

**SYNOPSIS**

The locations of some +8000 settlements and geographical features are included within the text of Claudius Ptolemy's 'Geographia'. To control the text and ensure readers understood the methodology there-in utilised it is evident that Claudius Ptolemy determined a strict order and utilisation of the information he wished to disseminate.

That strict methodology is maintained through the first 9 chapters of Book 2, but the 10<sup>th</sup> chapter breaks all of the rules that had been established.

Chapters 11 to 15 then return to the established pattern.

Magna Germania was basically unknown territory and in such a situation Claudius Ptolemy was able to ignore any necessity to guess thus leaving an empty landscape as is evinced in Book 3, chapter 5, Sarmatian Europe.

Why in an unknown land there are 94 settlements indicated in Germania when the 3 provinces of Gallia have only a total of 114 settlements, is a mystery? And, why does Claudius Ptolemy not attribute a single settlement to a tribal group? It appears there are other factors at play, which require to be investigated.

**BASIC PTOLEMY**

When analysing a map drawn from the data provided by Claudius Ptolemy it is first necessary to ensure that it is segregated into categories.

Those are; 1) reliable information i.e. probably provided via the Roman Army Cosmographers and Geometres; 2) the former information confirmed or augmented by various itineraries or from Bematists; 3) the possibility of latitudinal measurements from various settlements (gnomon ratios); 4) basic travellers tales with confirmed distances 'a pied'; 5) basic sailing distances along coastlines and those which can be matched to land distances; 6) guesses made by travellers who did not actually record the days travelled but only the length of time for the overall journey; 7) obscure references from ancient texts which cannot be corroborated.

Thus we may use the data from items 1, 2 & 3 with some confidence; the data from 4 & 5 with adjustments and scepticism, and from 6/7 with absolute caution.

This can affect a map drawn using Claudius Ptolemy's co-ordinates in many ways.

Firstly, if it includes a coastline which is not supported by exploration, texts or knowledge, we must treat the data cautiously. I have already shown in my text CP3 that Claudius Ptolemy took the length of the coastline from the information supplied by Eratosthenes, changed the length of the Stadia used (perhaps unknowingly) and produced an abysmal Indian sub-continent coastal profile.

Secondly, if behind that coastline we have a series of settlements or rivers, we must not assume that the coastline and the interior are correctly juxtaposed. There may be sufficient accurate data for the settlements to be correctly placed vis a vis each other, but the data placing that grouping vis a vis the coastline may be totally incorrect, due to there being no actual data linking the two, only vague comments and supposition, an educated guess.

Thirdly, if the map includes well documented settlements and routes, there is a basis for commencing research into the maps provenance to establish the unknown or assumed geographical positions.

The maps of Claudius Ptolemy were not drawn from a series of Latitudes and Longitudes. They were first drawn as a series of local maps from distance measures which have appended to them certain latitudes known from gnomon readings, but, the majority of geographical features were positioned by those distance measures and the juxtaposition to each other.

When sufficient latitudes were available the intermediary lines could be drawn.

The lines of longitude had to be established from distance measures; that is on the Equator each degree of latitude equals a degree of longitude and when the former is known the latter can be drawn proportionally.

It is usually stated that the zero longitude of Claudius Ptolemy is the Canary Islands, placed 2 ½ degrees west of the ‘Sacred Promontory’ of Iberia (Cape St Vincent). But that is patently false. The actual measurements could only be made with any accuracy from the sea and with land distances. Thus, the use or reference to the Zero Longitude (which is a correct distance island to landfall, i.e. 2 ½ degrees to the coast of Africa; Gran Canaria 15° 35’W to Tarfaya, Morocco at 12° 55’W) is spurious. But it is not to the Sacred Promontory which at 9°W, is therefore a discrepancy is 3° 55’ or some 1600 stadia..

Thus if the coastline of Africa had been properly surveyed, that is not just distance measures south but its relative distance west, (some 7 ½ degrees from the Pillars of Hercules, but 10 degrees to the Gran Canaria), and Ptolemy had inserted at least another 2 ½ degrees there would have been a closer correlation to the facts. But he did not, and text Cp4 clearly illustrates that in fact Marinus of Tyre and Claudius Ptolemy were actually thinking of the Cape Verde Islands and not the Canary Islands.

The text Ca1(Cp5) discusses the fixed points within the MT/CP latitudes which are dimensionally correct to each other; Alexandria to Sacred Promontory; Alexandria to Byzantium; Sacred Promontory to Byzantium. These are un-corrupted stadia distance measures converted by Ptolemy to distorted latitudes of 500 stadia.

It should be obvious to all that MT/CP distorted the longitudes of the Mediterranean Sea and the Oikoumene in order that actual distances between geographical points could be maintained and used upon their maps. Reduce true latitudes from 604 stadia to 500 stadia and it becomes an absolute necessity to increase the longitudinal spread of a coast line to accommodate the correct measurements.

But, that does not mean that within the boundaries of the coastlines the interim points are extended in the same manner. The local distances, settlement to settlement must be maintained and thus the given latitudes and longitudes are wrong although they may appear numerically correct at times. They are determined by a false world size and will have been read from a map after it had been drawn so that the correct distances could be accommodated.

Therefore the reliance upon the latitudes and longitudes given by Ptolemy to establish actual settlements is false. Commence with that which is correct and gradually expand the research across the map using itineraries and other similar knowledge of actual distances to build up a consensus.

## COMMENT

### Diagram cgPt1D01

This text concerns Magna Germania, and the most important factor to be borne in mind is that it was then largely unexplored territory. The ‘Limes’ of Germany, basically the River Rhine, was the final limit of Roman occupation, although not the limit of intended occupation or exploration. Thus we must accept that it is highly unlikely that first rate data would have been available to Claudius Ptolemy.

But first we must determine the accurate data that may have been available and its source.

## HISTORICAL DOCUMENTS

### HERODOTUS; BOOK 4; THE SCYTHIANS, HYPERBOREANS AND RIVERS

Herodotus meanders his way through the landscape of ‘Europe’, including a diversion to discuss the circumnavigation of Africa, but never actually discusses the land area we are investigating. He states, “*With Europe, however, the case is different; for no one has ever determined whether or not there is sea either to the east or to the north of it; all we know is that in length it is equal to Asia and Libya combined.*” He continues, “*The best known of the rivers, those, namely, which are navigable by sea-going ships, I will mention; they are the Ister (Danube) which has five mouths, the Tyras, the Hypanis (Bug), the Borysthenes (Dneiper), the Panticapes, Hypacyris, Gerrhus and Tanais (Don).*”

There is then a discourse on the Scythian rivers towards the Maeotis or Sea of Azov.

This is of course Greek history and their problems with the Persians. The actual heartland of Europe was hardly explored by the Ancient Greeks and is thus little help to us.

## JULIUS CAESAR; THE CONQUEST OF GAUL

### Diagram cgPt1D02

Book 4, entitled, "INVASIONS OF GERMANY AND BRITAIN", 55BCE, deals with the original battles when the Usipetes and Tenctheri tribes crossed the River Rhine in large numbers not far from its mouth. We are then told of the Suebi, the largest and most warlike of the German nations. *"it is said that they have a hundred cantons, each of which provides annually a thousand armed men for service in foreign wars.*

Caesar then states, *"Traders are admitted into their country more because they want to sell their booty than because they stand in any need of imports"*.

Within this text we read of the many tribal names and groupings and the snippets of geographical information which must have been used by Marinus the Tyrian and Claudius Ptolemy in their work. Caesar states, *"The Meuse rises in the Vosges Mountains, in the country of the Lingones. It is joined by a tributary from the Rhine, called the Waal, making the island of the Batavians, and flows into the Rhine some 75 miles from the sea. The Rhine rises in the country of the Lepontii in the Alps, and flows swiftly for a long distance through the lands of the Helvetii, Sequani, Triboci, Nemetes, Mediomatrici, and Treveri. As it nears the sea it divides into several channels, forming a number of very large islands (many of them inhabited by wild barbarian tribes, some of whom are supposed to live on fish and bird's eggs), and discharges itself by several mouths into the North Sea"*.

