# Role of the Jutes and Frisians in the 5<sup>th</sup> Century Anglo-Saxon Settlement of England and Related Y Chromosome Haplogroups

The present study was initiated after the discovery by the current author that, in a study of the ancient DNA of a large sample from Anglo-Saxon cemeteries across England, he was a Y chromosome paternal line match to sample I14538 from an early Anglo-Saxon cemetery at Rookery Hill, Bishopstone, Sussex, England. This cemetery is in a "Treaty Settlement area" of 5<sup>th</sup> Century mercenaries (likely Jute originating in Jutland, Denmark). Perhaps surprisingly, since the broad category of R-U152 and subclades are currently relatively common in England (particularly in the eastern area), this immigrant sample is the only individual in this study of Anglo-Saxon Britain found to occur within haplogroup R-U152, being in this instance a member of the <u>very rare</u> R-U152 subclade BY61198.

The current work will focus on what is known about the Jutes from history and archaeology, and will provide an assessment of all the ancient DNA Y chromosome haplogroup findings relating to samples from the area of documented Jute settlement in England, with particular attention to R-BY61198.

#### History of the Jutes of Jutland

Rather than repeat the voluminous information pertaining to the key groups of Jutland from earlier studies, interested individuals can read the following study of the Central European Celtic Cimbri, the earliest historically recorded people of Jutland, found (see Cimbri here). Further information may be gleaned from a second study that focused on the Angles of the Angelin region near Schleswig in southern Jutland (see Angles here). The present work will repeat some of the data relating to what the Classical authors wrote about the ancient Germanic peoples of the north, then take an expanded look at evidence relating to the Jutes and Frisians who played a significant role in the settlement of the region from Kent to Hampshire and the Isle of Wight. In other words, the south shore of England from Dover to Chichester – the area where the above ancient DNA sample was found.

<u>Classical Authors - Descriptions of Germanic Peoples</u>: References to the authors below are widely available. It should be recalled that after the most recent of these works, all reference to the Cimbri from reliable sources disappear, leading to the conclusion that they merged into other local tribal groupings such as, for example, the Eudoses (Jutes). Those considered as candidates for the Jutes and Frisians below are bolded:

**Pytheas** made a voyage from Massilia (Marseilles) circa 325 BCE to survey the north coasts of Europe, which he described in the now lost "On the Ocean". Fortunately Pliny the Elder provided an important quote from that work - Pytheas says that the **Gutones**, a people in Germany, inhabit the shores of the estuary of the Ocean called Mentonomon, their territory extending a distance of six thousand stadia: that, at one day's sail from this territory, is the Isle of Abalus, upon the shores

of which amber is thrown up by waves in spring, it being an excretion of the sea in a concrete form; also, that the inhabitants use this amber by way of fuel, and sell it to their neighbours, the Teutones. Timaeus, too, is of the same belief, but he has given to the island the name of Basilia.

<u>Pliny the Elder</u> wrote, circa 77 CE, his "Natural History" wherein he states that, "There are five German races; the Vandili, parts of whom are the Burgundiones, the Varini, the Carini, and the Gutones: the Ingævones, forming a second race, a portion of whom are the Cimbri, the Teutoni, and the tribes of the Chauci.the Istævones, who join up to the Rhine, and to whom the Cimbri belong, are the third race; while the Hermiones, forming a fourth, dwell in the interior, and include the Suevi, the Hermunduri, the Chatti, and the Cherusci: the fifth race is that of the Peucini, who are also the Basternæ, adjoining the Daci previously mentioned".

<u>Tacitus</u> wrote "Germanica", circa 98 CE, which may have been heavily influenced by the now lost manuscript of <u>Posidonius</u>. Tacitus wrote about the lands of the northern Germanics, at least in part, from his own investigations. After noting the Longobards, he named the tribes that worshiped Nerthus via a sanctuary on an island. These were, "The neighboring Reudigni, and the Avions, Angli, Varini, Eudoses, Suardones, and Nuithones, are defended by rivers or forests. Nothing remarkable occurs in any of these; except that they unite in the worship of Hertha, or Mother Earth; and suppose her to interfere in the affairs of men, and to visit the differentiations. In an island of the ocean stands a sacred and unviolated grove, in which is a consecrated chariot, covered with a veil, which the priest alone is permitted to touch." Tacitus indicated that all these peoples worshiped Nerthus at an Island – based sanctuary. The cult was supposed by some to be centred on the Island of Sealand at Lejde, others assert Rugen, and still others Heligoland.

If one realizes that Tacitus appears to be naming from east to west, and is probably, after the Angli, heading up the Jutland Peninsula and associated islands, then the following may apply from south to north: Reudingni (along the Baltic Coast), the Avions, the Angli in Schelswig and surround, the Varini (unknown), then north to the **Eudoses** (Jutes?), then the Suardones (Charudes?), the Nuithones (Teutones?), and finally the Cimbri in the north. The Teutones could be on Sealand – the physical locations are not given so one is left to guess based on the sequence of the list in relation to geography. The map below (an interpretation not a direct source) shows these groups in context.



Map that attempts to summarize the verbal descriptions of Tacitus

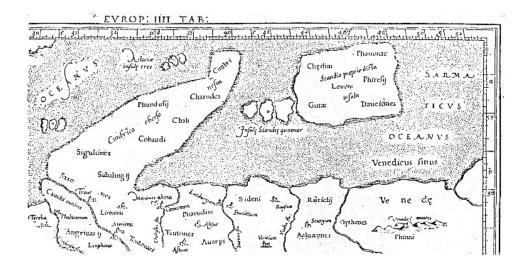
Ptolemaeus (Ptolemy), the Greek astronomer, mathematician and geographer, wrote circa 150 CE his book "Geographike Huphegesis" (Geographic Manual) wherein describes the Cimbrians as a people who lived further north than all other peoples on a peninsula to the north of the River Elbe (50 years after the descriptions of Tacitus). The earliest extant version of the accompanying map appears to be the from 1466 and shows all of the nations or tribes noted by Ptolemy (not so in all later versions) with the Cimbric Chersonesus, the three islands including Sealand called Scandia Insula z, and the area that seems to be Skane in Sweden as simply Scandia. A discussion of the tribal groups noted will follow later. The Ulm document dated to 1482 that appears to show the "Cimbrinie" peninsula, and three islands to the east with names inscribed on two of them -Fanmanni? and to the south Leudone?. What appears to be Norway and Sweden are shown, as well as Gotland. From this point all future maps appear to incorporate a blend of Ptolemy and "up to date" information making them of dubious value. For example, a version from 1503 (Johannes Schott) shows Sealand as "Scandia" and portrays the land to the north as the territory of the Norbegia, Suetin, Gottie, and Dana. Jutland is labeled "Dana". Ptolemy never mentioned the Dana, but did note the Dauciones (Dankiones) who Dilke (1984) identifies with the Danes.

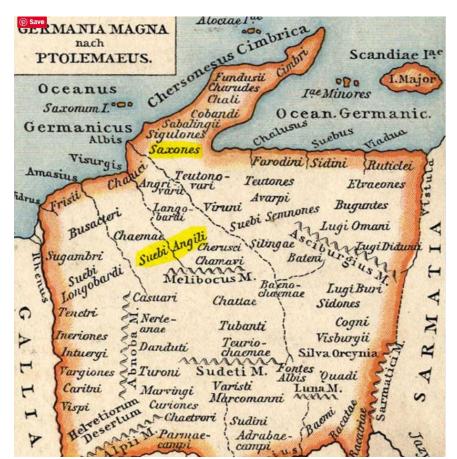
Using just the descriptions (and coordinates, such as they are), it seems that Ptolemy placed the Cimbric Peninsula at a 45 - degree angle towards the east and hence Fyn would likely have been considered as part of Jutland (Grance, 2003) and it becomes difficult (impossible?) to place any tribes in the area with much confidence.

The three maps below are of unknown provenance but are true to Ptolemy. The first is in Greek giving the impression of greater antiquity – but includes no information about the peoples residing in the Western Scandia. Here the Kobandoi are shown residing on the eastern side of the Peninsula. The second map is in Latin, but here the Cobandi are shown in a far eastern location. To confuse matters, both the Western Sealand cluster and Eastern Skane (Sweden) are labeled as Scandia – the former as "Insula Scandia granneur"?; and the other as "Scandia propriadissla? Insula". However there is a great amount of detail in the sense of the named tribes in the latter Scandia being truest to the verbal descriptions of Ptolemy (although missing one tribe) – however some were likely residing on Sealand and the other islands. The translation reads, *And this is called Scandia locally and is occupied by the Chaideini, in the east by the Faucona, and the Firaisi, and in the south by the Goutii and Dauciones, and in center by the Leuvoni*. The latter two may be the Danes and Seuoni (Swedes) in Sealand and Sweden respectively.

However, combining all these geographic – ethnographic sources, the most correct interpretation would seem to have the Fundosi (**Eudosi** or people of Funnen?) and Charudes as possible tribal units of the Cimbri – Teutones at the time (circa 77 to 150 CE) - although the Chaloi and the Cobandi are also "possibilities". The exact words (in one of three Greek to Latin translations available to the author) from Chapter X are as follows: thence the Saxons through the palisades of the Cimbrian peninsula; in the same peninsula above the Saxons on the west are the Sigulones, then the Sabalingi, then the Cobandi, above them the Chali, and above these to the west are the Fundusi, and to the east the Charudes. Of all these the Cimbri are the farthest north. Another translation has, while the Foundousi still to the west of these, are more to the east of the Charoudi, while at the very north, the Cimbri.





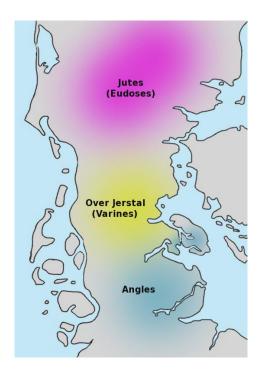


Three maps, unprovenanced, the first is in Greek lettering and the second and third are in Latin, which show similar but not identical detail in relation to the tribes of Jutland.

An article on the details of Ptolemy's work can be found <u>here</u>, along with a map that is circa 1400 (but difficult to read).

Ptolemy provided precise latitude and longitude coordinates for physical features and towns but not tribal locations, so they must be reconstructed on the basis of his verbal descriptions.

<u>Jutes of Jutland – A Summary of the Above Historical Evidence</u>: The Jutes may have been the Eudoses (Fundosii) of Ptolemy noted as residing immediately south of the Cimbri circa 150 CE. To further complicte matters, there were apparently Eudoses residing on the Black Sea at the time of Ptolemy. Two hundred years later, after 350 CE, there are reports of Eudoses residing east of the Crimea and Tanais on the Black Sea. Brandt (2006) speculates that after a defeat by the Goths they scattered to the south and east – however it may be that at this time they returned to the peninsula that would bear their name. It also cannot be entirely ruled out (since it is an assumption that Eudoses = Jutes) that the above noted Juthungi of Lower Saxony and Bavaria, being probably descendants of the Tungri and before Aduatuci (i.e., Cimbri and Teutones who stayed in Belgium), moved north to become the Jutes and give their name to the Peninsula. The Augsburg Memorial Stone records that the Juthungi were descendants of the Semnoni who were the lead tribe of the Suevi and allies of the Cimbri at the time of Augustus. The Juthungi were sometimes noted as Jutes during their raids on Roman Raetia (part of Switzerland) at various times between 259 and 431. They were recorded in other documents as residing north of the Danube between Regensburg and Guzenburg in 430 CE and were also known as Euthungi. Perhaps they moved north after this defeat and under pressure from the Huns – but were supposedly seen again in the above location between 450 and 500. It is not at all unusual for a tribe to split into two factions which each go their separate ways (e.g., Visigoths and Ostrogoths; West Herules and East Herules). Needless to say, however, this is all very confusing and not entirely helpful in sorting out the origins of the Jutes.



