiselborough, Exeter, Ilchester; and the Second Augustan Legion has been placed at Liskeard.

Some of these assumed identifications are so extraordinary that at first sight it is difficult to imagine how the blunders can have arisen. The problem, however, is not so very abstruse after all. The worst errors have been made by those who have

^{*}A recent identification of Uxella with Bridgwater on the ground that *Uchal* is "bridge" in Keltic, is founded on an etymological blunder. The "bridge" in the name is really "burgh."

trusted entirely to Ptolemy's leadership, and the next place is taken by those who have been misled by fancied etymologies.

Now a cursory examination of Ptolemy will show that there is a very marked difference-as indeed was inevitable-in the accuracy of his latitudes and his longitudes. He is very little over a degree out in his estimate of the length of Great Britain from the Land's End to Dunnet Head; but he is four degrees in excess of the estimate of the much smaller distance between the Land's End and the North Foreland; and places which are really on the same meridian of longitude are set down as differing from each other nearly 14 degrees. Moreover, while Ptolemy averages nearly two degrees in excess in the latitudes given to places in this western promontory, they are relatively placed with much greater exactness, the total range of comparative error being about 40 minutes. But the longitude is quite another matter. Between the Land's End and Exeter 61 degrees are allowed instead of less than 21; while between the Land's End and Hartland 3 degrees are given instead of 1. All in fact that Ptolemy's longitudes can do, at any rate in the West, is to indicate relative position; and to pay further attention to them would only ensure error.

There is no reasonable doubt that Isca Damnoniorum is our modern Exeter. Let us see how this fact will enable us to approximate the position of its sister towns.

The latitude assigned to Voliba is 25 minutes less than that of Exeter, and we may take the longitude so far into account as to accept the statement that it is the most westerly of the group. Running along the latitude indicated we find ourselves about the middle of Cornwall, and we shall see by and bye, from other considerations, that the most likely place is Polruan.

To Uxella the same latitude as Exeter is given, and so far as longitude is concerned it would be east of Voliba. If Uxella was a port (and all Ptolemy's western towns appear to have been near the sea) this would bring us to the north coast, and indicate in all likelihood the estuary of the Camel, which would be well within the ordinary range of error. It is a curious coincidence, if nothing more, that in this locality we have Uxella echoed in such names as Porth Izaak and Lezizick, Zanzidgie, Canalidgie, and St. Issey; and there is ample evidence that the Camel was visited by Roman ships. The attempt to associate Uxella the town with Vexala the river may be regarded as disposed of by the difference of their recorded latitudes and longitudes.

Tamare is given half a degree less latitude than Exeter, and its longitude is practically settled by its name. It must be on or near the Tamar. But Ptolemy's latitude from Exeter would give the Eddystone. We have therefore to fall back upon other considerations.

As to the place of the Second Legion, the only one to which Ptolemy assigns a special station, assuming that it is rightly given the same longitude as Exeter, the latitude would land us somewhere on the shores of Torbay.

We cannot gain any help from the comparative latitudes of the river mouths. That would place Tamare only five minutes within the Tamar estuary—satisfactory enough to those who find it in King's Tamerton; but it would place Exeter 25 minutes up the Exe, or somewhere in the neighbourhood of Exmoor.

If we take the Land's End as our standard, assuming as we very well may, its practical identity with Bolerium, Voliba is placed 10 minutes further south, somewhere in the Channel; Uxella 15 minutes to the north, and therefore sufficiently close to the parallel of Lostwithiel, one of the favourite claimants for the seat of this long-lost town. But precisely the same relative latitude is given to Isca; and Tamare is more hopelessly lost than Voliba, 15 minutes further south, and therefore all the more at sea. The Antivestæum bearings are therefore of no use.

We turn next to those of Hartland. Voliba is 40 minutes south of this promontory, and that brings us to Polruan. Uxella has a southing of only 15 minutes. That brings us to near Boscastle, and within reasonable distance of the Camel estuary. Isca has the same latitude as Uxella, and works out for Exeter with remarkable accuracy. Tamare is 45 minutes to the south, and that brings us just outside the entrance of Plymouth Sound. The Hartland bearings are hence far more accurate than in the other cases. Still Hartland fails us in the case of Tamare, and I pass that town by until I come to deal with the list of the Ravennat.

346

Concerning Ptolemy, I have only further to say that his Cenion is to my mind clearly the Fal, named not from *Tregony*, but from *Kenwyn*, so that Truro really, so far as we can apply the test of nomenclature, and not its rivals Tregony and Grampound, is the ancient head of the district.

I do not bring Richard of Cirencester into the argument. In the topographical treatise which passes under his name, it is true that Tamara, Voluba, and Cenia are mentioned as in or adjoining Cornwall; but this is now justly discarded as a modern forgery.