"The first crossing of the Rhine" is noted as probably near Coblenz.

But, here we must pause and consider what Julius Caesar has written, and the veracity of the text. But we must also consider that the following facts may have been taken verbatim by Marinus the Tyrian and Claudius Ptolemy.

These are the notes appended to the translated text; 22) IV.10, *"The Meuse does not rise in the Vosges, but on the plateau of Langres. This plateau is in the country of the Lingones; the Vosges are not. In saying that the Meuse flows into the Rhine, Caesar (or the geographer from whom his information is derived) evidently means that it flows into the Waal, which joins the Rhine not far from Arnhem. The Meuse now meets the Waal only about 40 miles from the sea; but the two rivers approach very near each other at the point indicated by Caesar, and may then have been connected by a channel."*

In Book 6, "OPERATIONS NEAR THE RHINE, 53BCE, the following comments are made; *"The Germans are not agriculturist, and live principally on milk, cheese, and meat. No one possesses any definite amount of land as private property; the magistrates and tribal chiefs annually assign a holding to clans and groups of kinsmen or others living together, fixing its size and position at their discretion, and the following year make them move on somewhere else"*. He continues later, *"The various tribes regard it as their greatest glory to lay waste as much as possible of the land around them and to keep it uninhabited."*

*"There was a time when the Gauls were more warlike than the Germans, when they actually invaded German territory, and sent colonists across the Rhine because their own country was too small to support its large population. It was in this way that the most fertile district of Germany, in the neighbourhood of the Hercynian Forest (which I see was known to Eratosthenes and other Greeks, who call it Orcynia) was seized and occupied by the Volcae Tectosages, who remain there to this day"*.

*"This Hercynian Forest is so wide that it takes a lightly equipped traveller 9 days to cross it; this is the only way the Germans have of estimating its size, as they know nothing of measures of length. Starting from the frontiers of the Helvetii, Nemetes, and Rauraci, it runs straight along the Danube to the country of the Dacians and the Anartes. At this point it turns north-east away from the river, and in its huge length extends through the territories of many different peoples. No western German claims to have reached its eastern extremity, even after travelling for two months, or to have heard where it ends."*

In VI.33, Caesar states *"the River Scheldt, which flows into the Meuse"* which in fact may or may not be true as there could have been a link one to the other near their mouths.

The settlements of Atuatuca, now thought to be Longres in east Belgium, and Durocortorum, a settlement of the Remi tribe, now thought to be Rheims as well as Agedincum in the country of the Senones, now Sens, are mentioned by name.

Thus we can anticipate that MT/CP although they had geographic information may well have been misled in their attempts to map Europe.

It is in Book 7 of Strabo's text that we find reference to this area of Europe. We must also be aware that it is through Strabo that we know of the writings of Eratosthenes, as the actual original text of Eratosthenes is lost to us. I commence the text of Strabo at the second sentence, Book 7, chapter 1.

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towards the east and the Pontus. It rises in the western limits of Germany, as also near the recess of the Adriatic (at a distance from it of about one thousand stadia), and comes to an end at the Pontus not very far from the outlets of the Tyras<sup>6</sup> and the Borysthenes,<sup>7</sup> bending from its easterly course approximately towards the north. Now the parts that are beyond the Rhenus and Celtica are to the north of the Ister; these are the p153territories of the Galatic and the Germanic tribes, extending as far as the Bastarnians and the Tyregetans and the River Borysthenes. And the territories of all the tribes between this river and the Tanais and the mouth of Lake Maeotis extend up into the interior as far as the ocean<sup>8</sup> and are washed by the Pontic Sea. But 1 289Now that I have described Iberia and the Celtic and Italian tribes, along with the islands near by, it will be next in order to speak of the remaining parts of Europe, dividing them in the approved manner. The remaining parts are: first, those towards the east, being those which are across the Rhenus and extend as far as the Tanais<sup>1</sup> and the mouth of Lake Maeotis,<sup>2</sup> and also all those regions lying between the Adrias<sup>3</sup> and the regions on the left of the Pontic Sea that are shut off by the Ister<sup>4</sup> and extend towards the south as far as Greece and the Propontis;<sup>5</sup> for this river divides very nearly the whole of the aforesaid land into two parts. It is the largest of the European rivers, at the outset flowing towards the south and then turning straight from the west both the Illyrian and the Thracian tribes, and all tribes of the Celtic or other peoples that are mingled with these, as far as Greece, are to the south of the Ister. But let me first describe the parts outside the Ister, for they are much simpler than those on the other side.

2 290Now the parts beyond the Rhenus, immediately after the country of the Celti, slope towards the east and are occupied by the Germans, who, though they vary slightly from the Celtic stock in that they are wilder, taller, and have yellower hair, are in all other respects similar, for in build, habits, and modes of life they are such as I have said<sup>9</sup> the Celti are. And I also think that it was for this reason that the Romans assigned to them the name "**Germani**," as though they wished to indicate thereby that they were "genuine" Galatae, for in the language of the Romans "**germani**" means "genuine."<sup>10</sup>

3 The first parts of this country are those that are next to the Rhenus, beginning at its source and extending as far as its outlet; and this stretch of p155river-land taken as a whole is approximately the breadth of the country on its western side. Some of the tribes of this river-land were transferred by the Romans to Celtica, whereas the others anticipated the Romans by migrating deep into the country, for instance, the Marsi; and only a few people, including a part of the Sugambri,<sup>11</sup> are left. After the people who live along the river come the other tribes that live between the Rhenus and the River Albis,<sup>12</sup> which latter flows approximately parallel to the former, towards the ocean, and traverses no less territory than the former. Between the two are other navigable rivers also (among them the Amasias,<sup>13</sup> on which Drusus won a naval victory over the Bructeri), which likewise flow from the south towards the north and the ocean; for the country is elevated towards the south and forms a mountain chain<sup>14</sup> that connects with the Alps and extends towards the east as though it were a part of the Alps; and in truth some declare that they actually are a part of the Alps, both because of their aforesaid position and of the fact that they produce the same timber; however, the country in this region does not rise to a sufficient height for that. Here, too, is the Hercynian Forest,<sup>15</sup> and also the tribes of the Suevi, some of which dwell inside the forest, as, for instance, the tribes of the Coldui,<sup>16</sup> in whose territory is Boihaemum,<sup>17</sup> the p157domain of Marabodus, the place whither he caused to migrate, not only several other peoples, but in particular the Marcomanni, his fellow-tribesmen; for after his return from Rome this man, who before had been only a private citizen, was placed in charge of the affairs of state, for, as a youth he had been at Rome and had enjoyed the favour of Augustus, and on his return he took the rulership and acquired, in addition to the peoples aforementioned, the Lugii (a large tribe), the Zumi, the Butones, the Mugilones, the Sibini,<sup>18</sup> and also the Semnones, a large tribe of the Suevi themselves. However, while some of the tribes of the Suevi dwell inside the forest, as I was saying, others dwell outside of it, and have a common boundary with the

Getae.<sup>19</sup> Now as for the tribe of the Suevi,<sup>20</sup> it is the largest, for it extends from the Rheneus to the Albi; and a part of them even dwell on the far side of the Albi, as, for instance, the Hermondori and the Langobardi; 291 and at the present time these latter, at least, have, to the last man, been driven in flight out of their country into the land on the far side of the river. It is a common characteristic of all the peoples in this part of the world<sup>21</sup> that they migrate with ease, because of the meagerness of their livelihood and because they do not till the soil or even store up food, but live in small huts that are merely temporary structures; and they live for the most part off their flocks, as the Nomads do, p159 so that, in imitation of the Nomads, they load their household belongings on their wagons and with their beasts turn whithersoever they think best. But other German tribes are still more indigent. I mean the Cherusci, the Chatti, the Gamabrivii and the Chattuarii,<sup>a</sup> and also, near the ocean, the Sugambri, the Chaubi, the Bructeri, and the Cimbri, and also the Cauci, the Cäulci, the Campsiani, and several others. Both the Visurgis<sup>22</sup> and the Lupias<sup>23</sup> Rivers run in the same direction as the Amasias, the Lupias being about six hundred stadia distant from the Rheneus and flowing through the country of the Lesser Bructeri.<sup>24</sup> Germany has also the Salas River;<sup>25</sup> and it was between the Salas and the Rheneus that Drusus Germanicus, while he was successfully carrying on the war, came to his end.<sup>26</sup> He had subjugated, not only most of the tribes, but also the islands along the coast, among which is Burchanis,<sup>27</sup> which he took by siege.