The State University of New York at Albany's Ethnohistory Project concludes that the Eudoses resided on the right bank of the Rhine between Karlsruhe and Strassbourg at some point between 70 BC and 200 CE and were part of the Jutes who in turn gave rise to the Euthungi.

Camden, (1607) reflects a common sentiment about the link between the Getae of Beowulf (see later) and the Jutes – who are often confused or discussed together as if they were one of two sides of a coin. Specifically, Camden stated, "The Jutes, who had that name (as many think) from the Gutes, Getes, or Gothes (for in a manuscript booke we read Geatun) did for certaine inhabite the upper part of Cimbrica Chersonesus, which still the Danes call Juitland, descended haply of those Guttae whom Ptolomee hath placed in Scandia, whose habitation this day is called Gothland. But take heede you thinke not with Jornandes that this was the native country of those Gothes who with victorious conquests over-ran all Europe: for the most ancient and best approoved writers have recorded unto us that they dwelt beyond the river Ister fast by Pontus Euxinus, as were before time called Getae."

Nordic Historical Sources: Some of the Scandinavian historical sources allude to events reflected in the archaeological finds. One source which "should" be of assistance in illustrating the relationship of the people of Jutland, and those residing in the rest of what is today Denmark, is Saxo Grammaticus. He wrote "Gesta Danorum" in the 12<sup>th</sup> Century (supposedly a comprehensive history of Denmark). Unfortunately, he generally refers only to Sealand and seldom mentions Jutland. In addition, there are three men named Dan in his saga and a profound lack of clarity. In considering the independence or not of Jutland, on one occasion he notes, "At this time Horwendil and Feng, whose father Gerwendil had been governor of the Jutes, were appointed in his place by Rorik to defend Jutland. But Horwendil held the monarchy for three years, and then, to will the height of glory, devoted himself to roving." Later he notes how upon the return of one of these men the "Palace burned" suggesting an overlordship of Jutland from Zealand. Concerning the same individuals Saxo speaks of the "kingdom of Jutland" which was ruled by Wiglek, who had a long and prosperous Administation. Elsewhere Jutland is noted as "the chief district of his realm" (Denmark). It is unclear whether at this time the population of Jutland was composed at least partly of Slavs (e.g., Poles) as he speaks as if the "Sclavs" are the common people there. In the final chapter of the book Saxo calls the Jutlanders, "a presumptuous race" and how they conspired against the Zealanders with the people of Skane in Sweden and Ragnar responded by crushing the Skane folk at "the stead of Whiteby" and then dealt with the Jutlanders "who dwelt near the Lim - fjord." In general the work tends to confuse not clarify as there is not a single date in the entire work upon which to pin events – although somewhat greater success (clarity) can be obtained in relation to the Angles (noted in the above noted study above by the present author).

"Chronicon Lethrense" (written circa 1170 CE) helps to narrow down the dates somewhat. The author recorded that Danish King Rorik Slengenborre was succeeded by his son Wighlek, the father of Wermund, the father of Offa (d. c. 456 CE). Thus Rorik and Horvendill would have been born about 310 and 340 CE respectively (assuming that there is more fact than myth in these works). Saxo relates that Horvendill of Jutland killed Koll, King of Norway while on a raiding expedition – which may tie in with the Illerup Adal archaeological finds of Norwegian military votive offerings (noted in the present author's above study of the Cimbri). Rorik's daughter Garutha married Horvendill and had a son "Ambleth" (Saxo) or "Amblothe" (Chronicon) – Shakespeare's Hamlet. He became ruler of Jutland perhaps 380 CE. His name, Amhlaoibh is the Celtic version of the Scandinavian Olaf (Kenner, 1989), he spent his youth with the King of England, and married a Scottish queen – suggesting possible Celtic ties.

It may be helpful to compare this data to the "Skjoldungasaga" by Arngrimur Jonsson composed in 1597 where the brother – in – law of the above Offa (d. 456) was one Dan who originally ruled in Jutland, then conquered Zealand from King Aleif (Alewih in Widsith?) and became the first king of a united Denmark. Other sagas of the time generally agree with the essentials. Snorre stated that his full name was Dan Milillati (the "Magnificent" or "Proud"). Thus it appears that the people of Jutland were the original Danes – a view reflected in the irrefutable fact that Harald Bluetooth, son of Gorm the Old of Jelling, Jutland was the first Christian king of Denmark. This may, however, be more myth than fact since a candidate tribe seen at the time of Ptolemy in what is today Sealand or Skane, Sweden is found in the Dauethones who may have migrated to Jutland before 500 CE. Others have suggested that the name came from the residence of the Herules at the Danube, among other guesses.

A detailed summary of the archaeology of the Jutland Peninsula from the Bronze Age Era to the Viking Era can be found in the above noted work on the Cimbri. Note in particular how, "After c.500 AD the archaeological record completely fails us, and as yet no villages from the sixth and seventh centuries have been found in Denmark" (Jensen, 1982, p.220). This stands in stark contrast to 100 or so documented continuous village sites that extend from circa 1 AD to the 5<sup>th</sup> Century in Jutland. It seems likely that some of the gap in the archaeological record can be explained by the mass movement of Jutes (as well as the Angles) from their homeland in Jutland to England in the 5<sup>th</sup> and 6<sup>th</sup> Centuries.

# History and Archaeology of Anglo-Saxon England: General

#### Early Authors in Britain – The Anglo-Saxon Chronicles, Bede, Gildas, Ninius:

The <u>Wessex Anglo-Saxon Chronicle</u> elaborates on how in the year 449 (likely 20 years earlier), the brothers Hengist and Horsa were invited by the British aristocrat Vortigen to England to fight the Picts. Their landing place was Wippidsfleet (Ebbsfleet) in Kent, and they duly performed their task and invited others of their nation for assistance. They list the founders of Isle of Wight as Wihtgar and Stuf, and Bieda and Maeglaof as the founders of Meonwara (Hampshire). This source gives a date of 477 CE (potentially 457 according to some authors) for the arrival of the Saxons AElla and his three sons who landed at Selsey Bill in Sussex and from there the conquest proceeded in fits and spurts moving west to east. The next significant Saxon recorded event is 495 when Cerdic and son Cynric arrived in Wessex and began to battle with the Britons in earnest (Stanton, 1971). However it is the data relating to the Jutes which will be the focus of the present study – although since the Chronicle had a habit of using Saxon for the Germanic peoples, Aelle could have been Saxon, Jute or Jute - Saxon.

**Bede** (a Northumbrian Anglian) writing in 731 CE his "Ecclesiastical History of the English People" is even more specific in dating the arrival of the first settlers to 449 (or 429) CE. He stated that, "They came from three very powerful Germanic tribes, the Saxons, the Angles and the Jutes. The people of Kent and the inhabitants of the Isle of Wight are of Jutish origin, and also those opposite the Isle of Wight, that part of the kingdom of Wessex which is still called the nation of the Jutes. From the Saxon country, that is, the district now known as Old Saxony, came the East Saxons, the South Saxons, and the West Saxons. Besides this from the country of the Angles, that

is the land between the kingdoms of the Jutes and the Saxons, which is called Angulus, came the East Angles, the Middle Angles, the Mercians, and all the Northumbrian race ... as well as the other Anglian tribes. Angulus is said to have remained deserted from that day to this" (Colgrave translation, see Myres, 1970, pp.146-7). Thus from north to south were the Jutes, Angles and Saxons, which positions the Jutes in the mid to northern (and perhaps west) part of Jutland using the known location of the Angles between Flensburg and Schleswig on the eastern aspect of Jutland.

Bede names the first chieftains, the brothers Hengest and Horsa who came at the behest of King Vortigen to assist him with the "Pictish problem". He notes that the people of Kent believed that they were descended from Hengest (described in the "Anglo-Saxon Chronicle"). Bede provides a genealogy of Hengest. "Ethelbert was the son of Irminric, son of Octa, and after his grandfather Oeric, surnamed Oisc, the kings of the Kentish folk were commonly known as "Oiscings". The father of Oeric was Hengist, who first came to Britain with his son Oeric at the invitation of Vortigern".

The genealogy was extended further by Bede, who asserts that the people of Kent believed that it was "Horsa, the father of the Kentish Jutes, was descended from Woden: Their first chieftains are said to have been the brothers Hengist and Horsa .... The sons of Wictgils, whose father was Witta, whose father was Wecta, son of Woden, from whose stock sprang the royal house of many provinces".

Gildas (a Briton) wrote (about 540 CE) that during the 440s (his specific dating may have been 20 years later than was the case) the call for assistance against the Germanic threat went out to the Roman commander on the Continent, Aetius, but no assistance could be offered. Hence a "British tyrant" invited "barbarians" to come and settle among the Britons to help in their defense. Three boatloads arrived and the warriors were given lands somewhere in the eastern part of England (Mucking?). Prior to 500 CE these mercenaries turned against their employers / hosts and attacked the Britons.

**Procopius of Caesarea** wrote circa 555 CE that in Britain there were three "races", "Angiloi, **Frissiones**, and Britons". He commented further that each year men, women and children from each group left Britain for the land of the Franks. Thus the most contemporary authors assert that there were 4 major tribes contributing to the "invasions". Bede mentions the Jutes, and Procopius notes the Frissiones (Frisians). The "Frisian connection" will be discussed later.

Although some authors have posited that the Saxons went on a "killing spree" and engaged in an "ethnic cleansing" of the Jutes (e.g., on the Isle of Wight), this is contradicted by a lack of any archaeological evidence, and the apparent way that the Jutes were viewed at the highest levels of English society at the time. Bishop Asser, who was the biographer of Alfred the Great provides genealogical details of King Alfred's descent from a Jutish Princess. Specifically in <u>Asser</u>, "Life of King Alfred" (Book 1, p.2), he states that, "The mother of Alfred was named Osburh, and extremely devout woman, noble in mind, noble also by descent; she was the daughter of Oslac, the famous cupbearer of King Aethelwulf. This Oslac was a Goth by nation, descended from the Goths and Jutes [many authors conflate these two peoples] – of the seed, namely of Stuf and Wihtgar,

two brothers and ealdeormen. They having received possession of the Isle of Wight from their uncle, King Cerdic".

Ninius who was a Briton, wrote the "Historia Brittonum" in 1021 CE, used many different sources unavailable today to tell the story of the British people. Ninnius also provides a great deal of information about the "Saxons" which is a term he uses to encompass all Germanic peoples. He gives the arrival date of the "Saxons" as 428 after the birth of Christ; but the brothers Hengest and Horsa as "four hundred and forty – seven years after the passion of Christ" – the two dates combining to offer a date about 20 years earlier than that provided by Bede (but more in keeping with the archaeological evidence discussed later). He also gives the genealogy of Hengest and Horsa as, sons of Wihtgils. Wihtgils was the son of Witta; Witta of Wecta; Wecta of Woden; Woden of Frithowald, Frithowald of Frithuwulf; Frithuwulf of Finn; Finn of Godwulf; Godwulf of Geat with the latter being the son of a god (idol) blinded by some demon (this being consistent with a description of Odin). He also says specifically that the brothers and their crew of three vessels were given lands on Thanet in Kent. They were able to take full control of Kent by a ruse involving giving Vortigen the daughter of Hengest in marriage. With Vortigen's permission, 16 more vessels arrived as reinforcements to assist with the attacks of the Picts, and soon after another 40 ships. After a falling out with Vortigen, Hengest sent for even greater numbers of men from the Germanic regions. According to Ninnius, during the time of the Arthurian battles, "The more the Saxons were vanquished, the more they sought for new supplies of Saxons from Germany; so that kings, commanders, and military bands were invited over from almost every province".

