

RESEARCH NOTE

Magnus Thane of Halton Progenitor Hypothesis: Assheton, Kirkby and Nettleton Families

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New Years Day, 2024

Abstract

This Research Note investigates Magnus Thane of Halton as the Progenitor of the Assheton, Kirkby and Nettleton Families. Recent Y-DNA evidence is evaluated. The hypothesis is assessed through five sub-hypotheses. Although the hypothesis has a high probability of 78%, at this stage the absence of direct Y-DNA evidence in two critical phases of the chain of causality and consequential methodological reliance on inference leads to a lower confidence in the progenitor hypothesis of 52%. In other words, the hypothesis would pass the balance of probabilities criterion used in civil cases but would not yet pass the criterion used in criminal cases of being beyond reasonable doubt.

| Table of Contents | Page |
|---|------|
| Introduction | 1 |
| 1. Progenitor Hypothesis | 2 |
| 2. Evaluating the Progenitor Hypothesis | 2 |
| 3. Sub-Hypotheses | 2 |
| 4. Sub-Hypotheses Investigation | 3 |
| 5. Evaluation of Sub-Hypotheses | 7 |
| 6. Assessing the Progenitor Hypothesis | 8 |
| Conclusion | 8 |
| References | 9 |
| End Notes | 9 |

Introduction

In 2022, two people with the Nettleton family name, one in Australia and one in Canada, unknown to each other, simultaneously submitted Ydna samples for Family Tree DNA's BigY analysis. Both shared a common ancestor who was probably born about 1708CE. The newly cross-vectored male Y-chromosome (Ydna) haplogroup at this point, labelled R-FTB79423, was a new downstream clade of the major haplogroup R-L151-A8053 and became a part of Family Tree DNA's Ydna Haplotree. The Ydna analysis provided enormous fidelity in identifying the path taken by the Nettleton's male ancestors from Africa to the Pontic Caspian-Steppes and to the South Baltic. However, the final journey from the South Baltic into Britain remained a mystery. The fortuitous

event of two Nettletons cross-vectoring a 1700CE haplogroup tantalisingly illuminated the final step of the journey into Britain but did not resolve it.

Increased information often leads to more questions than answers, and the new Ydna information is no exception. Ydna is passed down from father to son, so a modern Ydna haplogroup means that a male is descended from a male ancestor who also had this haplogroup. Therefore Ydna provides a modern means for tracing the Nettleton patronymic heritage. In this case the new information catalysed an interest to establish the earliest progenitor of the family, which in practical terms is the family's first ancestor in Britain, Magnus Thane of Halton who was alive at the unusually early date for genealogical investigation of 980CE. This Research Note is about the quest to understand Magnus Thane of Halton's own heritage and his connection to known family information such as property records and genealogy trees.

The steps followed here are to use the new Ydna information to form a hypothesis about Magnus Thane of Halton and his heritage, to investigate this hypothesis and the sub-hypotheses it raises, and then to evaluate the progenitor hypothesis. While it is easy to reject a hypothesis that is unsupported by evidence,ⁱ in many cases science and discovery hasn't yet provided clearly deductive evidence for or against a hypothesis. However, this doesn't mean such challenges need to be avoided. In these cases it is necessary to evaluate the substantial inferential evidence and express results in terms of subjective confidence based on assessed probability and certainty. Carl Sagan's Standard, that "big claims require big evidence," still applies.ⁱⁱ

1. **Progenitor Hypothesis**

Modern Nettleton R-A8053 Ydna, land ownership and genealogy information confirms that Magnus Thane of Halton (c980CE) in Lancashire is the Nettleton family's earliest known ancestor in Britain.

2. **Evaluating Progenitor Hypothesis**

The Ydna part of the hypothesis could be directly confirmed or rejected using additional Ydna evidence from another branch Magnus Thane of Halton's male descendants, such as Assheton/Ashton or Kirkby families. However, this confirmatory Ydna is unavailable at present. Furthermore, such confirmatory Ydna evidence wouldn't provide insights into the heritage part of the hypothesis. This is the heritage of Magnus Thane of Halton, which is potentially Norwegian Viking. The Progenitor Hypothesis is therefore evaluated through five sub-hypotheses, only one of which (3.e) would benefit from further confirmatory Ydna evidence from the wider family.

3. **Sub-Hypotheses**

- a. Individuals with R-A8053 Ydna formed part of the Germanic Western Corded-Ware tribes in the South Baltic area
- b. Norway's Hordaland coast was settled by Germanic Western Corded-Ware tribes of the South Baltic having R-A8053 Ydna
- c. Norwegian Vikings having R-A8053 Ydna from Norway's Hordaland coast populated Lancashire.
- d. Lancashire Magnus Thane of Halton (c980CE) is descended from Norwegian Vikings with R-A8053 Ydna.