4 These tribes have become known through their wars with the Romans, in which they would either yield and then later revolt again, or else quit their settlements; and they would have been better known if Augustus had allowed his generals to cross the Albi in pursuit of those who emigrated thither. But as a matter of fact he supposed that he could conduct the war in hand more successfully if he should hold off from those outside the Albi, who p161 were living in peace, and should not incite them to make common cause with the others in their enmity against him. It was the Sugambri, who live near the Rheneus, that began the war, Melo being their leader; and from that time on different peoples at different times would cause a breach, first growing powerful and then being put down, and then revolting again, betraying both the hostages they had given and their pledges of good faith. In dealing with these peoples distrust has been a great advantage, whereas those who have been trusted have done the greatest harm, as, for instance, the Cherusci and their subjects, in whose country three Roman legions, with their general Quintilius Varus, were destroyed by ambush in violation of the treaty. But they all paid the penalty, and afforded the younger Germanicus a most brilliant triumph<sup>28</sup> — that triumph in which their most famous men and women were led captive, I mean Segimuntus, son of Segestes and chieftain of the Cherusci, and his sister Thusnelda, the wife of Armenius, the man who at the time of the violation of the treaty against Quintilius Varus was commander-in-chief of the Cheruscan army 292 and even to this day is keeping up the war, and Thusnelda's three-year-old son Thumelicus; and also Sesithacus, the son of Segimerus and chieftain of the Cherusci, and Rhamis, his wife, and a daughter of Ucromirus chieftain of the Chatti, and Deudorix,<sup>29</sup> a Sugambrian, the son of Baetorix the brother of Melo. But Segestes, the father-in-law of Armenius, who even from the outset had opposed<sup>30</sup> the purpose of Armenius, and, taking advantage of an opportune p163 time, had deserted him, was present as a guest of honour at the triumph over his loved ones. And Libes too, a priest of the Chatti, marched in the procession, as also other captives from the plundered tribes — the Cäulci, Campsani, Bructeri, Usipi, Cherusci, Chatti, Chattuarii, Landi, Tubattii. Now the Rheneus is about three thousand stadia distant from the Albi, if one had straight roads to travel on, but as it is one must go by a circuitous route, which winds through a marshy country and forests.

5 The Hercynian Forest is not only rather dense, but also has large trees, and comprises a large circuit within regions that are fortified by nature; in the centre of it, however, lies a country (of which I have already spoken)<sup>31</sup> that is capable of affording an excellent livelihood. And near it are the sources of both the Ister and the Rheneus, as also the lake<sup>32</sup> between the two sources, and the marshes<sup>33</sup> into which the Rheneus spreads.<sup>34</sup> The perimeter of the lake is more than three hundred stadia, while the passage across it is nearly two hundred.<sup>35</sup> There is also an island in it which Tiberius used as a base of operations in his naval battle with the Vindelici. This lake is south of the sources of the Ister, as is also the Hercynian Forest, so that necessarily, in p165 going from Celtica to the Hercynian Forest, one first crosses the lake and then the Ister, and from there on advances through more passable regions — plateaus — to the forest. Tiberius had proceeded only a day's journey from the lake when he saw the sources of the Ister. The

country of the Rhaeti adjoins the lake for only a short distance, whereas that of the Helvetii and the Vindelici, and also the desert of the Boii, adjoin the greater part of it. All the peoples as far as the Pannonii, but more especially the Helvetii and the Vindelici, inhabit plateaus. But the countries of the Rhaeti and the Norici extend as far as the passes over the Alps and verge toward Italy, a part thereof bordering on the country of the Insubri and a part on that of the Carni and the legions about Aquileia. And there is also another large forest, Gabreta;<sup>36</sup> it is on this side of the territory of the Suevi, whereas the Hercynian Forest, which is also held by them, is on the far side.

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The Editor's Notes:

1) The Don, 2) The Sea of Azov, 3) The Adriatic, 4) The Danube, 5) the Sea of Marmora, 6) The Dniester, 7) the Dneiper, 8) Strabo here means the exterior or Northern Ocean; see 2.5.31, 9) 4.4.2-3. 10) So also Julius caesar, Tacitus, Pliny and the ancient writers in general regarded the Germans as Celts (Gauls). Dr Richard Braungart has recently published a large work in two volumes in which he ably defends his thesis that the Boii, Vindelici, Rhaeti, Norici, Taurisci, and other tribes, as shown by their agricultural implements and contrivances, were originally not Celts, but Germans, and, in all probability, the ancestors of all Germans. 11) e.g. the Ubii, see 4.3.4. 12) the Elbe. 13) the Ems. 14) the chain of mountains that extends from northern Switzerland to Mt. Krapak. 15) now called the Black Forest, although the ancient term, according to Elton (origins, p52) embraced also the forests of the Hartz, the woods of Westphalia and Nassau. 16) Muller-Dubner and Forbiger, perhaps rightly, emend Coldui to Coadui. But, as Tozer (p1870 says, the information Strabo here gives about Germany" is very imperfect, and hardly extends at all beyond the Elbe." 17) hence the modern Bohemia, the house of the Boii. 18) Scholars have suggested different emendations for Zumi, Butones, Mugilones and Sibini, since all these seem to be corrupt. 19) the Getae, also called Daci, dwelt in what are now Rumania and southern Hungary. 20) Strabo now uses tribe in its broadest sense. 21) including the Galatae, see 4.4.2. 22) The Weser. 23) the Lippe. 24) the Lesser Bructeri appear to have lived south of the Frisii and west of the Ems, while the Greater Bructeri lived east of it and south of the Western Chauci. 25) the Thuringian Saale. 26)XXX. 27) now Borkum. The Romans nicknamed it Fabaria (Bean Island) because of the wild beans that grew there. 28)XXX. 29, 30, 31)XXX. 32) Lake Constance now the Bodensee. 33) the Untersee. 34) Cp 4.3.3. 35) these figures, as they stand in the manuscripts, are of course, relatively impossible, and Strabo could hardly have made such a glaring error. Meineke and others emend 300 to 500, leaving the 200 as it is; but on textual grounds, at least, 600 is far more probable. "Passage across" (in Strabo) means the usual boat-passage, but the terminal points of this passage are now unknown. According to W.A.B.Coolidge, the length of the lake is now 46 ½ miles (from Bregenz to Stein-am-Rhein), while its greatest width is 10 ½ miles. 36) the forest of the Bohemians.

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1 (292)As for the Cimbri, some things that are told about them are incorrect and others are extremely improbable. For instance, one could not accept such a reason for their having become a wandering and piratical folk as this — that while they were dwelling on a Peninsula they were driven out of their habitations by a great flood-tide; 293for in fact they still hold the country which they held in earlier times; and they sent as a present to Augustus the most sacred kettle<sup>37</sup> in their country, with a p167plea for his friendship and for an amnesty of their earlier offences, and when their petition was granted they set sail for home; and it is ridiculous to suppose that they departed from their homes because they were incensed on account of a phenomenon that is natural and eternal, occurring twice every day. And the assertion that an excessive flood-tide once occurred looks like a fabrication, for when the ocean is affected in this way it is subject to increases and diminutions, but these are regulated and periodical.<sup>38</sup> And the man who said

that the Cimbri took up arms against the flood-tides was not right, either; nor yet the statement that the Celti, as a training in the virtue of fearlessness, meekly abide the destruction of their homes by the tides and then rebuild them, and that they suffer a greater loss of life as the result of water than of war, as Ephorus says. Indeed, the regularity of the flood-tides and the fact that the part of the country subject to inundations was known should have precluded such absurdities; for since this phenomenon occurs twice every day, it is of course improbable that the Cimbri did not so much as once perceive that the reflux was natural and harmless, and that it occurred, not in their country alone, but in every country that was on the ocean. Neither is Cleitarchus right; for he says that the horsemen, on seeing the onset of the sea, rode away, and though in full flight came very near being cut off by the water. Now we know, in the first place, that the invasion of the tide does not rush on with such speed as that, but that the sea advances imperceptibly; and, secondly, that what takes place daily and is audible to all who are about to draw near it, even before they p169behold it, would not have been likely to prompt in them such terror that they would take to flight, as if it had occurred unexpectedly.<sup>a</sup>