Widsith and Beowulf: In the old Anglo – Saxon poem sometime before the late 10<sup>th</sup> Century by Widsith, the ruler of each group of North Germans, apparently in the 5<sup>th</sup> Century or during the Age of Migrations, is described. For example "Sceafthere Ymbrum, Sceafa Longbeardum" which statement in Latin clearly applies to the men who led the people of the Island of Imbre and Lombards respectively. Also Widsith said that "Thyle [led] the Rondingas" (probably the people of Randers, Jutland). Others noted include Breoca the Brondingas, Billing the Wernas. Oswine ruled the Eowan and Gefwolf the Jutes; Finn son of Folcwalda the tribe of the Frisians. Sigehere ruled the Sea-Danes for a very long while, Hnæf the Hocingas. Alewih was the head of the Danes. The Hocingas are probably the Herules named after Ochus, one of their chiefs. Widsith provides different names for the rulers of the Jutes, and various Danes for example. The leaders so named are likely from the "Heroic Age" so may not reflect leadership current at the time of writing. He also said that Offa (d. c. 456 CE) ruled the Angles so the poem content can be dated to this time although the mention of Viking leaders suggests a later date for the writing (9th Century). Note that many have confused this Offa with the Offa of Mercia who built Offa's Dyke to keep out the Welsh. The mention of Finn and Hnaef links this work to the time of the first recorded migrations of the Jutes to Britain. Thus the Cimbri, Harudes and other tribes noted by Ptolemy as residing on the Cimbric Cheronesis appear to have lost their identity and are subsumed under the name Dane.

In summary, the leaders of those who would be at a later date likely be termed Danes are:

Getwulf – Jutes Sigehere – Sea Danes Alewih – Danes The well – known poem "**Beowulf**", written by an anonymous author probably in the 8<sup>th</sup> Century weaves together fantasy (dragon slaying) and fact (extensive information about the above Finn and Hnaef is included). In his translation of this work in 2007, Child states the following, *The Danes, in allusion to their valor, wide dominions, or their ruling house (the Scyldings, or descendants of Scyld), are called Spear – Danes, Ring – or Arm – or – Danes, Bright Danes; East - , West, South, and North – Danes; Scyldings, Victor – Scyldings, etc. They are also called Hrethmen and Ingwines* (p. 93). Harothi and Charudes have been linked as noted above.

It is also interesting to note that in Beowulf the Danes are known as Ingwines, harking back to Pliny's statement earlier that the Ingeviones included the Cimbri, Teutones and Chauci (probably Charudes). Specifically, the Crossley-Holland (1999) translation writes, *Then the King of the Danes, Ing's descendants, presented the horse and weapons to Beowulf, bade him use them well and enjoy them* (p.100). In the Child (2007) translation the version reads, *And then the prince of the Ingwines gave Beowulf the right over both of these* (p.114). This might imply that the Danes were composed largely, at least at the princely level, of the Cimbri and kin.

Some of the other historical sources are within the realm of myth, rather similar to the contents of Anglo-Saxon "Beowulf" and "Widsith"

<u>Documentary Sources Beyond Widsith and Beowulf and Archaeology re the Jutes</u>: A more recent source to consider in attempting to profile the Jutes is the <u>Frankish King Theudebert</u> who wrote a letter to Emperor Justinian referring to the "Saxones **Eucili**". Once again we find a name that is phonetically linked to Jute, especially if writing in Latin – so Eucili is a highly likely version of Jute.

As described above, the semi – mythical Jute / Angle princes and brothers Hengest (the first King of Kent) and Horsa (sons of Wihlgils - possibly Wiglek noted as King of Jutland by Saxo) arrived in England with three ships before the year 449 CE at the behest of King Voltigen. Beowulf recorded that Hengest was involved in the fight between Finn the leader of the Frisians and the Dane Hnaef (leader of the Hocingas according to Widsith) who was killed in the fracas. Henget, as the latter's lieutenant, kills Finn. Beowulf clearly differentiates between the Danes and the Jutes (assuming that the "Eotens" are Jutes – as most translations do). For example, the Crossley – Holland (1999) translation includes the statement that, Finn should give up to them another hall, with its high seat in its entirety, which the Danes should own in common with the Jutes (p.101). It is unknown how many men left their supposed home in Jutland and / or the old Chauci or Cheruci territory at the base of the Peninsula to settle in England during the Anglo – Saxon invasions. However they, under their leaders Hengest and Horsa, were at first mercenaries in the service of the Romano – British Celts, then later invaders and settlers (according to Bede) in Kent, the Isle of Wight, and adjacent Hampshire (more on this later). In England the terms Ytum, Eotum and Iotum appear to be equivalent versions of Jute (Chambers, 1912). Bede (731 CE) uses the term Iutarum and Geata apparently to mean from Jutland in relation to the Jutish conquerors of England who lived to the north of the Angles. These also appear to be the Geatas of Beowulf. This whole matter of the Geatas being from Sweden or Jutland and their relationship to the Goths is entirely unresolved among scholars.

If it can be assumed that the Euthiones noted in a poem by **Venantius Fortunatus** (dated 583 CE) are Jutes, then they were residing between the Danes and Saxons (Carmina IX i.73). Hence a reasonable assumption is that they were located, as the map below suggests, on the western side of the Jutland Peninsula above the Elbe River. Among the few to study the matter in detail, Starcke (1968) answered the question as to Jutish origins. He said they came, "From Jutland. In the districts round Hjerring Bay, Esbjerg, Varde and Ribe, the Jutes had their tribal area. This was situated between the areas inhabited by the Angles and the Hardi" (p. 95); and may have used the Frisian coast as a stepping stone to England. Myres (1989) reported that, "Between 561 and 584 Chilperich, king of Soissons, is described as the lord by conquest of a people known as the Euthiones, who are shown by their name to have belonged to the same nation as the Jutes of Kent and clearly represent the remanant of this nation which had not taken part in the migration to Kent" (p. 59). Archaeological support for this statement comes from a study of the village sites in Southwest Jutland near Ribe, for example Drengsted and Dankirke which have cemeteries dating throughout the entire length of the settlement period. None of the settlements in these locations date to earlier than 100 BC, and most were abandoned in the 5th Century CE (Jensen, 1982) precisely when the Jutes were recorded as settling in England. There is a distinct lack of references to the Jutes in England other than the scant information in Bede. Bush (2001) summarizes what little is known and reports that circa 686 CE the Saxons executed King Arwald of the Jutes and his two brothers, and then may have engaged in a form of ethnic cleansing. In Hampshire their territory can be ascertained to a degree by place names such as Ytene, Ytings, and Yte Deas. The area known as Hengistbury Head opposite the Isle of Wight may have been named after Hengest. Archaeological data is entirely unclear. There are no further records to which one can refer.

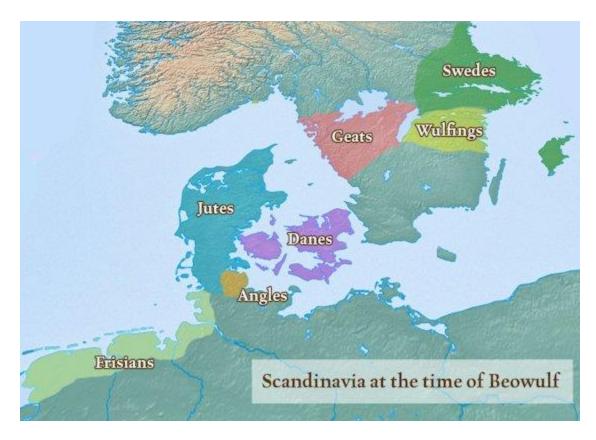
There is better evidence of a continuing presence in Kent where some of the local customs (e.g., gavelkind land tenure noted above) are attributed to the Jutes. Apparently the situation between the Jutes and Britons deteriorated and 3 battles ensued resulting in the expulsion of the latter. Hengest's son Aesc is said to have continued to rule until 512 CE in Kent. It may or may not be of significance, considering the uncertainties in relation to pointing to a Jutish homeland, but on the east side of Holstein, on the Baltic, is a village called Eutin, which may indicate the home of some part of the tribe at one time (Myres, 1989, pp. 46-47).

In a subject of this nature, it is impossible to discuss Europe without describing events that were occurring in the Romanized world. The Roman Empire did not come tumbling down with some single cataclysmic event – it was more a slow burn toward disintegration. In the years between 407 and 411 CE the Roman forces were withdrawn from England never to return. At this time there was a massive migration of Germanic peoples (e.g., Lombards, Brugundians, Ostrogoths, Vandals, Suebi) into the territories formerly administered by the Romans. In 455 the Vandals sacked Rome; and in 493 Italy was absorbed into the Ostrogoth Kingdom. There is ample evidence that the people of the Cimbric Peninsula (Angles and Jutes) were associated with the Roman military establishment from circa 20 CE to sometime after 420 CE (see above study by author). They were deployed to regions from Bulgaria (Moesia), to Algeria, to the Roman limes in Southern Germany (e.g., near Heidelburg).

As the Empire withered, the economic situation deteriorated and the hardship was amplified by the incursions of the Huns in the early years of the 5th Century. It might be expected that the people in Jutland were particularly hard hit since the prime source of employment and of rich trade goods was likely via those in Roman service. It would make sense that these men, when forced to return home when foreign military employment opportunities dried up, would be looking for similar work (as mercenaries) perhaps closer to home, and the possibility to better the lives of themselves and their families since the trading networks had been severed and poverty may have loomed. Hence, a reasonable explanation for their early appearance in England can be found in these facts. It should be noted that the "Notitia" is dated to circa 420 CE and it is likely that after this date these warriors would have been unemployed in their chosen field. This data (and the timing) coincides well with the appearance of Hengest and Horsa on the shores of England.

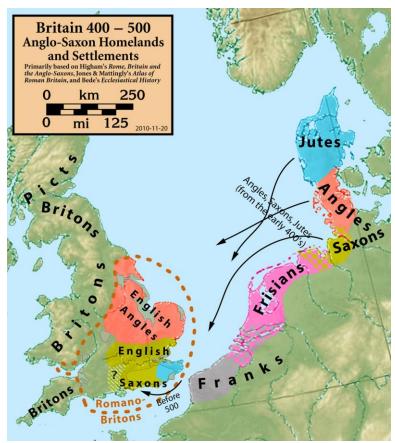
The extreme paucity of burials of any sort is also part of the "larger picture" of the Migration Period. Although it is clear that there was a dramatic evacuation of the area in the later 4th and early 5th Centuries, there are burials at five sites which show limited continuity to the mid 5th Century. These include, Bordesholm, Kr. Rendsburg; Borgstedt, Kr. Eckenforde; Schmalstede, Kr. Eckenforde; Sorup, Kr. Flensburg; and Suderbrarup, Kr. Schleswig. There are also a couple of cemeteries further south with similar affinities. However, radiocarbon dating shows that these burial grounds decline at varying rates, from the early 5th to the 7th Centuries. The cemeteries at Schmalstede and Borgstede, have mid - or even late fifth century brooches and other dressaccessories with important parallels in Anglian England (p. 39). Continuity arising from the former cemetery is seen with two high status cruciform 20 brooches (similar to the Idsteadt Scandinavian variety) that date to the late 5th Century, and appear to have been introduced to England circa 500 CE along with the more common square – headed brooches (noted in detail later). Another source of evidence is the distribution of Roman coins from the 1st to the 4th Centuries. Through the duration of this timeframe the area of central and southern Jutland have consistently the largest percentage anywhere in Scandinavia or the southern Baltic region. Perhaps these finds relate primarily to the pay received by the locals for their service in the Roman military.