- e. The Nettleton family in Lincolnshire and Yorkshire received its R-A8053 Ydna from Lancashire Magnus Thane of Halton.

4. Sub-Hypotheses Investigation

- a. *Individuals with R-A8053 Ydna formed part of the Germanic Western Corded-Ware tribes in the South Baltic area.*

Modern individuals having R-A8053 Ydna live in Mecklenburg, Pomerania (West of Hamburg) in the South Baltic area, in the Netherlands and near Wilhelmshaven in Germany.ⁱⁱⁱ Only one ancient burials with R-A8053 Ydna has so far been discovered in the South Baltic area.^{iv} However, additional inferential evidence is:

- i. R-L51 is the base haplogroup for the bulk of Corded Ware on the very western fringe of the Corded Ware zone and continues dominates western Europe. It originated in the middle Volga forest zone, either in the Samara/Kazan region of Russia, or in the Dnieper Basin region of Ukraine. These Pontic Caspian Steppe Nomads, from the region located between the Black Sea and the Caspian Sea, moved through the river systems north of the Carpathian mountains into Western and Central Europe. Around 2900BCE the first Corded Ware pocket appears on the East Baltic (Estonia Latvia), ahead of the main R1a-M417 Corded Ware groups.
- ii. R-L51's child haplogroup R-L151 then pops-up all across this Western area, presumably travelling via the Baltic shoreline.
- iii. In about 2950BCE, R-L151 splits into the siblings R-P312/U106/S1194/A8053 somewhere in Poland/Belarus/Germany/South Baltic.^{v,vi}
 - I. The R-P312 sibling is the main R1b Ydna group in Europe. These are the Bell Beaker people that appear around the north Netherlands in 2579BC, flourish, and are the main Ydna component of the groups that spread to western Europe as well as into Britain as the Celts where they replaces approximately 90% of the prior DNA.
 - II. The R-U106/S1194/A8053 siblings, dominated by R-U106, are the Corded Ware people who appear mainly along the South-East Baltic coast and all over Norway and Scandinavia. The Danish, German and Netherlands R-U106 groups formed the main Ydna component of the tribes that invaded Britain as the Angles, Saxons, Jutes and the Frisians from Friesland.
 - III. In contrast to to R-P312/U106, R-S1194/A8053 are comparatively rare. Figure 1 shows R-A8053 concentration in the South Baltic, from where it is thought to have travelled to Britain.

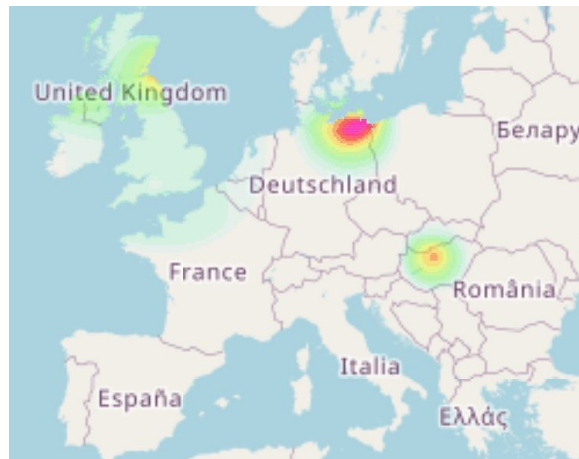


Figure1: PhyloGeographer Yseq R-A8053 Heatmap^{vii}

- b. *Norway's Hordaland coast was settled by Germanic Western Corded-Ware tribes of the South Baltic having R-A8053 Ydna.*

Neither modern individuals nor ancient burials with R-A8053 have yet been discovered in either Norway's Hordaland, or elsewhere in Norway or Scandinavia. However inferential evidence is:

- i. Hordaland on Norway's Western coast, which is the source of most of the Norwegian Vikings, such as the Lochlann Vikings in Ireland, commemorates its settlement by the Germanic Western Corded-Ware tribes of the South Baltic that carry R-U106/S1194/A8053. There are a number of fjords named after the old South Baltic Germanic Harudes tribe, which is also called the Charudes.^{viii} One Hordaland fjord is named after another South Baltic tribe, the Rugians.^{ix,x,xi}
 - ii. R-A8053 is closely associated with the more common R-S1194 haplogroup. R-S1194 is found along the coast of Hordaland, into Denmark and on the Faroe Islands.^{xii}
 - iii. Mecklenburg and Pomerania had extensive contact with Skåneland in southern Sweden, which was previously part of Denmark and provided a route for the South Baltic groups to reach Hordaland in Norway.
- c. *Norwegian Vikings having R-A8053 Ydna from Norway's Hordaland coast populated Lancashire.*