2 Poseidonius is right in censuring the historians for these assertions, and his conjecture is not a bad one, that the Cimbri, being a piratical and wandering folk, made an expedition even as far as the region of Lake Maeotis, and that also the "Cimmerian" Bosphorus<sup>39</sup> was named after them, being equivalent to "Cimbrian," the Greeks naming the Cimbri "Cimmerii." And he goes off to say that in earlier times the Boii dwelt in the Hercynian Forest, and that the Cimbri made a sally against this place, but on being repulsed by the Boii, went down to the Ister and the country of the Scordiscan Galatae,<sup>40</sup> then to the country of the Teuristae<sup>41</sup> and Taurisci (these, too, Galatae), and then to the country of the Helvetii — men rich in gold but peaceable; however, when the Helvetii saw that the wealth which the Cimbri had got from their robberies surpassed that of their own country, they, and particularly their tribes of Tigyreni and of Toygeni, were so excited that they sallied forth with the Cimbri. 294All, however, were subdued by the Romans, both the Cimbri themselves and those who had joined their expeditions, in part after they had crossed the Alps into Italy and in part while still on the other side of the Alps.

3 Writers report a custom of the Cimbri to this effect: Their wives, who would accompany them on their expeditions, were attended by priestesses who p171were seers; these were grey-haired, clad in white, with flaxen cloaks fastened on with clasps, girt with girdles of bronze, and bare-footed; now sword in hand these priestesses would meet with the prisoners of war throughout the camp, and having first crowned them with wreaths would lead them to a brazen vessel of about twenty amphorae;<sup>42</sup> and they had a raised platform which the priestess would mount, and then, bending over the kettle,<sup>43</sup> would cut the throat of each prisoner after he had been lifted up; and from the blood that poured forth into the vessel some of the priestesses would draw a prophecy, while still others would split open the body and from an inspection of the entrails would utter a prophecy of victory for their own people; and during the battles they would beat on the hides that were stretched over the wicker-bodies of the wagons and in this way produce an unearthly noise.

4 Of the Germans, as I have said,<sup>44</sup> those towards the north extend along the ocean;<sup>45</sup> and beginning at the outlets of the Rhenus, they are known as far as the Albis; and of these the best known are the Sugambri and the Cimbri; but those parts of the country beyond the Albis that are near the ocean are wholly unknown to us. For of the men of earlier times I know of no one who has made this voyage along the coast to the eastern parts that extend as far as the mouth<sup>46</sup> of the Caspian Sea; and the Romans have not yet advanced into the parts that are beyond the Albis; and likewise no one has made the journey by land either. However, it is clear from the "climata" and the parallel distances that if one travels longitudinally towards the east, one encounters the regions that are about p173the Borysthenes and that are to the north of the Pontus; but what is beyond Germany and what beyond the countries which are next after Germany — whether one should say the Bastarnae, as most writers suspect, or say that others lie in between, either the Iazyges, or the Roxolani,<sup>47</sup> or certain other of the wagon-dwellers<sup>48</sup> — it is not easy to say; nor yet whether they extend as far as the ocean along its entire length, or whether any part is uninhabitable by reason of the cold or other cause, or whether even a different race of people, succeeding the Germans, is situated between the sea and the eastern Germans. And this same ignorance prevails also in regard to the rest of the peoples that come next in order on the north; for I know neither the Bastarnae,<sup>49</sup> nor the

Sauromatae, nor, in a word, any of the peoples who dwell above the Pontus, nor how far distant they are from the Atlantic Sea,<sup>50</sup> nor whether their countries border upon it.

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The Editor's Notes:

<sup>37</sup> When the throats of prisoners of war were cut, the blood was caught in huge brazen kettles. 38) Cp. 3.5.9. 39) the Strait of Kerch (or Yenikale). 40) the Galatae lived between the Ister (Danube) and the Morava Rivers on the confines of Illyria. See original for the remainder.

### COMMENT

Thus we can read an enormous corpus of information available to Marinus the Tyrian and Claudius Ptolemy which includes distance measures and sufficient geographical data to begin to compile a map of Magna Germania. But, there is little or no mention of settlements or of any attributable to a tribe or tribal grouping.

PLINY THE ELDER, THE NATURAL HISTORY, BOOK4, CHAPTER 28, GERMANY  
FROM <http://www.perseus.tufts.edu>. Bostock and Riley original translation.

### CHAP. 28.—GERMANY.

The whole of the shores of this sea as far as the Scaldis<sup>1</sup>, a river of Germany, is inhabited by nations, the dimensions of whose respective territories it is quite impossible to state, so immensely do the authors differ who have touched upon this subject. The Greek writers and some of our own countrymen have stated the coast of Germany to be 2500 miles in extent, while Agrippa, comprising Rhætia and Noricum in his estimate, makes the length to be 686<sup>2</sup> miles, and the breadth 148<sup>3</sup>. (14.) The breadth of Rhætia alone however very nearly exceeds that number of miles, and indeed we ought to state that it was only subjugated at about the period of the death of that general; while as for Germany, the whole of it was not thoroughly known to us for many years after his time. If I may be allowed to form a conjecture, the margin of the coast will be found to be not far short of the estimate of the Greek writers, while the distance in a straight line will nearly correspond with that mentioned by Agrippa.

There are five German races; the Vandili<sup>4</sup>, parts of whom are the Burgundiones<sup>5</sup>, the Varini<sup>6</sup>, the Carini<sup>7</sup>, and the Gutones<sup>8</sup>: the Ingævones, forming a second race, a portion of whom are the Cimbri<sup>9</sup>, the Teutoni<sup>10</sup>, and the tribes of the Chauci<sup>11</sup>. The Istævones<sup>12</sup>, who join up to the Rhine, and to whom the Cimbri<sup>13</sup> belong, are the third race; while the Hermiones, forming a fourth, dwell in the interior, and include the Suevi<sup>14</sup>, the Hermunduri<sup>15</sup>, the Chatti<sup>16</sup>, and the Cherusci<sup>17</sup>: the fifth race is that of the Peucini<sup>18</sup>, who are also the Basternæ, adjoining the Daci previously mentioned. The more famous rivers that flow into the ocean are the Guttalus<sup>19</sup>, the Vistillus or Vistula, the Albis<sup>20</sup>, the Visurgis<sup>21</sup>, the Amisius<sup>22</sup>, the Rhine, and the Mosa<sup>23</sup>. In the interior is the long extent of the Hercynian<sup>24</sup> range, which in grandeur is inferior to none.

References follow.

1 Now the Scheldt.

2 In a straight line, of course. Parisot is of opinion that in forming this estimate Agrippa began at the angle formed by the river Piave in lat. 46°4', measuring thence to Cape Rubeas (now Rutt) in lat. 54°25'. This would give 8°21', to which, if we add some twenty leagues for obliquity or difference of longitude, the total would make exactly the distance here mentioned.

3 As Parisot remarks, it is totally impossible to conceive the source of such an erroneous conclusion as this. Some readings make the amount 248, others 268.

4 As already mentioned, Zeuss has satisfactorily shown that the Vandili or Vindili properly belonged to the Hermiones. Tacitus mentions but three groups of the German nations; the Ingævones on the ocean, the Hermiones in the interior, and the Istævones in the east and south of Germany. The Vandili, a Gothic race, dwelt originally on the northern coast of Germany, but afterwards settled north of the Marcomanni on the Riesengebirge. They subsequently appeared in Dacia and Pannonia, and in the beginning of the fifth century invaded Spain. Under Genseric they passed over into Africa, and finally took and plundered

Rome in A.D. 455. Their kingdom was finally destroyed by Belisarius.