As to the primary reason for this massive dislocation of the peoples of the Jutland Peninsula a hint can be taken from the sheer scale of the military weaponry sacrificially consigned to the bogs from the 1st to the 5th Centuries. There must have been tremendous anxiety about the future as news of the Hun incursions and subsequent dislocations of Germanic peoples became common knowledge. As Myres (1989) stated, "It was this pressure from southern Scandinavia which must have unsettled the Angles from their homeland around Angelin in eastern Schleswig, and their neighbors the <u>Jutes from Jutland and Fyn</u>" (p. 54 – underline and bold by present author). Additional reasons may be frequent flooding and significant sandstorms, and possibly the presence of plague, which all served to aggravate the situation. Soon after this date (circa 500 CE) is often seen as the time of the arrival of the Danes in Jutland (replacing the Cimbri or descendant tribes who had departed?).



It may be wondered if there is any evidence of Celtic cultural survival in Jutland and Fyn circa 500 CE. Todd (2004) comments on the survival of apparent Celtic links until this late date for example seen in the metalwork styles. Specifically, It has long been remarked that some of the motifs on the Gallehus horns [golden embossed drinking horns from Jutland] of about CE 400 are drawn from a Celtic repertoire (p. 132). It is perhaps noteworthy that according to historical sources from England (discussed below) in relation to the Angles, Saxons, Friesians and Jutes, the Jutland princes Hengeist and Horsa arrived with their people in southeast Britain at the behest of the local Brythonic king Vortigern about 429 or 449 BC. Perhaps the reason why the men of Jutland were chosen was that as possible descendants of the Cimbri (Angles and Jutes), they may have spoken Celtic (may have been bilingual at the time). It is also curious that the names of some of the major Angle kingdoms along the east coast of England are Celtic – Bernicia, Deira, Lindsey and Kent.

Subsequent Archaeology and History – Angles, Saxons, Jutes and Frisians: The history of the Jutes of Kent is more thorough beginning with the reign of King Ethelbert of Kent (reign 589-616 CE) when he received the Archbishop of Canterbury, and accepted Christianity (although it was years later before he converted). However even by 686 CE the Jutes of the western regions such as the Isle of Wight were still pagan. Although at that point the Jutes appear to fade into the more general category of Saxons, their appearance in Beowulf written in the late 10<sup>th</sup> to 11<sup>th</sup> Centuries shows that they had not been forgotten hundreds of years later – although termed "Eotena" in this work.



Traditional Routes taken by Angles, Saxons and Jutes as well as Frisians

This would appear to be the Hengest of the Eoten tribe noted in the epic poem, Beowulf. As an aside, Newton (1993) has concluded that the manuscript was written circa 713-749 CE, and that it speaks of events circa 535 CE. Bede noted that that the English were composed of three peoples, the Angles, Saxons, and Jutes. He also mentions some Frisians, Bructeri, Danes, Huns and Rugini although this seems to be in the context of those Germanic people who were "ripe" for conversion to Christianity. The map above reflects the standard interpretation of Bede's terse statement. It was likely oversimplified, especially in the Thames region where there was a multi-cultural mix (Davies, 1999).

It seems fair to conclude that the Jutes were simply an amalgam of the tribes which once resided north of the Angles. This would include the once predominant Cimbri, who at one time resided in central and northern Jutland. At one time (113 to 101 BC) they almost brought the Romans to their knees in their perambulations around Europe from Jutland to Bulgaria to southern Germany, across most of Gaul (France) and into Spain and Italy. Tacitus, in 98 AD, stated that, "In the same quarter of Germany, adjacent to the ocean, dwell the Cimbri; a small state at present, but great in renown. Of their past grandeur extensive vestiges still remain, in encampments and lines on either shore, from the compass of which the strength and numbers of the nation may still be computed, and credit derived to the account of so prodigious an army". Therefore by the 1st Century AD the Cimbri had shrunk in numbers and influence to the point where they were ripe for absorption or amalgamation by/with other local tribes. So the Jutes likely included what remained of the Cimbri people, likely of Central European Celtic origin, and so likely many would have

carried the predominant haplogroup of this group which is R-U152, known as "Alpine – Celtic" (see here).

There is considerable evidence that there was a mixing of Angles, Saxons, Jutes, Frisian, Thuringians, Franks and other Continental Europeans who came ultimately under the rubric "Anglo-Saxon" – although one can point to dominant influences such as the Jutes along the south coast, and the Angles along the eastern coast of England.

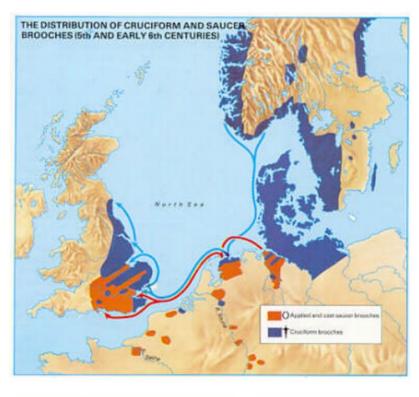
<u>Continuity Between the Continent and England:</u> Some material artifact items with diagnostic attributes will now be singled out. It has been noted, for example, that among the various Germanic groupings, the clothing and handywork of the females varies from group to group.

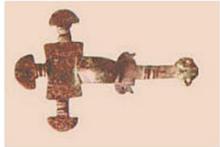
Looking at the archaeological evidence, at Mucking in Essex there is a Germanic settlement with two cemeteries continuously occupied from the early years of the 400s to the 700s. The assemblage (e.g., pottery, an excellent marker for culture) is virtually identical to that seen at Feddersen Wierdse, a Frisian – Saxon area, beginning about 430 CE. Note that the evidence suggests that this region on the Continent was abandoned in the 5th Century, thereby hinting at a possible discontinuity with those who resided there in later times. This was generally agreed to have been a "jumping off" or "assembly" point for all of the Germanic – Danish groups prior to raid or migration to locations such as England (Davies, 1999). The settlements there were abandoned in the middle of the 5th Century, beginning about 430 CE, hence the people who are residing there today may or may not be the same folk as lived there 1500 years ago. Therefore direct comparisons of Y-chromosome data between say Frisland and England today may be unjustified. It is to ancient DNA that one must look for more definitive answers.

Brooches are perhaps the most singularly significant signal of ethnic identity in those times. It has been noted, for example, that among the various Germanic groupings, the clothing and handywork of the females varies from group to group. Circa 500 CE the women of the Angles were wearing square headed broaches rarely seen in other groups. These devices, commonly used as clothing fasteners, provide a valuable indication of date and origin. The shape and type of decoration varied between tribal groups. Even slight differences can be significant in the search for tribal identifiers, and can often be tied very specifically to a time and place. Round and equal arm brooches were common among Saxons, while the Angles and Jutes preferred cruciform brooches. In addition, wrist clasps were common among the Angles but not the Jutes (Bakken, 1994).

Myres (1989) provides a very detailed analysis of the links between England and the Continent via examining jewelry and pottery largely from cemeteries in both locations. In Scandinavia, Jutland, the Danish Islands and Schleswig the long brooch has a head plate either square or rectangular, often cruciform in style with protruding knobs on the arms, and a diamond shaped foot plate. This type is common in the Anglian areas of Eastern and Mid Anglia, Mercia and Northumberland. Classic examples are found in Norfolk (e.g., Kenninghall), Suffolk (e.g., West Stow), and Lincolnshire (e.g., Sleaford). This is contrasted with the round or saucer shaped broaches that are commonly found in the Elbe – Weser area, and in the areas of England settled by the Saxons, and likely to be found in regions settled by the Middle Angles, also in Kent and Essex and locations further south. Another item of jewelry that can be "diagnostic" are wrist clasps seen in the Scandinavian regions and the Anglian regions. Henson (2004) states that, Hines sees

the introduction of sleeve clasps as due to Norwegian presence in East Anglia and / or the Hunber estuary from c. 475, and furthermore in relation to the Jutes that, the <u>quoit brooch style of metalwork developing in Kent from origins in Jutland</u> (p. 69).







Cruciform broach as a marker of Angles and Jutland on left and Saxon circular broach on right

Note that the above map also depicts the "jumping off point" in Frisia, again highlighting the role of this group in the settlement of England during the early Middle Ages.

Henson also reports that in general, Anglian cultural material is restricted to the traditionally Anglian areas of Britain, but Saxon material was not restricted to the traditionally Saxon areas (p. 70). For example saucer brooches are found in East Anglia. There is also an overlap with the coastal Frisian groups who were later replaced by the Saxons.

Myres (1989) notes the strong affiliation between <u>pottery styles</u> and geography and ethnicity, and contrasts the styles of the Saxons and related groups to, the styles in vogue among the northern

group of peoples in eastern Schleswig and Jutland, the Danish islands, and southern Scandinavia (p. 63). The strongest links are between all of Jutland and Kent to the Thames River (Bede's Jutes). In Jutland and Anglian England there is a rectangular style with massed groups of lines or grooves, horizontal on the neck and vertical on the shoulder – and the body has the look of polished metal. The jars tend to be short and squat. The comparison diagrams of pots from Jutland and East Anglia (seen on page 65) are strikingly similar, even virtually identical in the intricate design pattern (e.g., Borgstedt, Jutland and Newark, Northumberland). This can be contrasted to the Saxon version with, for example, curvilinear patterns and large jars. However this analysis is somewhat simplified since in Deira (northern Anglian territory) for example there are Saxon, Ango-Frisian and Alamanni artifacts (the town name Almondsbury may reflect an Alamanni settlement).

A summary of Oppenheimer's <u>linguistic</u> analysis (2006) offers two potentially important conclusions. The first is the variety of Germanic (English) at the time Beowulf was written (before the Viking invasions) was closer to that found in Scandinavia (Jutland) than in Saxony (using Forster's data). Secondly, he provides an analysis of the distribution of the early versus late Rune stone inscriptions (Elder Futhark) in England and concludes that these are almost exclusively found in the Anglian and Jute areas, not those occupied by the Saxons. A map of early rune inscriptions (Arnold, 1988) is interpreted as follows: "The geographical distribution is also uneven, there being in Kent, the Island of Wight and the region around the Wash from the Humber to Norfolk" (p. 125). In other words the areas Bede specifies as settled by the Jutes and Angles. It is noteworthy that, In the area of Jutland known even today under the name Angeln some of the most spectacular finds of runic inscriptions have been made dating from before the year 450 A.D. These inscriptions are written in a language which is commonly called 'Proto-Scandinavian', but which is more appropriately termed 'Northern Germanic', since it is clearly the predecessor of all later North and West Germanic languages (Antonsen, 2002, p. 331). As Hines (2000) notes, the language area north of the Schleswig-Husum neck, with what can rather loosely be referred to as some form of distinctively Ingvaeconic, Proto-Low German language (which ultimately gave rise to English). Furthermore, the early (pre 650 CE) stones inscribed with Runic script, with analogies only in Jutland (particularly the lower neck of the Peninsula), are only found at sites of early Anglian or Jutish settlement (see Oppenheimer, 2006).