There has not yet been any ancient burial discovered in Lancashire having R-A8053 Ydna. However inferential evidence is:

- i. It is thought that the R-U106/S1194/A8053 siblings arrived in Britain in three waves, firstly with the Saxons. Later with the Norwegian Vikings and Normans in 1066CE.^{xiii,xiv,xv}
- ii. Western Norwegians from the Hordaland region first colonised Orkney and Shetland, which were used as a base for further conquests down through the Western Isles, Northern Ireland, Lancashire, Western Scotland and as far south as the Isle of Mann.

- iii. Between 880 and 920CE, R-A8053 Ydna arrived in Belfast in Northern Ireland, Lancashire, South West Scotland (Ayr, Glasgow, Carlisle), and around Lothian in South East Scotland. This arrival pattern suggests a sea route around the top of Scotland.
- iv. The *Dubgaill* or Black Vikings, thought to be Danish Vikings, evicted the *Findgaill*, thought to be Norwegian Lochlann Vikings, from Northern Ireland in 852CE. These Norwegian Vikings from Northern Ireland and from the Isle of Mann settled in South West Scotland, the Yorkshire Dales and Lancashire. Many placenames in Lancashire and towards Yorkshire are derived from the Norse settlement as shown in Figure 2.^{xvi} Around Heysham and Halton the hills are called fells, the pools are called tarns, the streams becks, the farms are thwaits, and the island rocks are skears. The family name Nettleton most likely derives from the toponymic name of a nettle-farm since the Norse word “tun” is commonly refers to a farm enclosed by walls or fences.

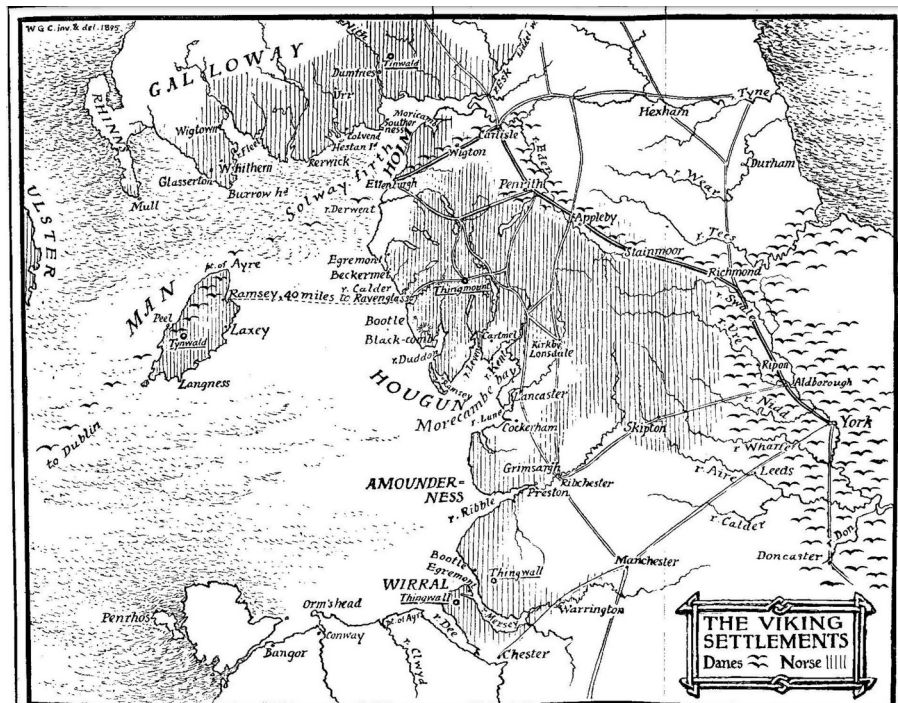


Figure 2: Norwegian Viking and Danish Viking Settlement in Lancashire and Yorkshire (Collingwood 1896)

- d. *Lancashire Magnus Thane of Halton (c980CE) is descended from Norwegian Vikings with R-A8053 Ydna.*