5 It is supposed that the Burgundiones were a Gothic people dwelling in the country between the rivers Viadus and Vistula, though Ammianus Marcellinus declares them to have been of pure Roman origin. How they came into the country of the Upper Maine in the south-west of Germany in A.D. 289, historians have found themselves at a loss to inform us. It is not improbable that the two peoples were not identical, and that the similarity of their name arose only from the circumstance that they both resided in "burgii" or burghs. See Gibbon, iii. 99. *Bohn's Ed.*

6 The Varini dwelt on the right bank of the Albis or Elbe, north of the Langobardi. Ptolemy however, who seems to mention them as the Avarini, speaks of them as dwelling near the sources of the Vistula, on the site of the present Cracow. See Gibbon, iv. 225. *Bohn's Ed.*

7 Nothing whatever is known of the locality of this people.

8 They are also called in history Gothi, Gothones, Gotones and Gutæ. According to Pytheas of Marseilles (as mentioned by Pliny, B. xxxvii. c. 2), they dwelt on the coasts of the Baltic, in the vicinity of what is now called the Fritsch-Haff. Tacitus also refers to the same district, though he does not speak of them as inhabiting the coast. Ptolemy again speaks of them as dwelling on the east of the Vistula, and to the south of the Venedi. The later form of their name, *Gothi*, does not occur till the time of Caracalla. Their native name was Gutthinda. They are first spoken of as a powerful nation at the beginning of the third century, when we find them mentioned as 'Getæ,' from the circumstance of their having occupied the countries formerly inhabited by the Sarmatian Getæ. The formidable attacks made by this people, divided into the nations of the Ostrogoths and Visigoths, upon the Roman power during its decline, are too well known to every reader of Gibbon to require further notice.

9 The inhabitants of Chersonesus Cimbrica, the modern peninsula of Jutland. It seems doubtful whether these Cimbri were a Germanic nation or a Celtic tribe, as also whether they were the same race whose numerous hordes successively defeated six Roman armies, and were finally conquered by C. Marius, B.C. 101, in the Campi Raudii. The more general impression, however, entertained by historians, is that they were a Celtic or Gallic and not a Germanic nation. The name is said to have signified "robbers." See Gibbon, i. 273, iii. 365. *Bohn's Ed.*

10 The Teutoni or Teutones dwelt on the coasts of the Baltic, adjacent to the territory of the Cimbri. Their name, though belonging originally to a single nation or tribe, came to be afterwards applied collectively to the whole people of Germany. See Gibbon, iii. 139. *Bohn's Ed.*

11 Also called Cauchi, Cauci, and Cayci, a German tribe to the east of the Frisians, between the rivers Ems and Elbe. The modern Oldenburg and Hanover are supposed to pretty nearly represent the country of the Chauci. In B. xvi. c. 1. 2, will be found a further account of them by Pliny, who had visited their country, at least that part of it which lay on the sea-coast. They are mentioned for the last time in the third century, when they had extended so far south and west that they are spoken of as living on the banks of the Rhine.

12 Mentioned by Tacitus as dwelling in the east and south of Germany.

13 It has been suggested by Titzius that the words "quorum Cimbri," "to whom the Cimbri belong," are an interpolation; which is not improbable, or at least that the word "Cimbri" has been substituted for some other name.

14 This appears to be properly the collective name of a great number of the German tribes, who were of a migratory mode of life, and spoken of in opposition to the more settled tribes, who went under the general name of Ingævones. Cæsar speaks of them as dwelling east of the Ubii and Sygambri, and west of the Cherusci. Strabo makes them extend in an easterly direction beyond the Albis or Elbe, and southerly as far as the sources of the Danube. Tacitus gives the name of Suevia to the whole of the east of Germany, from the Danube to the Baltic. The name of the modern Suabia is derived from a body of adventurers from various German tribes, who assumed the name of Suevi in consequence of their not possessing any other appellation.

15 A large and powerful tribe of Germany, which occupied the extensive tract of country between the mountains in the north-west of Bohemia and the Roman Wall in the south-west, which formed the boundary of the Agri Decumates. On the east they bordered on the Narisci, on the north-east on the Cherusci, and on the north-west on the Chatti. There is little doubt that they originally formed part of the Suevi. At a later period they spread in a north-easterly direction, taking possession of the north-western

part of Bohemia and the country about the sources of the Maine and Saale, that is, the part of Franconia as far as Kissingen and the south-western part of the kingdom of Saxony. The name Hermunduri is thought by some to signify highlanders, and to be a compound of *Her* or *Ar*, "high," and *Mund*, "man."

16 One of the great tribes of Germany, which rose to importance after the decay of the power of the Cherusci. It is thought by ethnographers that their name is still preserved in the word "Hessen." They formed the chief tribe of the Hermiones here mentioned, and are described by Cæsar as belonging to the Suevi, though Tacitus distinguishes them, and no German tribe in fact occupied more permanently its original locality than the Chatti. Their original abode seems to have extended from the Westerwald in the west to the Saale in Franconia, and from the river Maine in the south as far as the sources of the Elision and the Weser, so that they occupied exactly the modern country of Hessen, including perhaps a portion of the north-west of Bavaria. See Gibbon, vol. iii. 99. *Bohn's Ed.*

17 The Cherusci were the most celebrated of all the German tribes, and are mentioned by Cæsar as of the same importance as the Suevi, from whom they were separated by the Silva Bacensis. There is some difficulty in stating their exact locality, but it is generally supposed that their country extended from the Visurgis or Weser in the west to the Albis or Elbe in the east, and from Melibocus in the north to the neighbourhood of the Sudeti in the south, so that the Chamavi and Langobardi were their northern neighbours, the Chatti the western, the Hermunduri the southern, and the Silingi and Semnones their eastern neighbours. This tribe, under their chief Arminius or Hermann, forming a confederation with many smaller tribes in A.D. 9, completely defeated the Romans in the famous battle of the Teutoburg Forest. In later times they were conquered by the Chatti, so that Ptolemy speaks of them only as a small tribe on the south of the Hartz mountain. Their name afterwards appears, in the beginning of the fourth century, in the confederation of the Franks.

18 The Peucini are mentioned here, as also by Tacitus, as identical with the Basternæ. As already mentioned, supposing them to be names for distinct nations, they must be taken as only names of individual tribes, and not of groups of tribes. It is generally supposed that their first settlements in Sarmatia were in the highlands between the Theiss and the March, whence they passed onward to the lower Danube, as far as its mouth, where a portion of them, settling in the island of Peuce, obtained the name of Peucini. In the later geographers we find them settled between the Tyrus or Dniester, and the Borysthenes or Dnieper, the Peucini remaining at the mouth of the Danube.

19 According to Parisot, the Guttalus is the same as the Alle, a tributary of the Pregel. Cluver thinks that it is the same as the Oder. Other writers again consider it the same as the Pregel.

20 Or Elbe.

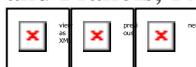
21 Now the Weser.

22 The modern Ems.

23 The Meuse.

24 The 'Hercynia Silva,' Hercynian Forest or Range, is very differently described by the writers of various ages. The earliest mention of it is by Aristotle. Judging from the accounts given by Cæsar, Pomponius Mela, and Strabo, the 'Hercynia Silva' appears to have been a general name for almost all the mountains of Southern and Central Germany, that is, from the sources of the Danube to Transylvania, comprising the Schwarzwald, Odenwald, Spessart, Rhön, Thuringer Wald, the Hartz mountain (which seems in a great measure to have retained the ancient name), Raube Alp, Steigerwald, Fichtelgebirge, Erzgebirge, and Riesengebirge. At a later period when the mountains of Germany had become better known, the name was applied to the more limited range extending around Bohemia, and through Moravia into Hungary.

The Natural History. Pliny the Elder. John Bostock, M.D., F.R.S. H.T. Riley, Esq., B.A. London. Taylor and Francis, Red Lion Court, Fleet Street. 1855.



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## COMMENT

Pliny obviously has little or no information regarding Germany, although he does manage to quote two distances which may have been of some help to MT/CP.