#### The Frisians

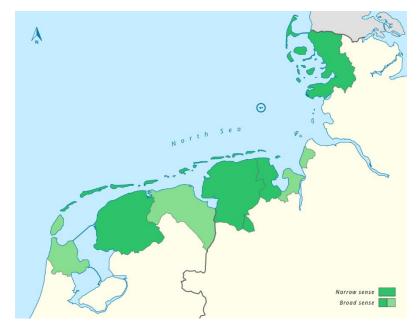
The Frisi first came to the attention of the Romans about 50 BCE where they were described as residing west of the Chamavari and Angrivarri near the mouth of the Rhine. Tacitus has them in their present homeland, west of the Chauci, in what are today the provinces of Groningen and Drenthe in the Netherlands. Their circa 300 BCE residence until a time when there was some loss in the migration times circa 450 CE was consistent. Many lived along the marshy coastal region on terps (mounds of sod and debris). They became known as independent people who fought against piracy, and encouraged merchant activity.

At the time of the Anglo-Saxon-Jute migrations an archaeological trail of these folk enroute to England shows a significant increase in goods from the homelands of these groups found in Frisi territory. The general interpretation is that the migrating people left signs of their presence, but not due to invasion but via trade as the region became a stopping off point prior to boating across the Channel. The focal point was what is today Friseland Province (as opposed to adjacent

provinces such as Groninjen) where Scandinavian (Jutlandic) influences are seen, for example in jewelry. According to Nicolay in "Odin in Friesland" (2017), "The square-headed brooch that was recently found in the province of Friesland is probably a copy of an older, direct imitation of a Scandinavian prototype that belonged to Haselof's 'Jutlandic brooch group'. The silver-gilt brooch was produced at a regional 'Frisian' workshop in the late 5th or, more probably, in the first half of the 6th century. The brooch is part of a larger category of Scandinavian-type ornaments, including regional-style imitations/copies, which within the Netherlands show a striking concentration in Friesland". See here for further information. An inspection of the brooches found in Sussex (e.g., Alfriston) show clear parallels to these Jutlandic – Frisian samples.

The Anglo-Saxon artifacts and cemeteries do, however, suggest that there were some residential settlements, some temporary, among the Frisians between 450 and 650 CE. An example is the large Anglo-Saxon settlement at Hoogebeintum – although some have described it as Anglo-Frisian. There was some population loss, however, which brings to the fore the likelihood that there were Frisians who accompanied the migrations of other Germanic peoples to England. During the "Dark Ages" the Frisians appear to have developed strong trade ties with the Franks to their west. See Vandermeulen in "The Canadian Journal of Netherland Studies", (1998) entitled "The Frisian Tribe: From Caesar to Charlemagne" here, as well as the various chapters in "Frisians and their North Sea Neighbours" (2017), see here.

The data suggest that via migration and amalgamation there was a merging of the various groups. In particular, considering that the Frisians (as well as some Saxons) and the people of Jutland shared, "an overlapping territory with Jutland" and Medieval writers referred to the Frisians "interchangeably with the Jutes" (Pohl, 2018, p.8). Oddly, perhaps, no author of the time ever mentions all four "founding" groups of England together (Martin, 1971, p.83). Based on archaeological data, Martin (1971, pp. 102-3) posits that the incoming Danes (e.g., from Zealand) pushed many of the Jutes west and south such that they assimilated with the Frisians and some Saxons – although remaining the dominant group. The dark green area in the map below reflects this overlap region (top right).



According to Homan (1953-57, p.43), "the first wave or Jutes departed from the Frisian coast" (very close to the Kent region where their first settlements are documented), and successive waves soon followed.



The connections to Frisia (which included northern Belgium and Holland) were likely significant with a probably mixed community of Jutes (pushed south) and Frisians living across from Britain providing ease of access to the latter. Sass, 2019 makes the point that due to the paucity of sources and reliance on Bede, the contribution of the Frisians has been shunted aside by most. However, other than Bede, the only early source to suggest that the Frisians were among the major tribes invading England from the 5<sup>th</sup> century, only Procopius of Caesarea has added another group, writing c. 555 that there were three "races" who are now settled in Britain, "Angiloi, Frissiones, and Britons" – as was noted above. However it appears that there are serious problems in any direct interpretation of this assignment, with the realization that there were political motives for noting the Frisians. Specifically, "he does not distinguish between Angles and Saxons in the first place because the Anglo-Saxons themselves were not at all consistent in a distinction between the two (Myres 1937:343 ff.). We must bear in mind that Procopius talked with members of a Frankish embassy whose purpose was not primarily to provide the Byzantine court with all sorts of geographical data, but to further Frankish interests and territorial claims. The whole thing smells very much of a diplomatic trick. If the Emperor justified Theudebert's claims, the latter would have had a stacked deck to play against the Frisians on the Continent and assume suzerainty over them as well. It was not until the reign of Charlemagne that these Frankish aspirations fully materialized. This does not imply that Procopius's remark is null and void. In view of the above we may cautiously conclude that the Frankish envoys exaggerated with preconceived intentions the number of Frisians in Britain. All in all, taking the historical evidence into account, it would seem that the assumption that the Frisians played a role of some significance in the early history

of England only hinges on a questionable remark in Procopius. It is altogether too weak to allow any safe conclusions, let one to argue a Frisian origin of the English nation" (Bremmer, "Frisians in Anglo-Saxon England: A Historical and Toponymical Investigation", 1981, p.51).

It seems that we are left with the conclusion that the Frisian contribution to Anglo-Saxon England was that their territory was largely a "jumping off" point for Jutes and others. There may have been a number of Frisians among the Angles, Saxons and Jutes – but their genetic contribution to the migration is highly questionable – but the Jute – Frisian connection appears to be strongest.

#### Anglo-Saxon (Jutish) Sussex

<u>The Jutes in Sussex</u>: Since the primary purpose of this study is to explore the origins of the BY61198 individual found in Grave 43 of the Rookery Hill, Bishopstone, Cemetery, it is essential to turn our attentions to what was happening east of the Jute Kingdom in Kent, and east of the Jute Provinces of the Isle of Wight and Hampshire within Wessex.

Welch ("Late Romans and Saxons in Sussex", Britannia, 1971, Vol.2, pp.232-237) set about exploring the Saxon sites between the River Ouse and the Cuckmere River which adjoin Kent in an area between the sea and the heavy clay area of The Weald. He included, "the cemeteries at Highdown, Ferring; Malling Hill, South Malling; and Beddingham Hill, Beddingham; the cemetery and settlement at Rookery Hill, Bishopstone; and the cemeteries at Alfriston and Selmeston" were connected. This is an area where there are no contemporary Roman Villas – the few in the region has been abandoned before the "Saxon" migration to the area. Welch believes that this area, with large Villas to the east and west has all the characteristics of a 5<sup>th</sup> Century "treaty settlement". Martin posits that after the disastrous defeat of the Briton King Voltigern by Hengist, the former bought his freedom by "ceding Sussex and Essex". He believes that this event is associated with the landing of Aelle at Cymenesora c. 457 (more on Aelle later). All of the above cemeteries appear to have begun in the 5th Century, and "a strong Kentish cultural influence" in their gravegoods has been noted. The excavator Rookery Hill believes that the cemetery dates from c. 400 and in continuous use until the early 6<sup>th</sup> Century". Welch speculates that this area was one where German mercenaries (Roman or British foederati) settled (or were settled), ones who ultimately turned on their hosts as is consistent with the story of Hengist.



Standard Map of Jute Settlements Based on Bede 731 AD

<u>Jutes Along the Extent of South Shore of England to Chichester</u>: Bede provides compelling statements about the location of Jutish settlements – basically Kent, the Isle of Wight and Hampshire. What we will now explore, taking the previous section into consideration, is whether the Jutes at one time controlled the entire southern coastal region until the 7<sup>th</sup> Century when Wessex "gobbled the area up".

Foord (2017) provides a detailed study of a group residing in eastern Sussex from about Pevesney (but possibly the Cuckmere / Ouse Rivers) east to the Isle of Oxney in Kent. This group is named the Hastingas with the modern town of Hastings near the center of their territory. As the author acknowledges, it is not clear what role they played in the continuing conflicts between Angle Mercia, Saxon Wessex, and Jutish Kent. None the less their name, and that of a group residing to the east called the Limenwara had emerged by 700 CE (beyond the date of particular interest to the present study).

A very influential work is that of Jolliffe (1933) which discusses the somewhat unique features of Kentish systems or social customs and agrarian economy not seen elsewhere (e.g., gavelkind involving partial inheritance within a manor system), which also sets out grouping of hamlets into regiones or lathes of which there were 12 or 13 each with a Royal village. He puts forward evidence that this system was also in place to the west, clearly differentiating Saxons and Jutes. He posits a "Jutish kingdom" that includes not only all of Kent, but also parts of Sussex, Surrey and Hampshire established by the Jutes before the Saxons arrived. So the conclusion here is that the area around the Ouse and Cuckmere Rivers was part of this Jutish kingdom, and by extension that the people who resided there were largely of Jutish origin (although with acknowledged affinities to the Frisians as well as the Franks of the Rhine Valley who show cultural resemblances to the Kentish people). Jolliffe posits a middle Rhine River, "triangle whose corners now stand the towns of Dusseldorf, Frankfurt, and Trier" (p.108) region of origin of the Jutes at the time of migration based on cultural practices such as ploughing units, and wergeld fines rather than archaeology.



The Boundaries Established by Jutish Settlers Along the Sussex Shore According to Jolliffe

The archaeological evidence shows that the "Anglo-Saxon" settlements in Sussex between the sea in the south, and the Weald (thick forest) in the north, with the Ouse River to the west and the Cuckmere River to the east began at a relatively early date – perhaps as early as the withdrawal of all Roman forces in 410 CE (based on archaeological assemblages). It is to the very early historical documents that we must turn to shed further light on the early settlement of the area.

According to the Anglo-Saxon Chronicle in 477 CE, somewhere along the shore of Sussex between Hampshire and Kent (some authors opt for Selsey as the location), Aelle of Sussex along with his three sons, Cymen, Wlensing and Cissa landed. So in effect Aelle, according to this "myth" set the foundation of the coastal Sussex region. Known as the "ora-maritima" in Latin, and the various "ora" placenames (e.g., Ower near Southampton) it apparently suggests that it was coined by someone with a Jutish or West Saxon dialect. The area of the first landing has been

called Cymensora (Cymenshore) (after the name of one of Aelle's sons) and its location is unknown, but in the map above from Jolliffe (1933) a plausible location can be seen east of the Isle of Wight. As the author of a Wikipedia article notes, other than places such as Apple Down about 11 kilometers northwest of Chichester, the primary archaeological sites of this time period are those between the Ouse and Cuckmere Rivers in Sussex, "the treaty settlement of Anglo-Saxon mercenaries".