We come therefore to the list of names of cities and campscivitates et castra-set down by the unknown writer who is commonly known as the Anonymous Chorographer of Ravenna, and who wrote subsequently to the Saxon invasion of England, and probably about the 7th century. It has been too much the fashion to regard his list as a mere collection of "barbarous names," and although it has been suggested that the Ravennat used some kind of map, and adopted some kind of order, yet it has been confidently asserted that we cannot settle from it the position of a single town, "since we cannot discover what was the particular plan, or whether any, which the author made use of in the arrangement." It may be venturesome on my part to attempt the solution of a problem which has puzzled so many eminent men, but I think I shall be able to give reasons in favour of my method of unriddling the mystery, which have at least an air of probability.

One point on which all commentators are agreed, is the commencement of the Ravennat's list at the extreme West of Cornwall; and there is also a general belief that twenty-four names which form his first group, and which precede Moridunum, the next station to Exeter in the well-known Antonine Itinerary, relate to Cornwall and Devon. These names are :--

Giano, Eltabo, Elconio, Nemetotacio, Tamaris, Durocoronavis, Pilais, Vernalis, Ardua, Ravenatone, Devionisso, Statio Deventia, Stene, Duriarno, Uxelis, Vertevia, Melarnoni, Scadum Namorum, Termonin, Mostevia, Milidunum, Apanauris, Masona, and Alongium. And then a fresh start is made with Moridunum, mentioned as the next city to Exeter—Scadum Namorum.

The first thing to be settled is the place at which we are to begin. This is one of the two keys to the solution of a problem which has always appeared more difficult than it really is. The name with which we start is Giano. Mr. Kerslake, whose critical acumen in questions of this kind is so remarkable, identifies this place, as do others, with Ptolemy's Cenion. And this would be a very natural conclusion if the G had the hard sound. But the Ravennat, using the Italian pronunciation, would sound the G soft. Directly I recognised this fact I saw that we had here the earliest name, apart from Iktis, recorded for a Mount's Bay port, for the second syllable of Ludgvan was at once suggested. This was my first step. The second was taken when the identity of the Ravennat's Giano, with the Jew which closes the popular name of Marazion, flashed upon me. The rest was easy. The Gian of the old chorographer turned out to be both the gran of Ludgvan, and the zion of Marazion, and Lud and Mara stood confessed as in all probability distinctive prefixes. It is quite possible, whatever the Lu or Lud may mean, that the Mara may equal Marhas, "market "-as commonly interpreted. I am more concerned, however, about the root word. This is variously written-gon, syowe, gou, ysowe, ju, deythyow, iewe, siew, diow, iu, sion, &c., showing a far wider range of difference between these undoubted attempts to express one and the same word, than between either and our Giano. I do not see how the identity can be resisted, but the discovery, while naturally aiding the Iktis tradition, is against the rival theories that interpret Marazion either as Jew's Market, or Thursday Market, to say nothing of "bitterness of Zion !" The original word which Gian is intended to represent is probably the Kornu sian or zian "sea-shore" or "strand." If Mara represent marhas we have therefore evidence of ancient commerce at Marazion, curiously reproduced in name at the well-known "Market Strand" of Falmouth. The old Cornish tongue had no j; its g almost universally had the hard sound; nor is it easy to see how the Ravennat could have rendered the sian or zian otherwise than he did. The o is of course redundant and inflexional.

An omission of the Mount's Bay district in ancient lists of British towns or ports is really inexplicable, and the identification of Giano, by removing this obstacle, satisfied me I was on the right track. Eltabo and Elconio at once suggest as their first component, the Kornu hayle or hel = river. II is a letter the Ravennat never uses, and his *e* would sound *a*. Assuming a topographical order, we naturally look for Eltabo in connection with the stream commonly known as the Helford. No possible process of accommodation will enable us to accept Helston as Eltabo. Tuban, however, is a Kornu word meaning "dam" or "bank"; and it is a very remarkable fact that not only is there a site in Helston called the Tubbans, but that there is in St. Keverne the manor of Treraboe, or Traboe. The Ravennat's name therefore still exists. It will be remembered that Condurra, at the mouth of the Helford, has yielded some of the most important traces of Roman intercourse in Cornwall.

Elconio requires very little comment. If Ptolemy's Cenion is Kenwyn, Elconio is simply the ancient equivalent of the modern "Kenwyn River," and the place signified undoubtedly Truro. And this view is strengthened by the fact that at this point the Ravennat leaves the coast for a while and takes up a line of internal communication.

