

Plato's Impossible Plain

We have surely all heard that old saying that if we had some bacon then we could have bacon and eggs – if we had some eggs! This is a warning for us not to nest too many 'ifs'; not to go beyond the facts and venture too far into speculative territory. But sometimes as long as you admit what you are doing then the results can be interesting – especially when the subject is Plato's Atlantis and the vast dimensions that he specifies for the lost 'continent'.

Author Tony O'Connell in his book *Joining the Dots* (pages 82-87) and on the excellent *Atlantipedia* website draws our attention to the huge dimensions that Plato gives for the rectangular plain at the centre of Atlantis; and for the size and depth of the surrounding ditch. When you consider these huge proportions, it is easy to see why Plato compared Atlantis to a lost 'continent'! There should be no need to repeat in detail here the discussion of the units and solutions suggested by other authors and which are amply explored at <http://atlantipedia.ie/samples/dimensions-of-atlantis/>

In *Critias*, the scale of the central plain is given as *three thousand stadia by two thousand stadia*; a natural rectangle bounded by broad straight canals that diverted the rivers as they came down from the surrounding mountains. The fields within were irrigated by ditches that drew off the larger channels. The impression given is rather similar to the Dutch canals and dykes; or to the modern irrigation of the Cambridgeshire Fens.

Like everyone else I assumed, in my own earlier books: [Towers of Atlantis](#) and [Atlantis of the West](#), that the dimensions were unreliable due to a mistranslation of smaller units at an early stage in the transmission of the story. Even Plato found it hard to believe the measurements that he inherited, but he duly passed them on for us to consider. This should negate any suggestions that the story was Plato's own invention – for why would he not have chosen more credible dimensions?

Consider the following ancient measures:

<u>UNIT</u>	<u>MULTIPLE</u>	<u>METRIC EQUIVALENT</u>
Egyptian Cubit	-	52.5 centimetres
Egyptian Khet	100 cubits	52.5 metres
Egyptian 'River measure'	20,000 cubits	10.5 kilometres
Egyptian Stadium	-	157 metres
Athenian Stadium	-	185 metres
Greek Plethron	100 Greek feet	30 metres

The length of a Greek Stadium (Stadion) varied from place to place between 157m and 209 m – but it doesn't help us much whichever unit we choose. As O'Connell points out, a canal width of a Greek or Egyptian stadium is excessive for purpose; the further detail that they were wide enough for ships to pass gives us a better idea of adequate dimensions from which we may scale down the other measures appropriately. However, we don't have to accept that *all* the channels were quite so wide, or so deep, perhaps only those parts that needed to be; after all, we are also told that bridges spanned the various canals!

If you consider a plethron as roughly the width of a Greek running track then you would have an adequate breadth for a canal, with perhaps wider passing places. However, this same dimension is also given as the *depth* of the channels. *Why would the channels need to be so deep?*

Firstly, let us assume that we have a memory of a real place and not Plato's own fiction. If we posit that Solon or his source mistranslated Egyptian *khet* as *stadia* then this would give us a rectangle (approximately) 150 km by 100 km, still huge, but slightly more plausible. We cannot be sure that the exact same units of length were used in the most archaic Egyptian dynasties. Regardless of how the original story came to be recorded by the priests of Sais, they too must have translated the dimensions from a native (Atlantian) source. The chain of preservation goes something like this:

1. Recorded in unknown local units of measure
2. Transmitted by traders or colonists to archaic Egypt
3. Recorded by the Saite priests when the temple was built
4. Transcribed numerous times up to the era of Solon
5. converted to Greek units by/for Solon
6. Interpreted by Plato for his narratives
7. Translated for modern readers by Greek scholars