However in Book 37, chapter 11, Pliny discusses Amber, and in section 3 states the following; *“There can be no doubt that amber is a product of the islands of the Northern Ocean, and that it is the substance by the Germans called ‘glaesum’ for which reason the Romans, when Germanicus Caesar commanded the fleet in those parts, gave to one of these islands the name Glaesaria, which by the barbarians was known as Austeravia.”* *“Amber is imported by the Germans into Pannonia, more particularly; from whence the Veneti, by the Greeks called Eneti, first brought it into general notice, a people in the vicinity of Pannonia and dwelling on the shores of the Adriatic Sea.”* *“From Carnuntum in Pannonia, to the coasts of Germany from which the amber is brought, is a distance of about 600 miles, a fact which has been only recently ascertained; and there is a member of the equestrian order, who was sent thither--- to procure a supply of this article.”*

Note 6 states, “In reality, these ‘Amber Islands’ were situated at the mouth of the Vistula, into which the Radanus discharged itself; a river whose name was afterwards confounded with ‘Eridanus’, the ancient name of the Padus, or Po.

In Book 4, chapter 30, Pliny writes, *“and opposite, scattered in the German Sea are those known as Glaesariae but which the Greeks have more recently called the Electrudes, from the circumstances of their producing Electrum or Amber”*. Note 15 states, “he speaks of the Islands of Oeland and Gothland and Ameland called Austeravia or Actania in which Glaesum or Amber was found by Roman soldiers”.

Thus we obtain one reasonable distance measure; from Carnuntum to the mouth of the Vistula River is some 600 miles.

**CORNELII TACITI; GERMANIA** Diagrams cgPt1D02, D03, D04 and D05  
note these diagrams are from the Penguin Atlas of World History, volume 1

The next author who we can turn to for information is Cornelii Taciti, commonly known as Tacitus who wrote the text, “On Britain and Germany”, ‘The Germania’. Written around 98CE he describes much that we have already read including the details of the Hercynian Forest.

Tacitus writes, *“ I am inclined not to reckon among the people of Germany the cultivators of the ‘Agri Decumates’, settled though they may be between the Rhine and the Danube. All the wastrels of Gaul, all the penniless adventurers seized on whilst was still no-man’s land. It was only later, when the frontier line of defence was drawn and the garrisons were moved forward, that they have become a sort of projection of the empire and a part of a province.”*

In chapter 34 Tacitus tells the following; *“ The Frisii are called the ‘greater’ and the ‘lesser, in accordance with the actual strength of the two peoples. Both tribes have the Rhine as their border right down to Ocean, and their settlements also extend round vast lakes, which have been sailed by Roman fleets. We have even felt our way into Ocean by this route, and rumour has it that there are pillars of Hercules beyond. Did Hercules really go there, or is it only our habit of assigning any conspicuous achievement anywhere to that famous name? Drusus Germanicus was not deficient in the courage of the explorer, but Ocean forbade further research into its own secrets or those of Hercules. Since then no one has tried to explore. It has been judged more pious and reverent to believe in what the gods have done than to investigate it.”*

In chapter 35 Tacitus states, *“This is as far as the Germany we know extends to the westward. To the north it comes back in a huge sweep. The very first nation here is that of the Chauci. They begin after*

*the Frisians and hold a section of coast, but they also lie along the flanks of all those nations that I have been describing, and finally curve back to meet the Chatti. This huge stretch of country is not merely occupied, but filled to overflowing by the Chauci”.*

In chapter 37 we read, *“In the same bend of Germany, next to Ocean, dwell the Cimbri, a mighty name in history, though now but a tiny State”.*

In chapter 44 he states, *“The states of the Suiones that follow along the shore of Ocean are strong not only in arms and men but also in their fleets.”* And follows in chapter 45 with; *“Passing the Suiones, we find yet another sea that is sluggish and almost stagnant. The reason why this sea is believed to be the boundary that girds the earth is because the last radiance of the setting sun lasts here till dawn, with a brilliance that dims the stars.”*

*“Nor do they omit to ransack the sea; they are the only people to collect the amber- glaesum- is their own word for it- in the shallows or even on the beach.”*

The notes following the translation are as informative as the text; The “Agri Decumates”, in the territory between the Rhine, Main and Danube, were included in the empire by Vespasian and his successors (c73-95CE). The name Decumates is pre-Roman. It does not mean ‘tithe lands’; it may be lands of ten (cantons)?

The basic facts from Tacitus are that he considers the Suebi to occupy around half of Germany and that their territory juts out into the inner recesses of Germany.

Thus we come to a point where a resume of the Roman occupation of parts of Magna Germania is required to establish the veracity of any settlement names and likely accurate positioning. There are many texts available which explain nearly day by day the advances and retreats of the Roman legions to the final borders. The following is that resume.

The annexation of the Agri Decumates , 73CE on the upper Rhine and Danube source can be shown by a glance at the map and the obvious frontier. The Rhine after flowing west from Lake Constance for about 70 miles turns sharply north and makes with the Danube a triangle of territory which includes what is now the Black Forest. This territory which the Romans called the Agri Decumates or Decuman, ( a name of which no satisfactory explanation has been given) was thinly inhabited; no one knew to whom it belonged, it was as Tacitus says, “dubiae possessionis solum” (Germania 29) A new frontier line of 120 miles is then noted, “Limitibus per centum viginti milia passum actis”, although where precisely these miles are to be measured is uncertain.

The ‘LIMES GERMANICUS’ from Rheinbrohl to the River Main is a line of Domitian Forts around the Wetterau to Kesselstadt. On the River Main Hadrian had an outer line, which was pushed forward to between Echzell and Gross-Krotzenburg and as a result some of the forts were abandoned and became towns.

The Odenwald-Neckar section, the Inner Line, was an extension of the frontier from Obensburg near Miltenberg to the River Neckar at Wimpfen. Then the course of the river was followed as far as Kongen. From Kongen, up the Fils to Urspring and so to Faimingen, on the Danube, a line was planned by Domitian, and on it wooden watch towers were placed. A Palisade was erected by Hadrian.

From the Main to Lorch, the outer line, was occupied about 155CE ( note this is probably much too late for data to be transferred to Claudius Ptolemy for inclusion in his Geography), but it ran in almost a straight course ignoring geographical features from Obensburg to Lorch with a palisade placed from fort to fort.

Finally the ‘Limes Raeticus’ were established as the boundary of Raetia with forts from Ristissen to Eining. A major fort was established by Vespasian at Regensburg, Castra Regina.

But this advanced line was given up and the limit of Roman power was once again the Rhine/Danube line.

Vespasian saw the need to strengthen the Danube defence system and rebuilt the fort at Carnuntum, with garrisons at Vindobona, Vienna; Viminacium, Ratiaria and Oescus as well as at Singidunum.

Thus we have the extent of the Roman advance into Magna Germania.

## CLAUDIUS PTOLEMY BOOK 2; CHAPTER 10, LOCATION OF GREATER GERMANY FOURTH MAP OF EUROPE Diagram cgPt1D06 and cgPt1D07

Within the preceding 9 chapters Claudius Ptolemy has adopted a systematic methodology for the description of each land area or country. He describes the coastal area first in a geographical pattern and then after a short general description of the interior geography he lists the Tribes and their settlement names. There is thus continuity of textual description and normally of tribal locations across the landscape.

But, when we read Chapter 10, Germania, there is a distinct change of approach to the layout of the text. However in Chapter 11 and those following the methodology reverts to the original format.

### CHAPTER 10

The text commences with a description of the coastal features which are to be found in the landscape from the Mouths of the Rhine to the River Vistula, the eastern boundary of the map. That is it encompasses the Western, North-western and Northern boundaries of Germania.

The first words Ptolemy uses are; *“The Rhine River terminates the west side of Germania, the Germanic Ocean terminates the north side.”* The Rhine itself is described in Chapter 8, Gallia Belgica. The southern boundary is terminated by the Western Danube and the eastern boundary the Sarmatian Mountains and the space between those and the source of the Vistula River. Ptolemy then gives a landscape description of mountains and forests.