There is an absence of direct evidence as to whether Magnus Thane of Halton’s heritage was Saxon, Norwegian-Viking or a combination. Lancashire had been part of the Saxon kingdom of Deirie (530CE), which became Northumbria (547CE) and part of the kingdom of England (827CE). Lacking confirmatory Ydna evidence it is not possible to determine whether Magnus Thane of Halton had R-A8053 Ydna. However, inferential evidence that Magnus Thane of Halton is descended from the Norwegian Vikings is:

- i. Notwithstanding William the Conqueror was thoroughly Normanised, his claim to the Throne of England substantially rested on his Norwegian Viking heritage through his great-aunt Queen Emma of England.^{xvii}
- ii. Following the Norman invasion William appears to have granted favours to his Norwegian countrymen including Magnus Thane of Halton and Henry Sinclair.
 - I. William the Conqueror did not kill or reduce Magnus Thane of Halton to serfdom as he had other Saxon and Viking nobles, and particularly in his Yorkshire Danish Viking genocide.
 - II. After the Normans conquest only Normans could hold land, and even then by military service to the King. However, north country “Viking statesmen” such as Magnus Thane of Halton enjoyed a continuing tenure after the Conquest that later puzzled the lawyers, and forced them to invent the term “border service” as a reason for the allodial independence of the Dalesmen. Magnus Thane of Halton was killed in such border service, fighting the Welsh.^{xviii}
 - III. It is not possible to identify any land holdings of Magnus Thane of Halton prior to the invasion. However, Magnus Thane of Halton appears to have somehow retained tenure over half of Ashton-under-Lyne that was amongst the swathe of territory that William the Conqueror gave to Roger of Poitevin. Roger of Poitevin received all lands in the *inter Mersam et Ripam*, which is “between the rivers Mersey and Ribble”, and which is now divided between Lancashire, Merseyside, and Greater Manchester.
 - IV. Unusually the Norman’s permitted Magnus’ great-grandson Orm fitz Ailward to acquire significant Norman land within Roger of Poitevin's Honour of Lancaster.^{xix} Even more unusual was that Orm acquired these land gifts after his marriage to the daughter of prominent Norman Albert Grelly I (or II). Amongst the land gifts, Magnus' great grandson Orm received Magnus Thane of Halton’s unusual tenure of Ashton-under-Lyne, and perhaps a second half of Ashton-under-Lyne that Magnus may not have previously held, allowing Orm to consolidate what is today’s Manchester. Later Orm’s Assheton family branch would become the Barons of Manchester.
 - V. The highly unusual “quasi-Norman” legitimacy of Magnus Thane of Halton’s great grandson Orm fitz Ailward and his successors such as the Asshetons and Kirkbys has led some to the conclusion that Magnus Thane of Halton must have been of Norman-French descent.^{xx} A Norwegian Viking ancestry shared with William the Conqueror is a more likely and less controversial hypothesis.
 - VI. In a similarly uncharacteristic vein, the Norman’s permitted Henry Sinclair, to purchase Norman Herdmanston land in Lothian, south-East Scotland.^{xxi} Henry Sinclair shares the rare R-A8053 Ydna with Magnus Thane of Halton’s Nettleton family branch.^{xxii} Resulting from the unusual favour granted to Henry Sinclair, it has also been speculated that Henry Sinclair’s ancestral family is related to the, the same Viking Hrolf/Rollo/Rolf/Robert who invaded Normandy.

VII. It is a regional legend that a viking called Orm built Ormeskirk near Halton. As we shall see in the next section, Magnus Thane of Halton's great-grandson Ailward fitz Dunnic (1062-1133CE) was Lord of Ormskirk and Magnus' son and great-great-grandson were both named Orm, which means "dragon".^{xxiii}

VIII. A close association between Hordaland's vikings and Lancashire is supported by unique religious iconography. Harald Bluetooth Gormsson (died c.985), King of the Norwegians and Danes, christianised the Vikings. The church subsequently harmonised the religion of the Vikings with Christianity by drawing upon the legend of the Germanic-Norse hero Sigurd as a parallel to the story of Jesus. The 10th or 11th Century Halton cross at Halton in North Lancashire displays both Christian symbols and the Viking legend of Sigurd.^{xxiv}