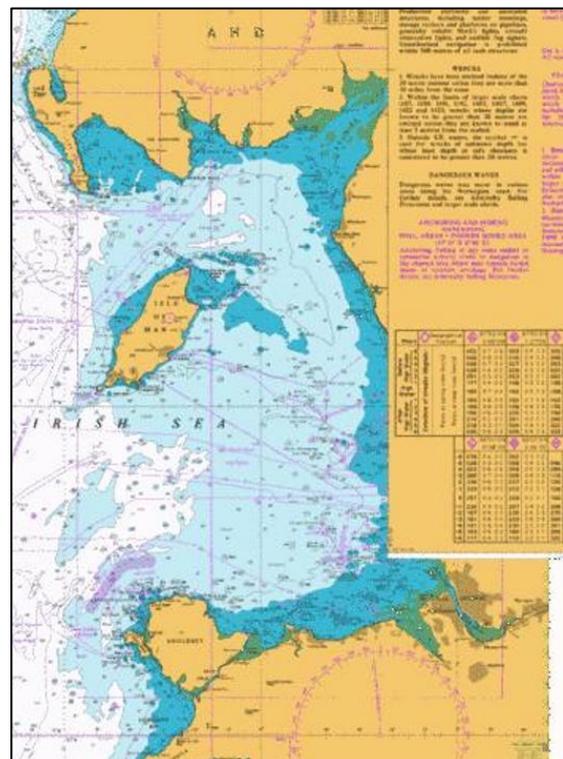
Errors could have been introduced at any of these intermediate stages in the preservation of the history. Therefore other than to conclude that the measurements are sensibly too large by a huge multiple then it becomes fruitless to seek a submerged rectangular plain of any precise scale; be it in the Atlantic or Mediterranean. We can better trust the invariable statements that ships could pass on the canals, and that the plain was roughly a 3 by 2 rectangle, as details more likely to have survived as 'fossils' through the various stages of transmission.

Most theorists, in discussing diverse locations, from Thera, to Spain, to the Altiplano and beyond will simply ignore or bend Plato's dimensions to suit their own pet theory. All we can really say is that there was a rectangular 3:2 plain at the centre of a large island. The plain was dissected by broad rivers which were controlled and diverted into the straight canals; it was surrounded by hills and mountains with another hill towards the centre; and a part of it faced south towards the open sea. So where might we find this combination of natural features?

On the floor of the [eastern Irish Sea](#), we do find a submerged rectangular plain at the centre of a large island (Britain and Ireland together) that would make a good match for Plato's description. Actually, we can see two such rectangles. The larger rectangle is bounded by the modern shores of the Irish Sea, with the mountain of Mann at its centre. Between the Isle of Man and Anglesey lies a smaller submerged rectangle known as the *Manx-Furness Basin*. Separating this from the northern *Solway Basin* is a rise known as the *Manx-Furness Ridge*.

UK Admiralty Chart 1826

The eastern Irish Sea is a relatively shallow submerged shelf, as shown here on the navigation chart. As a guide the road distance from Liverpool to Holyhead is around 63 km and from Liverpool to Carlisle 78 km



If you would like to use some imagination and make some figurative ‘bacon and eggs’ then we do know that at some stage between the end of the Ice Age and modern times, the eastern Irish sea was exposed and the Isle of Man was linked to the Lancashire coast. We know this because various animals reached the island. The only point of dispute is precisely *when* this was. Conventional sea-level theories require the Irish Sea basin to have flooded early in the Holocene as the northern ice-cap melted and thus it would have had at best an icy tundra climate. It is generally agreed that the sea had gradually settled to its present shores by the mid-Holocene warm period, around 5,000 years ago.

The submerged floor of the eastern Irish Sea slopes only gradually away from the Lancashire coast and reaches 50m depth, roughly along a line drawn from Anglesey via Mann to Galloway; and then drops away steeply to the west. To fulfil Plato’s description of a flat plain requires a relative tilt to have occurred. The Manx-Furness Ridge lies at a depth of 15-20m with two gaps where the depth falls to 25-30m. If we assume the basins to north and south to have been formerly close to sea level (rather like the present-day Cambridgeshire Fens) then in order to link the basins across this ridge at sea level would have required a ‘canal’ of *perhaps* 20-30m depth to be dug in the soft glacial till – perhaps by deepening a natural river valley. Therefore, the most extreme depth of cutting specified by Plato (a plethron) would have been needed in only this one location. There is no point in trying to be precise with such estimates!

Consider the labour that would have been required for such an irrigation scheme? Plato writes that the canals of Atlantis were a task over many generations for a large population of farmers. We may compare it to other civil engineering projects from the ancient world such as the lakes of Aztec Mexico, the lagoons of Angkor Wat; or even closer to home the digging of Offa’s Dyke or Hadrian’s Wall. We may see that the task becomes far more credible if the exaggerated dimensions of the canals and channels applied to only small sections of an otherwise naturally flat plain.

If you would like to review more of the pattern of evidence that points to the Irish Sea as a likely location for the lost city then you will find this in my **Towers of Atlantis** and **Atlantis of the West**. These books contained quite enough new ideas to absorb, without frying any bacon and eggs! However, I hope the possibilities were always apparent to some of the more imaginative readers. Where else can you find a location that fits so well to Plato’s description and his impossible dimensions?

References:

UK Admiralty Charts 1121 and 1826

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