## Archaeology

<u>Archaeology of Jute Sites in Southern England</u>: It is beyond the scope of the present work to delve into detail how Jute sites differ or don't differ from Saxon or Angle – related sites. However the author will report on the findings of one study since it explored costumes (largely female clothing / broaches) with a focus on the Jutes of Hampshire during the time frame of interest (5<sup>th</sup> and 6<sup>th</sup> Centuries). Stoodley, "Costume Groups in Hampshire and Their Bearing on the Question of Jutish Settlement in the Later 5<sup>th</sup> and 6<sup>th</sup> Centuries CE" (2020, pp. 92-3). The "bottom line" will be reported below:

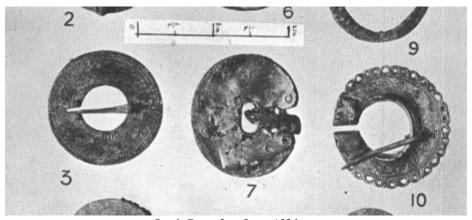
"As has been mentioned above, the creation of ethnic groups is often dependent upon cultural changes provoked through, for example, the interaction of competing groups. According to Barbara Yorke, the three coastal regions of southern England formed a political confederation during the 6th century that was aimed at combating a threat posed by Saxon pirates operating in the Channel which threatened the trade on which the prosperity of East Kent and Wight depended. It is argued that in 6th-century southern Hampshire the pressure from Saxon piracy brought together what had hitherto been a mix of different peoples as evidenced in the earlier 5th century by the brooches from south Scandinavia and north-west Germany, and probably also a group of (archaeologically invisible) natives. In a similar way Yorke has also claimed that the population would have been more ethnically mixed. That it was a threat by the Saxons explains why this identity was shunned in favour of one with links to East Kent, where the elite families claimed Jutish ancestry. In southern Hampshire the choice of a Jutish identity was a politically motivated response to an external (Saxon) stimulus. 'Jutishness' may have also been desirable because lying just across the Solent was Wight, possibly home to a Scandinavian elite, who may have offered military support in exchange for political allegiance and economic contributions. This process of ethnogenesis developed out of political connections with a Jutish elite, rather than an influx of people from northern Jutland. By the 6th century the people of south Hampshire claimed a Jutish identity, yet the majority were unlikely to have been able to trace their roots back to north Jutland; it was an identity created around a shared past that was legendary and was symbolised through folk costume. Conclusion Hampshire has provided evidence for differentiation in costume in the late 5th and 6th centuries, suggesting essentially two distinct costume groups. In the north of the county a group of local communities followed a style typical of the surrounding Saxon groups the peplos was the costume of choice. In the south a different situation prevailed and styles not dissimilar to those from East Kent and the Isle of Wight are identified. This is the archaeological evidence for a new identity, one that linked the areas. Previously, archaeological connections between southern Hampshire and the other two kingdoms were considered very weak, if nonexistent. It can be claimed that all three south coast territories shared a common identity in the later 5th and 6th centuries, although for southern Hampshire this may have been more of a created

identity to serve certain political objectives rather than deriving from an actual influx of Jutish settlers. Finally, this essay has attempted to demonstrate that it is not only the types of artefacts that are important in the identification of cultural and ethnic groups in the early Anglo-Saxon period, rather it was the way that they were used, which after all was their primary function".

<u>The Quoit Brooch</u>: As noted earlier, the particular and distinctive style of brooch known as "Quoit" has been found in Kent, and is linked to Jutish influences. The brooch below is of this style and is early 5<sup>th</sup> Century from Sarre in Kent and currently in the British Museum.

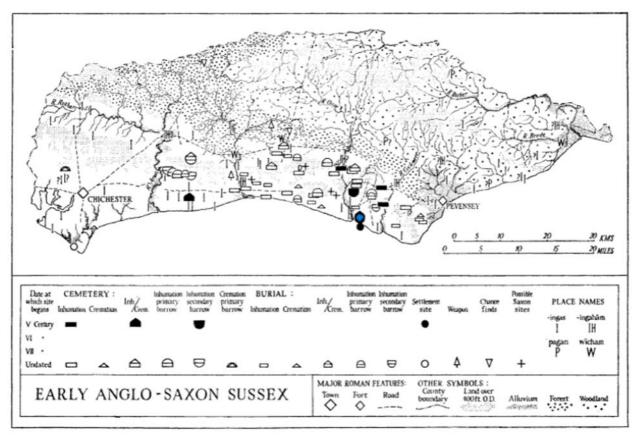


Quoit Broach from Kent



Quoit Broaches from Alfriston

Archaeology of Sussex Between the Ouse and Cuckmere Rivers: As noted above, it is here that the earliest Anglo-Saxon cemeteries are to be found. The data relating to two sites will be examined. The first is Rookery Hill, Bishopstone which, although excavated at various dates between 1967 and the 1970s, was in the earliest days (when the cemetery was excavated) completed by amateurs and the important grave goods and documenting the cemetery site are not available to this day. However an adjacent contemporary cemetery at Alfriston has at least been published, including descriptions of the graves, and the contents – including photographs.



Rookery Hill located at site with blue dot

1) Rookery Hill, Bishopstone: In Moore et al., "Archaeology of the Ouse Valley, Sussex, to CE 1500" (2016) there is a general description of the Cemetery including finds such as, "the latest coin from the site is a possible issue of Gratian (CE 367-378), the large pottery assemblage includes the latest recognizable Roman products from the same area, including Pevensey Ware which may have continued to be produced into the 5th Century". There are, "no recognizable domestic buildings dating to the Roman period". "It is not known whether there was continuity or a hiatus in occupation/activity at Bishopstone between the phase of late Romano-British and early Saxon settlement. The area of Saxon occupation, however, is much larger than the late Roman settlement and it covered both the Roman enclosure and some of the adjacent fields, with little respect being shown for the previous features on the site. The Saxon settlement, which Bell estimates to have covered some three hectares, consisting of rectangular post-built hall structures, sunken featured buildings

(SFBs), fence lines and an adjacent and contemporary cemetery. Unfortunately that part of the settlement and all of the cemetery which were excavated by David Thompson remain unpublished, but Martin Bell was able from the results of his own fieldwork and what is known of Thompson's finds to suggest that the Saxon settlement at Rookery Hill dates to the 5<sup>th</sup> and 6<sup>th</sup> Centuries, with the cemetery perhaps starting as early as c. CE 400. At some time in the 6<sup>th</sup> Century or perhaps later, the Saxon settlement on Rookery Hill was deserted – probably in order to establish a settlement in the valley to the east. This new valley-slope settlement, which is the site of the parish church of St. Andrew and a modern village, has been the subject of a research project" (see Thomas, 2010).

The professional archaeologist, Martin Bell, who had to pick up after an amateur excavated the cemetery, in 1977 did publish the extensive work he had completed in relation to the settlement. In addition to the human factor, Bell was faced with a site that was under immediate danger with housing being constructed and detritus being deposited as he tried to do his work; and furthermore that plough damage was becoming an urgent matter. Some sense of the situation during the archaeological work can be seen in the following map:

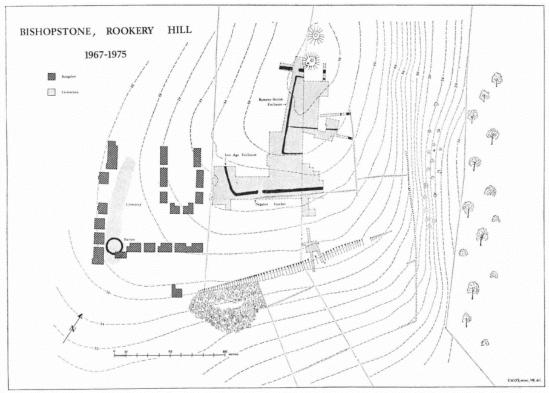


Fig. 2. General plan of the top of Rookery Hill, based on a survey by E. W. O'Shea. Contour heights in metres above O.D.

Quoting Bell, "The Cemetery Workmen engaged in the construction of the Harbour View Estate uncovered the first human bones in September, 1967. This led to rescue excavations by Mr. Thomson which continued until the following March, mostly at weekends and under difficult conditions with building going on around them. The nucleus of the cemetery appears to have been a Bronze Age round barrow, 13m. in diameter surrounded by a ditch lm. wide. Ploughing had obliterated the mound itself, and the original burial appears to

have been robbed, for at the centre was a large irregular pit, the fill of which contained a Beaker sherd. The cemetery spread out to the north of this barrow in a shallow crescent 94m. long by 20m. wide. The majority of the 118 burials were inhumations in graves orientated both north-south and east-west. Some were comparatively shallow, only 10 to 20cm, into the chalk, whilst others were over 60cm, deep. There were also six cremations, at least two of them inurned and others simply placed in shallow pits in the chalk. Dating the cemetery must be largely speculative until all the finds have been cleaned and examined in detail. At the time of writing only one object is published, a Quoit Brooch Style buckle from Grave 12, which was probably made during the first half of the fifth century. Two iron buckles were inlaid with silver and this was a technique chiefly employed during the fifth century. Weaponry in the graves included spears and three shield-bosses but no swords. Other finds were a bronze bound wooden bucket, buckles, numerous knives, beads, a few pots, disc brooches, spindle whorls and a bone comb. A few graves are also believed to have contained artifacts of Roman production. Amongst the fills of some graves were small pottery sherds which were probably part of occupation spread from the nearby Saxon settlement. Preliminary examination of the finds suggested to Mr. Thomson that the cemetery continued in use until the early sixth century. It was certainly used for sufficiently long to allow a number of graves, particularly those near the barrow, to cut through earlier burials. The excavator has suggested that the earliest burials were made round the barrow and that they spread out in a chronological sequence to the north. If this hypothesis is eventually proved by a detailed examination of the finds it will have interesting implications for the dating of Anglo-Saxon objects. The population interred in the cemetery has been the subject of a special study by Roderick Concannon. So far 83 skeletons have been made available to him, though some were in a very fragmentary condition. Of those which could be sexed 31 were male and 33 female. The population had the following age structure: 1 baby under 1 year; 12 children between 1 and 15; 19 young adults aged 15 to 25; 29 of middle age 25-45; and 14 classed as old which, in terms of the Saxon lifespan, was judged to be 45 onwards. The skeletons exhibited many of the usual pathological features, including arthritis and dental disease, and there were also a number of bone fractures. No evidence was found of battle wounds or of major epidemics. With 35 skeletons still to be seen and much work remaining to be done on the others, the study is far from complete. These preliminary results do however suggest that we are dealing with a fairly normal population showing no particular imbalance in terms of its age or sex composition" (pp. 193-4).

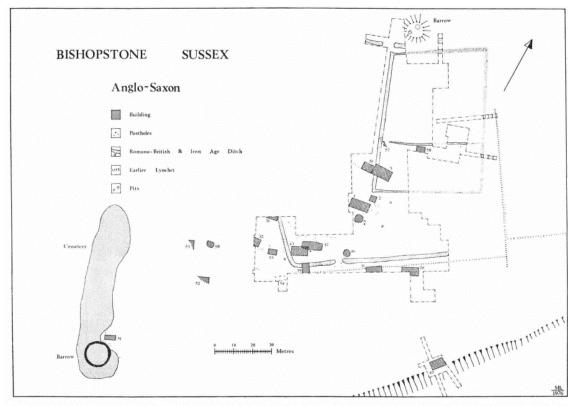


Fig. 86. General plan of the Anglo-Saxon site

The rest of the study focuses on the settlement site and is peripheral to the current study.

2) <u>Alfriston Cemetery</u>: Unlike the above Rookery Hill Cemetery, a contemporary version just a few kilometers to the north can offer a glimpse into what is likely to be located in relation to the former. Full and comprehensive reports were written by Griffiths in "Sussex Archaeological Collections", the first (99 graves) Vol. 56, 1914 see <a href="here">here</a>; and the second (32 graves) Vol. 57, 1915 see <a href="here">here</a>. The descriptions, sketches, and photos provide a clear sense of the grave furnishings seen in this (and presumably Rookery Hill) cemetery.