### CHANGE OF METHODOLOGY

Diagram cgPt1D08

There then follows a most detailed listing with geographical locations included such as rivers and mountains and over 65 Tribes living in Germania. These are also the tribes listed by Strabo, Pliny and Tacitus although the names are written quite differently at times.

But not one settlement, farmstead, hamlet, village, town or perhaps even a city is attributed to any tribe as a holding or more importantly as its chief Polis or capital settlement.

However, if we read the Klima details there are three settlements noted which we can assume have a greater standing than the others. They are, Amisia, Lupia and as written in Lat VF 32 and Zamoyiski Codices, Rhobodumii. This however appears to be a mistranslation or scribal error as the Greek text has, Εβουροδουνον or Eburodunum.

### DIGRESSION

The Germans could not write and hence any names of original settlements in Germania can only have been written by Greek or Romans from their understanding of the spoken word for the settlement. Given the number of potential dialects and pronunciations’ we can expect that if the name was written by several persons it may well have been quite different. We then have the following to contend with; Name originally written in Latin, Ptolemy translates it to Greek, it is translated back into Latin in the 13<sup>th</sup> to 15<sup>th</sup>

centuries and we now use an English translation. But, it at least appears that these translations may be no more than the original speech name transcribed and written in Latin which is then written in Greek by using equivalent letters and then returned to Latin by the same method. Thus the use of Germanic part-words in the names of settlements given by Ptolemy is explained. But are the prefixes and nouns included within the names meaningful or misheard words.

If the original spoken “German” name for a settlement was translated by a Greek or Roman, we would expect the possibility of common threads, sections of the name referring to location, river, ford, valley, forest, etc. In fact only 4 settlement names appear to have definitive subparts; Laciburgium (13), Asciburgium (20), Tulifurdium (28), Lupfurdum (38), and possibly Tulisurgium (300 and Furgisatis (65). That does not ignore the obvious, Segodunum (57), Meliodunum (65), Carrodunum (74), Tarodunum (76), Abilunum? (85) and Eburodunum (90).

The German for a river ford is today; ‘Flussfurt’, and thus ‘Furd’ or a near equivalent is probably acceptable. A ‘Burg’ is now a castle, and could have implied a fortified habitation. Unfortunately in modern German a ‘Berg’ is a mountain and thus the confusion arises in translating the spoken word to another language.

Thus, are we witnessing Asciburgium (20) as the “Fortified settlement of Asci” etc. and Tulifurdium as “ford across the Tuli, or, the ford of Tuli”. Certainly Lupfurdum (38) is on the bank of the River Albis and indicates that it is probably a personal name or of course the settlement is completely misplaced by Ptolemy. The work done in the German Universities will no doubt aid the research.

## CHANGES

The first strange alteration to the methodology is to be found after the list of Tribes. Ptolemy writes, “*The towns located in Germania in the northern clima are*”, and follows with a list of 19 settlements. This is a quite extra-ordinary departure from the norm as Ptolemy has not introduced towns located by clima in any other part of his geographical listings. The 19 settlements are listed as spread from 28° 45’ E / 44° 00’E and 54° 15’N to 56° 00’N.

The northern clima is 17 to 17 ½ hours longest day and is shown as 54° to 56° N. But across this region Ptolemy has informed us of some 12 tribal groups and not a single one has a Poleis.

The text then continues; “*Towns located in the clima below this are*”, and 29 settlements are the listed with a range from 27° 20’E to 44° 00’E and 51° 30’N to 54° 00’N. This list of settlements includes Amisia, 31° 30’E, 51° 30’N and Lupia, 34° 30’E, 52° 45’N, which are two of the three clima marker settlements.

This next clima below is 16 ½ to 17 hours longest day and is shown as 52°N to 54°N. Across this region Ptolemy informs us of some 14 tribal groups with no attributions made.

The next list is headed; “*In the region below this are the following towns*”, which are 27 in number. This whole area is in fact the clima from 15 ½ to 16 ½ hours or 45° 30’N to 52°N and Ptolemy’s 7<sup>th</sup> clima zone bounded by the 14<sup>th</sup> and 16<sup>th</sup> parallels. But again there are no attributions of poleis.

The final listing is headed, “*Towns in the remaining region near the Danube River are,*” and another 19 are listed with no attributions. This listing includes Eburodunum, 39°E and 48°N, the last of the clima markers.

Before continuing it is necessary to list the KLIMA poleis and examine the data given.

Poleis	Hours	°N	Hours west	°E	actual °N/cp	actual °E /cp
Amisia	16 ½	52	2	30° 50’	51° 30’	31° 30’
Lupia	16 ½ ⅓	53° 40’	1 ½ ¼	34° 25’	53° 40’	34° 30’
Rhobodunum	15 ½ ⅓ ⅓ ⅓	48	1 ⅓	40° 30’	48° 00’	39° 00’

## COMMENT

Diagram cgPt1D09 and cgPt1D10

It is patently obvious that if the text containing the large list of tribes is attributable to Ptolemy as well as the four sections of settlement listings, then Ptolemy did not know the names of any attributed settlements. Or, as with the European Sarmatia listing, Map 8 of Europe, Book 3, chapter 5, where he has absolutely no knowledge of settlements above the 16 ½ clima or 52<sup>0</sup>N, he just lists the tribes he has read about. All of the data for European Sarmatia given for settlements comprises the small land area around the River Borysthenes which was occupied by the Greeks for eons.

On map 4, Germania there are 94 unattributed settlements.

The conclusion of this preliminary exercise is therefore that Ptolemy knew from texts that there was a large population in Germania, and they had to have settlements. Whether they were just habitations, farmsteads, hamlets, villages or towns and not able to be described by formal Greek or Roman terminology is not relevant.

The question that must be asked is, *“did Claudius Ptolemy just guess these positions, just distribute various names across the map, or did this listing become appended to the original text after the list of tribes was known and written?”*

There is a large gap in our knowledge regarding the original manuscript of Claudius Ptolemy. *When was it originally copied from Greek to Latin for Roman usage? And after his death, did other competent researchers, his assistants in Alexandria, amend/update the text as information arrived?* Even if the Library at Alexander only existed until c275CE (or c391CE) there is adequate time for it to be reworked. Our documents are from the 13<sup>th</sup> century, in Greek and Latin.

Regardless of the possibilities discussed above one fact is quite apparent, Claudius Ptolemy has suddenly changed his methodology and lists some 94 settlements in Germania without attributing a single one to a tribal grouping. In his preceding chapter covering the three provinces of Gallia there are only 114 settlements listed and all are attributed to a tribe or tribal grouping.

Thus we must analyse the map that can be drawn from the data provided by Claudius Ptolemy, in some detail to answer our questions.

## THE COAST OF MAGNA GERMANIA

On the death of Augustus, 14CE, Germanicus is commander in Gallia Belgica/Germania and used the Roman fleet in cooperation with the Legions along the coast from the Rhine to at least the River Albis (Elbe). He landed troops in the mouth of the Amisia (Ems) having sailed through the great lakes which are now part of the Zuider Zee or Isjelder. The Batavians lived on an island in the Rhine which stretched nearly from Antwerp to Leyden and Utrecht. The North Holland and Frisian isles were under Roman control. Indeed the Roman influence here was based on the power of their fleet; commanding the abundant waterways, they had not the difficulties of transport which prevailed everywhere else in Northern Germany.

Thus we may be certain that there were Roman sources for Ptolemy to use in his cartography up to the Cimbric or Jutland peninsula. However it is patently obvious that that peninsula was never properly described by a Roman cosmographer or chronicler. Geographically it is a northwards heading when sailing its coastline to round the peninsula and enter the Baltic Sea. Ptolemy has a coastline trending northeast and thus a sloping peninsula and then easterly trend for the North German coastline along the 56<sup>th</sup> latitude. Again, it is far from geographical fact.

This is obviously an interpretation from travellers' tales and illustrates the problems they can give.

It is therefore necessary to further analyse the map to establish if any actual geographical knowledge, distance measure or clima details were available, or is it all from word of mouth.