That there were ancient British roads in Cornwall is undoubted; but I have never been able to trace any evidence of Roman roadmaking. I believe, moreover, that the trunk line of communication has been lost sight of by our antiquaries, who have been misled, largely by the forgery bearing the name of Richard of Cirencester, into placing it on the south coast, instead of tracing it along the high land which forms the backbone of the two counties. The Fosse Way is said by the early chroniclers to have begun in Caithness and ended in Totnes; and this Totnes we find, from the manner in which it is spoken of in the sixth century chronicle of Nennius, was not the town of that name, but used in a sense equivalent to the Land's End. The confusion of Totnes, the town, with this older Totnes, has led to the loss of the real route of the Fosse Way, which there is very good evidence to show crossed Dartmoor by what is still called the great central trackway, and entered Cornwall by a ford on the Tamar somewhere in the vicinity of Hingston Down.

Now the next name on the Ravennat's list is on the line of this ancient road. Nemetotacio is manifestly corrupt, even beyond the Ravennat's wont; though we do find him venturing upon such flights of fancy as the conversion of Isca Damnoniorum into Scadomorum. "Neme" or "Nemet" is not a Kornu word, though "totacio" may seem to be represented in such a name as Tokenbury near St. Ive. It occurred to me, however, that the neme or nemet might really represent a transposed and inflected form of a word of frequent combination in Central Cornwall-the Menna of Mennaglaze, Mennabroom, Polmenna, Tuelmenna. Whether this means maenic "stony," or simply maen "stone," is of no consequence. It certainly cannot in these instances be read manach, monk, as in the popular derivation of Bodmin, and it comes remarkably close to part at least of the word we have to deal with. Are there not then fair grounds for suggestion that this barbarous Nemetotacio really representsnot precisely the modern Bodmin, but its parent, the magnificent fortified town immediately to the south-east, commonly known indeed as Castle Canyke, but still retaining the older name of Castle Mannau. Canyke of course is not Keltic but Saxonthe Conig so frequent in Somerset, and not unknown in Devon, in Conygar. This earthwork is clearly from its size and position one of the most important sites in ancient Cornwall, and is manifestly the parent of the more modern but still venerable Bodmin, which, like Salisbury from old Sarum, and Dorchester from Maiden Castle, has descended into the watered valley. And I am not at all sure that while the "neme" represents the modern affix, the Bod may not be found in the "tot" of the older form.

However this may be, I feel no doubt that Castle Canyke, or Bodmin if you will, is the next station of the Ravennat to Truro. The fact that Tamaris succeeds shows that Nemetotacio is between Truro and the Tamar, and the identification of Durocoronavis as Launceston appears to indicate that Nemetotacio stood at a place where the roads to Tamaris and Durocoronavis diverged.

Ptolemy failed to give us any certain indication of the position of Tamaris; but the Ravennat clearly strengthens the conclusion to which I have come, for reasons which cannot be given in full here, that it is to be sought on the old main line of communication into Cornwall commonly called the Fosse Way, which struck the Tamar at a ford, and must therefore be near the head of or above the tidal reach. It is idle to believe that in the early days when this road originated, the crossing of a difficult and at times dangerous estuary would have formed part of a customary route. The great trackway on Dartmoor points clearly from Exeter to Tavistock; the crossing place of the Tamar can hardly be placed lower than Horse Bridge, and if not Tavistock then some place in its near vicinity will represent Tamaris.

Durocoronavis I have assigned without hesitation to Launceston, and this brings us to the application of the second key to the Ravennat's list, at which I hinted. He was evidently a man unacquainted with the meaning of the Kornu-Keltic names, as with Keltic generally, for he simply turns them into Latin, flavoured by Italian pronounciation, as best he may. But Saxon names or particles he understands, and commonly translates. The old name of what is now Launceston proper was Dunheved, or Dunheafod. The Ravennat knew that *heafod* meant head or summit, and so he turned it into *coronavis*.

Leaving Launceston we then, according to my theory, return to the Truro estuary. My next suggestion may appear to savour of great simplicity—the riddle may seem too easy of solution. To me, however, this solution appears one of the very strongest points of my case.

The three names which follow Durocoronavis are Pilais, Vernalis, and Ardua. Surely it is something more than a casual coincidence that we have on the upper tidal waters of the Fal, and in much the same order—Philleigh and Veryan, and Ardevora, each with its little creek harbour. The manor of Ardevora is said to have once included St. Mawes, but is shown in Norden's Map of Cornwall to the north-east of Philleigh. There is nothing in the assumed saintly origin of the names of Philleigh and Veryan to militate against their use by the Ravennat at the date commonly assigned to him.*

^{*} The fact that Philleigh and Veryan were usually known in the middle ages by other names is no proof to the contrary. It is a very common thing for a parish to have two names running contemporaneously, and for one to obtain easual precedence. So with the different names often borne by parishes and their chief towns. The original dedications of the churches admitted, the names must in some form have continued, and if the saints are disbelieved in the names must have existed to found the saintly myth.