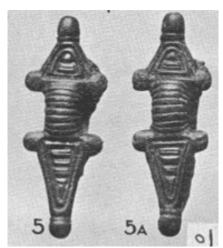
Amber and Glass Beads and brooch from Alfriston: Photo by Max Bunker

An inventory from the first report includes strings of beads (9 graves with amber, most glass), and axe – hammer, iron and bronze buckles, 3 square or rectangular fibulae – but no broaches of the cruciform or Jutish types, 2 smaller versions, many saucer / annular shaped broaches, a few quoit shaped broaches, fancy bronze pins, buttons, 2 finger rings, Roman coins pierced for suspension, some glass vases, small number of bronze and iron pails, 2 pottery urns, 14 shield bosses, shield studs, 2 shield handles, 6 swords, many spear heads, 35/73 graves had knives. As noted, these items can be seen in the photos included with the above reports.

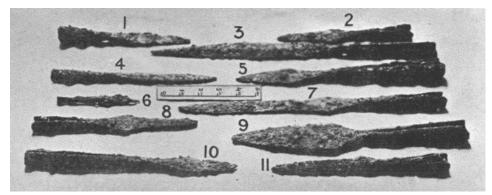
Although the second excavations found much the same material as the first, there were some interesting exceptions. For example there were no bronze pins, and no shield bosses, handles or studs – although 7 graves contained spearheads and there were 3 swords.

Skeletal remains were not part of these studies.

Perhaps the last word on this subject should be given to the respected archaeologist J.N.L. Myres. In his lecture of 1970 Myres presents strong evidence from, in particular, pottery that the Frisian and Frankish influences on the assemblages of Southern England did not begin until many years after the initial settlement of the Jutes. Early examples of almost identical Kent and Jutland pots point clearly to a strong influence from the latter on regions not only considered Jutish, but also Anglian – pointing to a flexible Angle – Jute mixing in the homeland. Furthermore it was becoming fashionable in Bede's time to identify as Angle, thereby subsuming Jute ancestry under a more general Anglian identity. Myres (1971, pp.169-174) presents considerable evidence of this amalgam.



Two Bronze Fibulae



Spearheads from Alfriston

Comparable Cemetery Furnishings from Sites in Jutland, Denmark: The former Cimbri Jute region of Jutland, is defined as extending from coast to coast (as noted by Tacitus 98 AC), from the Frisian occupied islands near Ribe on the southwest, north to encompass the northern area of the Peninsula above Limfjord, south along the eastern coast to (and including) the Island of Funen and to Haderslev and completing the circle back to Ribe. Within this territory to 1993 (Parker Pearson, p.208) 160 settlements and 317 cemeteries within the period of 500 BC to 600 AD have been documented. Many are dated to the era in the immediate years before the Jutes left to work as mercenaries, or to settle in England, and which can be compared with that seen at Rookery Hill.

The village called Vorbasse (see maps below) was established in the 1<sup>st</sup> Century BC. It moved 8 times but only within a .6 mile radius, retaining continuity with the modern town of the same name. One of the 4<sup>th</sup> Century cemeteries "immediately east" of the village, with 16 graves, has been excavated. The description of the grave furnishings sounds similar to the 5<sup>th</sup> Century Jutish settlement and graves at Rookery Hill and Alfriston, Sussex, England noted above. For example, two of the male graves included weapons (as with Rookery Hill and Alfriston, only sone of the

males were buried with weapons). Two of the Vorbasse males were interred with 2 spearheads, shields with a boss, a sword, a fibulae, buckles, a bronze bucket and clay pot; and with one of the women "a necklace of amber beads and imported glass beads" and "a wooden bucket with a bronze band and a clay pot" (T. Douglas Price, "Ancient Scandinavia: An Archaeological History from the First Humans to the Vikings" (2015, Oxford), p.265). See original article by Hvass, 1983 here. Hvass, while focusing primarily on the settlements, provides a fuller description of the above warrior graves, as follows: "In the middle lay two weapon graves. In one of them two spearheads stood point downwards at the side of the grave, and a shield had stood on edge. Its remains showed that it had originally had a diameter of 1,30 m with central boss. There had been a pot at the end of the grave beyond the head. At the neck was a silver fibula, and across the corpse lay a large sword with remains of a suspension belt with ornamental tin nails. There were two belt buckles, two belt-end pendants, and several small rods. At the foot of the grave was found a Hemmoor pail. The other weapon grave had likewise two spearheads point downwards at the side and a shield standing on edge. In this case there were 4 pots near the head of the corpse. In the thoracic region were found silver rivets and in the pelvic region a large iron dagger and several objects that are still undergoing conservation treatment".

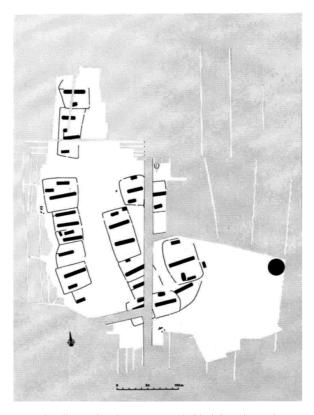


Fig. 5. The village in the 4th century A.D. The black dot indicates the position of the cemetery.

The grave furnishings are so similar to those in Rookery Hill and Alfriston that it would not be out of place to suggest that the latter in the 5<sup>th</sup> Century emerged from the same culture as the people of Vorbasse in the 4<sup>th</sup> Century (considering the geography, likely Jute). However a direct

comparison needs to be made – for example the direction which the spearheads point in the grave. Two of the graves at Alfriston have the direction of the spearhead described (the two graves at Verbasse above had spearheads pointing downwards). At Alfriston, with Grave 7, "The spearhead in this case was inverted, the point resting close to the pelvis" (p.31); with Grave 63, "The spearhead was inverted (point towards the feet) close to, and possibly grasped by, the right hand" (p.45). As to Rookery Hill, based on an abbreviated description, similar belt buckles were observed both here and Vorbasse); and pots / bowls and pails (brass or wood with brass fittings were also found). The assemblage hints are something closer to Rookery Hill (but there is simply insufficient data for any conclusions to be made). Female burials in both the Alfriston and Vorbasse cemeteries frequently included necklaces composed of amber and glass beads (see illustration above for Alfriston examples). One grave had a "pale green glass vase" (p.38), and at Vorbasse, one had "a little thick walled beaker of clear glass" (p.7) – how similar these artifacts may be can only be surmised. This brief comparison is the "tip" of what needs to be done (in a systematic and comprehensive way).

A good selection of the potentially relevant sites can be found in Parker Pearson (1993), seen <u>here</u> and are shown in the map below.

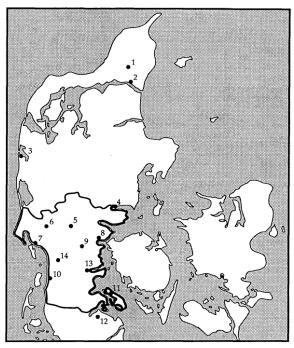


Figure 1. The Danish region of southern Jutland. Sites mentioned in the text are:

- l Kraghede
- Overbygård
- 3 Nørre Fjand
- 4 Priorsløkke
- 5 Vorbasse
- 6 Hodde
- 7 Esbjerg
- 8 Sønder Vilstrup
- 9 Dollerup
- 10 Hjemsted
- 11 Hjortspring
- 12 Husby
- 13 Christiansdal
- 14 Årupgård

More comparisons such as the above could be made, but realistically, in order to do the task justice, it would necessitate trips to museums in Denmark and England and the taking of hundreds of photographs of artifacts – somewhat impractical without institutional support.

#### **DNA Findings**

Please see the author's above noted Cimbri study (<u>here</u>) for details of the Y – Chromosome and haplogroup R-U152. The focus below is on the Rookery Hill sample which, in genetic terms, is Y haplogroup R-U152/S28 > L20/S144 > BY61198.

#### **Ancient DNA**

<u>Anglo-Saxon DNA - Sample I14538 Y Chromosome</u>: This sample was described in the 2022 paper in Nature by Gretzinger et al. entitled, "<u>The Anglo-Saxon migration and the formation of the early English gene pool</u>" found here. As summary of this study is seen in the following abstract:

"The history of the British Isles and Ireland is characterized by multiple periods of major cultural change, including the influential transformation after the end of Roman rule, which precipitated shifts in language, settlement patterns and material culture. The extent to which migration from continental Europe mediated these transitions is a matter of long-standing debate. Here we study genome-wide ancient DNA from 460 medieval northwestern Europeans—including 278 individuals from England—alongside archaeological data, to infer contemporary population dynamics. We identify a substantial increase of continental northern European ancestry in early medieval England, which is closely related to the early medieval and present-day inhabitants of Germany and Denmark, implying large-scale substantial migration across the North Sea into Britain during the Early Middle Ages. As a result, the individuals who we analyzed from eastern England derived up to 76% of their ancestry from the continental North Sea zone, albeit with substantial regional variation and heterogeneity within sites. We show that women with immigrant ancestry were more often furnished with grave goods than women with local ancestry, whereas men with weapons were as likely not to be of immigrant ancestry. A comparison with present day Britain indicates that subsequent demographic events reduced the fraction of continental northern European ancestry while introducing further ancestry components into the English gene pool, including substantial southwestern European ancestry most closely related to that seen in Iron Age France".

<u>Y Chromosome Findings for Sample I14538</u>: The path from the ancestral R-M269 is as follows:

R-M269 > L23 > L51 > P310 > L151 > P312 > Z46516 > ZZ11 > U152 > L2 > Z258 > Z367 > L20 > BY61198

The above assignment beyond what is seen in the supplementary table S.1 with the Gretzinger et al. (2022) paper is found <u>here</u>, but is seen in the Family Tree DNA haplogroup assignment <u>here</u> based on an analysis on the BAM file (full raw data). The ancient DNA connections from FTDNA are seen here.

## **Autosomal Findings for Sample I14538**:

The data seen below illustrates the statistical admixture of CNE (Continental Northern European – Northern Germany and Denmark), CWE (Continental Western European – Belgian and French), and WBI (Western British Isles – Ireland, Scotland and Wales).

Table S5.5. Ancestry estimates for England\_EMA individuals from supervised ADMIXTURE at K = 3.

Individual	Site	CNE	CWE	WBI	
	·			entro e de la composition della composition dell	
I14533	Rookery Hill		0.3832	0.4912	0.1256
I14534	Rookery Hill		0.1354	0.2251	0.6395
I14535	Rookery Hill		0.2917	0.6230	0.0854
I14536	Rookery Hill		0.2688	0.6361	0.0951
I14538	Rookery Hill		0.4047	0.3513	0.2440
I14539	Rookery Hill		1.0000	0.0000	0.0000
I14540	Rookery Hill		0.0432	0.9530	0.0038
I14541	Rookery Hill		0.1374	0.3468	0.5158
I14542	Rookery Hill		0.1981	0.2709	0.5310

The data above shows that I14538 was most CNE, but also lesser amounts of the other two ancestries. This finding is somewhat difficult to interpret since he may or may not have been born on the Continent. If, as the evidence suggests, the settlement began as a treaty settlement for mercenaries hired by the Britons to defend against other Germanics, then I14538's father may have been entirely CNE, and his mother being a local Briton or Frisian. The latter hypothesis is supported by the analysis below where there is a forced categorization into CNE and WBI by the addition of a Norway sample into a 3 - way analysis.