The text lists four bands or clima's with settlements stretching from west to east as per the longitudinal methodology by Ptolemy. The diagram is colour coded to illustrate these bands and to facilitate easy recognition.

The first band or clima is 2 degrees in width, 54 to 56<sup>0</sup>N and as stated there are 19 settlements listed. But two settlements are also at a river mouth listed as 31<sup>0</sup>E, 55<sup>0</sup>N, Visurgis River and Tecelia settlement. It is therefore safe to opine that this is the River Weser and the settlement is Bremen and thus slightly north-east is Fabrianus which would equate to Bremerhaven. [Diagram cgPt1D11](#)

The next settlement, Treva, is situate upon the River Albis (Elbe) and is logically Hamburg.

Following on we have a typical distribution of settlements with latitudinal alignments of 3 or 4 settlements as is the Ptolemaic custom. This is not the random positioning of settlements which would be found in the natural landscape determined by good land, open areas for some crops and adequate fuel for the rather harsh winters experienced here.

There are four rivers noted as having outlets to the sea (Baltic), but there are only two major rivers, the Oder (Suevus) and the Wista (Vistula). There is a tributary to the Oder, the Warta, which may have been thought to discharge to the Ocean and is named Viadus, but the first river after the Cimbric peninsula, the Chalusus could be the Warnow at Rostock, or the Peene or one of a number of smaller rivers, if in fact it is not imaginary.

The second band or clima is contained within the latitudes 52-54<sup>0</sup>N with the exception of 3 settlements. That is settlements 21 to 48 with 21, 32 and 38 being slightly south of the 52<sup>nd</sup> latitude. Again the first two settlements are possibly identifiable. The first is situated within the rivers which make up the mouth of the Rhine. Settlement 20 is Asciburgium, and can be identified as Aesburg, and is possibly one of the verbal translations by the Romans, the 'town' of Ascii. Settlement 21 is Navalia, which has been given the same co-ordinates as the eastern mouth of the Rhine, 27<sup>0</sup> 20'E, 54<sup>0</sup>N. The Latin Navalis means Naval, of Ships and a Dockyard. The possibilities are therefore from Rotterdam to Arnhem on the Rhine itself. A large number of settlements have been identified in this section relatively close to the Rhine and Weser Rivers which were used along with the River Ems as a highway for transporting the Legions. Two settlements in this section were chosen by Ptolemy for his clima identification, 26, Amisia and 34, Luppia. It is quite strange that two of the chosen representative settlements for this clima should only be 1/3<sup>rd</sup> of an hour apart. This probably denotes a complete lack of data available. It is also curious to read that Drusus built a fort at the mouth of the Ems called Amasia, which would have been in the preceding clima. [Diagram cgPt1D12](#)

The third section is basically from 49<sup>0</sup>N to 51<sup>0</sup> 30'N, and commences in the west with two settlements, 49, Alisum and 50, Budor situated on the east bank of the Rhine. Ptolemy then introduces the Abnoba Mountains stretching N/S from 52<sup>0</sup>N to 49<sup>0</sup>N at 31<sup>0</sup>E, in other words as the clima. However, at 31<sup>0</sup> 30'E there are 6 settlements in a N/S alignment, Amisia, Novaesium, Melocabus, Gravionarium, Locoritum, and Segodunum. Geographically this range could be considered as commencing with the 840m mountain at the northern limit of the Sauerland and stretching south through the Westerwald with the Vogelsburg, 772m to the east and Fulda at 950m. It is then to the Hunsruck, but that is south of the Rhine. The spread of settlements in this clima is to the west and east with a 7 degree central section containing only 3 settlements. [Diagram cgPt1D13](#)

The fourth section is from 47<sup>0</sup>N to 49<sup>0</sup>N, with the River Danube forming the southern boundary. There are again 19 settlements in this section commencing at 76, Tarodunum, (possibly Freiburg) situated in the bend of the Rhine. This area east of the Rhine, encompassing Germania Superior covers the Rhine

Danube sources, the Agri Decumates, and the Limes from Castra Regina (Regensburg) on the Danube then following parallel to the Danube in a westerly direction before turning northwards parallel to the Rhine passing around Frankfurt, Mainz and Koblenz. The third clima settlement of Eburodunum is in this section with to its south, Carnuntum/Carnus on the Danube in Pannonia at 39<sup>0</sup>E, 47<sup>0</sup>N, the place where Pliny states it is 600 miles to the coast of Germania to collect Amber. Diagram cgPt1D14

## COMMENT

## Diagram cgPt1D15

Missing from Ptolemy's description between the Rhine and the Abnoba Mountains is the whole Black Forest area, which he knows as the Hercynian Forest. The Sudetes Mountains of Ptolemy, basic geographical position 50<sup>0</sup>N are correctly placed numerically with the Bohemian Forest, called by Ptolemy the Gabreta Forest to their south. However north of the Sudetes, Ptolemy has another range he calls the Melibocus with the Semanus Forest to their south. In fact Ptolemy has the River Oder (Viadus) rising in a mountain chain, his Asciburgius, where as in fact it rises in the Sudetes, which is akin to his first river name the Suevus. Curiously though Ptolemy does not link the Asciburgius Mountains and the settlement of Asciburgium even though the southern limit of those mountains at 52<sup>0</sup> 30'N is the same as for the settlement, but it is at 27<sup>0</sup> 30'E, and the mountains are between 39<sup>0</sup> and 44<sup>0</sup>E. Is this a classical scribal error or misplacement by Ptolemy? There are two other settlements which may be directly attributable to a Tribe; the Rutidi/Rugidei west of the River Vistula have a settlement named Rugium (17) and the Lug Bari south of the Asciburgius Mountains have a settlement named Lugidunum (41). Both of these settlements may be considered as on the route from Carnuntum, Pannonia, to the mouth of the Vistula River, the Amber Route, which is latitudinally 47<sup>0</sup>N to 56<sup>0</sup>N; or 9 x 500 stadia = 4500 x 0.185Km = 832.5Km or 563 Roman Miles. This is probably the 600 miles noted by Pliny.

The Vistula River which rises in the Asciburgius Mountains according to Ptolemy, actually rises in the Carpathian Mountains and it is therefore shown 2 degrees north of its actual position and just east of the Sudetes, when it should be linked to the Sarmatian Mountains (which are in fact the Carpathians).

Thus the settlements as located by Ptolemy, if they relate to the rivers and mountains, cannot be transferred to a geographical map. Each individual section will require to be analysed apropos its intended geographical location.

If we study the Lat VF 32 and Zamoyski Codices it is apparent that their maps have been drawn with knowledge gained during the intervening years from the time of Ptolemy. There are considerable additions which are not available from within the Ptolemy text and as I have already opined on several occasions it is necessary to draw the individual maps using only the information in the text, ignoring our present day knowledge. To rely on a map drawn in the 15<sup>th</sup> century, although based upon the text of Ptolemy will therefore prove problematical.

## CONCLUSION

This section of the text by Claudius Ptolemy has been collated but not analysed and therefore the Tribal groupings and their settlements not co-joined. This is possibly because the Tribal names were available, but the transcribed settlement names were not.

It would appear that they may have been added to the text after its preliminary completion by Claudius Ptolemy and that there were no latitudinal readings to aid the assessment of the intermediate latitudes only vague Solstice day lengths.

Thus we can assume that there is a great deal of guesswork within this section as it relies entirely on traveller's information, traders who may only have heard of these settlements, Mountains and Forests.

In the west and along the Rhine and Danube Rivers it is perhaps acceptable to use the data of Claudius Ptolemy, but as the appendix chart indicates, his positioning of settlements is inaccurate even

when the Roman Army would have known and disseminated the actual marching distances settlement to settlement.

It is perhaps wise to accept that this map, Map 4 of Europe, is not as accurate as we would wish and is possibly the result of a large number of unacceptable assumptions, guesses by Claudius Ptolemy.

Michael J Ferrar, August 2011

## Appendix

## Diagram cgPt1D16

The diagram illustrates the text of Ptolemy and the Itinerary routes applicable for a comparison of accuracy. Obviously Ptolemy's Rhine is far from accurate and thus it is perhaps not that helpful.

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