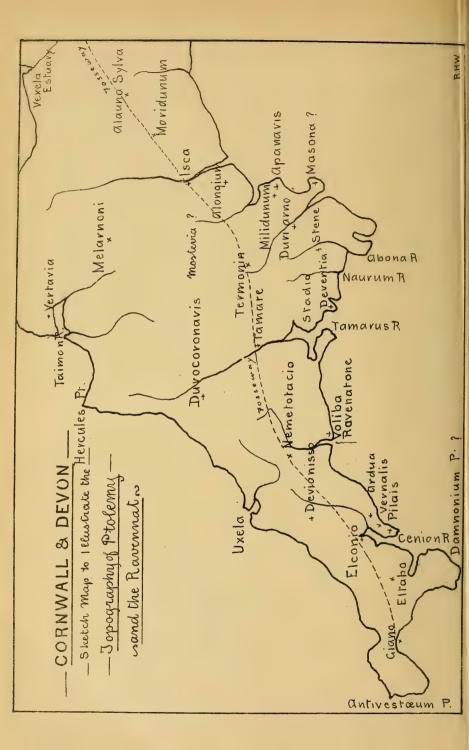
In Ravenatone, the v being sounded as u, we have clearly one of the Ruans; but which, without the aid of Ptolemy, it would be hard to say. There is really no evidence that either Tregony or Grampound were Roman stations; nor does it seem easy to realise the existence of an amount of commerce in these early days that would employ five ports on the various branches of the Fal, and we have placed four there already. Polruan therefore I hold to represent both Voliba and Ravenatone. It retains traces of both names; it is to all appearance the most ancient settlement remaining on the Fowey; and it has yielded unmistakable traces of early commerce with the Mediterranean. I do not, however, believe that Ruan means Roman, or that it originated in a dedication to St. Rumon. We need not go further for a meaning than Price's ruan=river, or rhyn= promontory.

Devionisso, which comes next, evidently represents the ancient Cornish word for a fortified place—dinas, to which the pronunciation Deuionis comes as close as a Latin or Italian rendering of a Keltic word well can. And of the reduplicative Castell-an-dinases of the county that which best suits the reference is unquestionably the finest of them all—the magnificent entrenchment on the high ground south of St. Columb.

With the exception of Uxella this completes the Cornish towns in the Ravennat's series, but for the purpose of further illustration of his method I may mention the leading features of his references to Devonshire.

Stadio Deventia is Staddon, on the east of Plymouth Sound, where remains of an ancient settlement of importance have recently been discovered. Stene survives in Stanborough, a fine "camp" commanding a wide extent of country, in Moreleigh parish. Duriarno is evidently on the Dart; but as it simply stands for "Dart river," it may be either Totnes or Dartmouth, though probably the former.

Having reached this point in exact topographical order, but for the divergence inland from Truro, the Ravennat returns to pick up the towns on the north coast which he has overpassed; and thus gives us in succession, Uxelis, Vertevia which is probably Barnstaple, Melarnoni, and Scadum Namorum. As the last is undoubtedly Exeter, and Melarnoni lies between it and



Vertevia, and since *arno* as in Duriarno means a river, some place on the river Mole is at once suggested, and in all probability South Molton.

And here the Ravennat again returns to take up the line of the central route left at Tamaris. His next name is Termonin, and bearing in mind that the e sounds a, and that the local pronunciation of Tor is still Tar, Termonin has a very natural rendering in Tor-hill, and we are led to locate it somewhere on the line of the great Dartmoor trackway. Without going into detail, I may say that there is a Tor-hill which shows abundant traces of ancient population, in the neighbourhood of Rippon Tor. Mostevia, which comes next, may be variously placed, but Milidunum there can be no hesitation in identifying with the great earthworks on Milber Down, near Newton Apaunaris is indicated beyond the reach of Abbot. reasonable controversy in Hope's Nose, the eastern headland of Torbay, which bore ample traces of ancient settlement. The modern Hope's is a clear corruption of the Apau which the Ravennat has preserved, and his naris is of course a translation of the original Scandinavian ness. Masona is doubtful, and may very well be Berry Head, once the site of an important station; but whether this be so or not I have no hesitation in placing Alongium on Haldon, completing the route to Exeter on the south

It will be gathered from this that I assume the Ravennat to have worked methodically, possibly from a map, proceeding from west to east, with all the regularity possible, and taking traverses from the north to the south to complete his work. The same rule applies, so far as I am able to trace, through the counties of Somerset and Dorset; and I believe it supplies the key to the interpretation of his record for the kingdom. My belief in the correctness of this solution of his problem does not, it will be seen, depend upon a few happy guesses, or possibly chance coincidences, but upon a whole series of consecutive identifications, each of which decreases in geometrical ratio the chances of error.

The results at which I have arrived are best shown probably in the accompanying map.