Table S6.3. An				
Sample	Population	CNE	NOR	WBI
	I			
I14533	Rookery Hill	0.49384	0.00001	0.50615
I14534	Rookery Hill	0.126414	0.00001	0.873576
I14535	Rookery Hill	0.354411	0.00001	0.645579
I14536	Rookery Hill	0.293849	0.00001	0.706141
I14538	Rookery Hill	0.503224	0.00001	0.496766
I14539	Rookery Hill	0.98386	0.00001	0.01613
I14540	Rookery Hill	0.310397	0.00001	0.689593
I14541	Rookery Hill	0.154691	0.00001	0.845299
I14542	Rookery Hill	0.223753	0.00001	0.776237

The above data, of 50% CNE and 50% WBI might support the hypothesis that I14538 was of mixed Continental Jutish and local Briton ancestry. Another interpretation, however, is that he was a mixture of Jutish and Frisian ancestry. The available data does not allow for a clear acceptance of one or the other possibilities. Complicating matters is the fact that the authors detected a strong Southern European influence, especially the samples from Southern and Eastern England. Therefore at the moment clarity awaits further analysis once the genotypes are released to the public and genetic genealogists will have the opportunity to conduct further analyses, and debate the findings. What is evident at this time, however, is that within the Rookery Hill

community with 9 sample there was high variability ranging from 4% to 100% CNE. This perhaps implies that this was a mixed community of those who were, for example, Jutes and Frisians.

The only other male sample from Rookery Hill whose Y chromosome data could be analyzed was I14535 in the above tables. He was genotyped as being R-DF27 > ZZ12 > CTS511567. It is interesting, and perhaps informative, that he matches exactly with sample BUK049 from Buckland, Dover, Kent, England (the heart of Jute territory) in terms of the terminal SNP CTS51157 — although there are known downstream SNPs. Both have an almost identical autosomal profile with I14535 having CNE = 0.29, CWE = 0.62 and WBI = 0.09; and BUK047 with CNE = 0.36, CWE = 0.45 and WBI = 0.19. There is a reasonable possibility that these two R-DF27 individuals are kin.

# Y Chromosome Haplogroups and Numbers From the Areas Where the Jutes Settled in England:

- 1) Dover, Buckland, Kent I2a (5), I1-M253 (4), R-L21 (1), R-DF27 (4), R-U106 (15).
- 2) Polhill, Kent R-U106 (3), R1a-M417 (1)
- 3) Eastery UpDown, Kent E1b-PF2179 (1), R-L21 (1)
- 4) Folkstone, Dover, Kent G-L141
- 5) Rookery Hill, Bishopstone, Sussex -R-U152 > L20 (1), R-DF27 (1)
- 6) Apple Down, West Chichester, Sussex R-U106 (1), R-DF27 (1)
- 7) Wolverton, Buckinghamshire I1a-M253 (2)

The pan Germanic haplogroups of R-U106 and I1a-M253 predominate (as expected), although it is surprising that the "Iberian – Celtic" haplogroup R-DF27 has a strong showing (see <a href="here">here</a> for a possible reason). A deeper analysis including terminal SNPs where available can be found <a href="here">here</a>.

<u>All Ancient R-L20 Samples</u>: To date the following are all the known R-L20 samples from the Bronze Age (gold), Iron Age (purple), Roman Age (blue), Anglo-Saxon Age (green) to the Viking Age (red).



The full map can be found <u>here</u>. The focus here will be on the Viking Era samples which are closest in time to Sample I14538 from Rookery Hill.

R-L20 and the Ancient DNA of Bronze to Iron Age Britons: A very recent study of early British samples (Neolithic Age, Bronze Age, Iron Age) was conducted by Patterson et al., "Large-scale migration to Britain during the Early to Late Bronze Age", 2021 (see <a href="here">here</a>). Therefore we have now ancient DNA samples from Britain ranging from circa 2000 BCE to 1000 CE. As to L20, the only other validated sample to be found was an individual from Middle Wallop, Hampshire, England dated from about 200 BCE to 1CE. Since the Romans invaded England in 55 and 54 BEC, it is possible that the origin of this sample might be a German foederati. In addition, the Hampshire area was a long - established trading zone which may have brought people from as far as Switzerland to trade in manufactured goods (primarily weapons). Unfortunately there is no Continental versus Briton type analysis of samples in the study so that the origin of this sample is not evident – although the Western Hunter Gatherer, Early European Farmer, and Steepe Ancestry analysis did not point to a significant difference from others in the community. The fact that the Y chromosome of this sample was "automatically called" as Z262 (an entirely different haplogroup) is mildly concerning, although further analysis by multiple sources confirms the L20 analysis, with an added downstream SNPs as follows: R-L20 > Z1909 > A1510.

**R-L20** and the Ancient DNA Study of Viking Era Genomes: The most persuasive (useful) ancient DNA information has come from a landmark study (see <a href="here">here</a>) "Population genomics of the Viking world" (Margaryan et al., 2020). They focused on the genomic structure of those who peopled Scandinavia and the diaspora during the Viking Age (c. 750 to 1050 CE). They used a very large 26,083 biallelic SNP (single nucleotide polymorphism) array and were able to place each male Y chromosome into a category from the ISOGG (International Society of Genetic Genealogy) phylogenetic tree. This is an unprecedented depth of analysis – even for modern samples, let alone samples 1000 or more years old.

As expected by the present author, not most others in the genetic genealogy community, there were individuals with the "Continental Celtic" Y Haplogroups of R-U152 and derivatives R-L2 and R-L20 among the Viking Age "ancient DNA" samples from Denmark and southwestern Sweden – as well as a Dane from Oxford, UK. Some of the most relevant findings as they relate to the Cimbri and Y Haplogroup R-U152 include the observation that in Viking Age (VA) Scandinavia, "Many individuals from southwestern Sweden (e.g., Skara) cluster with Danish present-day individuals from the eastern islands (Funen, Zealand), skewing towards the 'Swedish' cluster with respect to early and more western Danish VA individuals (Jutland)." Skara is inland but just east of the tip of the Jutland Peninsula. Furthermore, "We also observe several individuals with large amounts of South European ancestry in Denmark and southwest Sweden during the Viking period." An inspection of the raw data shows that it was common for those VA individuals from Funen and associated areas to have much higher amounts of Southern European ancestry (e.g., 20%) than those from for example western Norway. This finding of Southern European – Like ancestry is entirely consistent with the hypothesis being advanced in the present paper since the Cimbri appear to have originated in southcentral Europe (e.g., as the Boii from the modern Czech Republic and Northern Italy). Also, after the defeat of 101 BCE at the hands of the Romans, the historical record shows that the remnants, originally from eastern Jutland, Funen and proximal islands, were accompanied back to the Jutland region by Swiss Celtic tribes such as the Helveti. It is predicted that no matter what the Y chromosome Haplogroup, the people residing in the Funen and Jutland area would have, via Cimbri ancestry, a larger Southern European contribution to their genomes than those from for example western Norway.

Of the 10 samples in the U152 category, 3 were L20 and all from the same location (western Jutland and islands off the east coast of Jutland). Noted below are these three individuals with Sample Number; haplogroup; location of find; and major autosomal ancestry. Included are the downstream (descendant) SNPs located after the .bam files were made public and researchers could examine the data beyond what was included in the paper.

VK286 = R-U152 > L2 > Z367 > L20 > Z1910 > S10708: Bogovej, Langeland, Denmark - 23% "Danish-Like"; 63% "Southern European-Like". Sample size 13 (8 males). Date c.950 CE.

VK326 (K1578) = R-U152 > L2 > L20 > CTSS9733 > S1505 > Y52895: Ribe, Jutland, Denmark – 12% "UK-Like"; 56% "Danish-Like"; 31% "Southern European-Like". Sample size 9 (5 males). Date c.950 CE.

VK373 (BER) = R-U152 > L2 > Z367 > L20 > FGC56105 (there is some controversy as to whether the sample is positive for this latter SNP): Galgedil, Funen, Denmark - 69% "Danish-Like"; 23% "Southern European-Like". Sample size 16 (10 males). Date c.950 CE.



Map showing the location of the ancient R-L20 samples from the Margaryan study.

<u>Dating BY61198 and its subclade BY55897</u>: It is not possible to be "precise" in providing a date when a particular mutation first appeared. Studies of well - established 13 generation pedigrees, for example, can provide an estimate of how often mutations occur on a Y chromosome – however there are always wide confidence intervals that can amount to say 500 years on either side of the mean. What can be done is to offer a statistical probability based on these and other observations. FTDNA is constantly revising their estimates using the vast amount of new data that keeps emerging from Big Y testers, and ancient DNA samples with dated provenance (e.g., archaeological or isotopic).

Currently, it is estimated, using a 68% confidence interval, that BY61198 first emerged on a L20\* chromosome between 2,454 - 1,625 years ago, or between 432 BCE - 397 CE. Here the mean (measure of central tendency) is used, giving us an estimate of 50 CE for the date of "birth" of the mutation. He has 31 private mutations or variants that are found in all his descendants.

The Y chromosome mutation rate is affected by many factors such as population bottlenecks, the haplogroup (e.g., fewer observed in haplogroup R Y chromosomes than say haplogroup O Y chromosomes see <a href="here">here</a>). There are also potentially significant family differences. Thus, using FTDNA data, rates range, for example, from say one per 60 years to one per 120 years. The latter rate was determined for the Sir John Stewart family of Bonkyll by counting the number of private mutations in his various lineages over the generations back to Stewart's estimated birth of 1246 CE. The author of the paper in which this is discussed also advocates for using not only SNP mutations, but also those of STRs (short tandem repeats) which are commonly tested for

genealogical purposes, as well as ancient DNA with clear provenance, to weave into a calculation of the estimated mutation rate (see <a href="here">here</a>).

**<u>Haplogroup R-BY61198</u>**: There are currently three groups descending from this haplogroup.

**<u>BY55987 Lineage</u>**: 24 variants (mutations) lead to the two tested individuals, however only the last 3 are private variants since both participants share all of the other mutations below BY61198.

<u>Current Author's Lineage</u>: The current author does not have the mutation BY55897, he possesses only 12 unique variant mutations (half that of the other group). This highlights the somewhat unpredictable nature (e.g., timing and number) of Y mutations.

<u>I14538 Ancient DNA Lineage</u>: Either of the two above groups (two BY55897, and one BY61198\*), might direct descendants of the Anglo-Saxon I14538 of Rookery Hill, born about 400 CE. Here, the primary question to be answered is whether or not I14538 shares any private variants with either the author, or the two individuals who are in addition BY55987. The Big Y specialist at Family Tree DNA was able to provide a clear answer as follows with respect to the author and presumably the BY55987 group. He said, "*I14538 is already in our system at R-BY61198 but he does not appear to match you any closer than that*".

#### Conclusion

The sample I14538 from Rookery Hill, Sussex, England dated to the Anglo-Saxon Era (early 5<sup>th</sup> Century to late 6<sup>th</sup> Century) was alive before the Viking Era. Either he or his father came originally from somewhere on the Continent. The available evidence suggests a Jute origin, perhaps having spent some time in the Friesland area of the coast before migrating to (invading?) England. His mother may have been from the latter area. The paternal ancestral home appears to be in Jutland or adjacent islands in the land of the Medieval Jutes, and earlier the Iron Age Cimbri people. Although both he and the author have the rare haplogroup R-U152 > L20 > BY61198, an analysis by Family Tree DNA of the private variants of the two provide a clear and unequivocal answer as to degree of relationship – sharing an ancestor born circa 50 AD – probably in Jutland.

Dr. David K. Faux Los Alamitos, California Caledonia, Ontario

Version 11: 18 November 2022, 7 February 2023