Rationalising the legend of Sigurd was apparently very important to the Norwegian church because the Sigurd legend is inscribed on church doors in Gaulstad Jarlsberg, Hyllestad Setersdal, Viegusdal Robygdalag, Osstad Setersdal and Opsdal Numedal. It is also found on the Isle of Man visited by the Norwegian vikings.^{xxv}

iii. Notwithstanding the Norman's Danish viking genocide in Yorkshire, Orm fitz Ailward and his successors including the Nettleton branch of the family continued to own their Lincolnshire and Yorkshire land. This was also notwithstanding that this land was not earned and maintained by military service to the King, which turned out to be quite a surprise in 1306 when King Edward I Longshanks (1239-1307, reigned 1272-1307) conducted an inquisition into Robert de Basketwork's lands around Lincoln. Although under threat of forfeiture and after 8 months of enquiry, the free tenants in the Soke of Kirton-in-Lindsey were unable to establish by what service to the king John de Nettleton had possessed their land.^{xxvi}

e. *The Nettleton family in Lincolnshire and Yorkshire received its R-A8053 Ydna from Lancashire Magnus Thane of Halton.*

While there is no confirmatory Ydna evidence that the Nettleton family in Lincolnshire and Yorkshire received its R-A8053 Ydna from Lancashire Magnus Thane of Halton, there is direct genealogical and land record evidence that Magnus Thane of Halton is related to the Nettleton family in Lincolnshire and Yorkshire:

- i. Land records and various genealogies of related families support the hypothesis that the Nettleton Lincolnshire/Yorkshire family traces its heritage back to a Magnus Thane of Halton, who was probably born in Ashton-under-Lyne, today's Manchester, in Lancashire, UK. Halton is near today's Lancaster.
- ii. The well-attested family line from Magnus Thane of Halton (c980CE) to John de Nettleton of Nettleton in Lincolnshire (1284CE) is:
 - I. Magnus Thane of Halton (c980CE).
 - II. Orm fitz Magnus.
 - III. Dunnic c1030-1092CE of Latham, Lancashire. Also called FitzAshton, Fitz de Latham, Aethelweard, Ailuard, Aegelward and Aeilwardi.

- IV. Ailward fitz Dunnic (1062-1133CE). Lord of Ormskirk also called de Assheton or Ashton.
- V. Orm fitz Ailward (1095-1126CE), who is mentioned in the Testa de Nevill (p.404) and is mentioned in the Domesday Book in Craven. Orm married Emma Grelly (abt.1100-abt.1120CE), daughter of Albert Grelley I (or II). Emma brought her husband one knight's fee in Dalton, Parbold and Wrightington. In a second inheritance in about 1155 Emma brought her father's grant of Heaton-in-Lonsdale, the remaining part of Ashton-under-Lyne, the Nettleton and Kirton-in-Lindsay lands in Yorkshire, and land around Rastrick, Glehold, Quernby and Thornhill Lees (near Dewsbury, Kirklees) in Yorkshire.^{xxvii}
- VI. Roger fitz Orm (1124-before 1175CE). Lord of the manors of Ashton, Kirkby-Ireleth and Heaton-in-Lonsdale.^{xxviii}
- VII. William fitz Roger (c1150). Also called William de Kirkby. William granted his younger brother Orm his share of Ashton-under-Lyne.^{xxix} William retained Kirkby-Ireleth, Heaton-in-Lonsdale and the other Yorkshire and Lincolnshire land. William's seal was a Fleur-di-lis, which in English heraldry either represents the Virgin Mary or is the cadency icon of a 6th son.^{xxx}
- VIII. Benedict (active 1230-1240CE) also called Benet (the blessed) inherited William fitz Roger's Yorkshire and Lincolnshire lands. In 1230-1240 he began liquidating the Nettleton's Lincolnshire lands by granting land to church of Lincolnshire. By 1238-1241 Benedict held only half a Knights Fee in Nettleton. Benedict's seal was a stinging nettle plant in stylised Fleur-di-lis, suggesting he was already active in wool scouring, which was perhaps in Yorkshire.^{xxxi}
- IX. John de Nettleton (active 1219-1233, d.1284CE). In 1284 John de Nettleton liquidated the last of the Nettleton Yorkshire lands by selling the Nettleton house and land to Prior of Sixle.^{xxxii} Previously he had liquidated the Nettleton land at Harpswell in the Soke of Kirton-in-Lindsey. The family relocated from Lincolnshire towards Leeds and Wakefield in Yorkshire, where they became wealthy wool growers and traders. The family's name first appears in 1284 as Jurors in the Wakefield Court Rolls of the Manor of Rastrick.
- X. As their wealth grew further, the Nettleton family moved to Quernby (Quarmby) in 1378, Rastrick, Nettleton Hill, Gledholt in 1402, converted a Viking dwelling to Thornhill Lees Hall^{xxxiii} in about 1412 and relocated to Almondbury in 1665.

5. Evaluation of Sub-Hypothesis

A subjective allocation of probability and certainty to the sub-hypotheses is set out in Table 1.^{xxxiv}

| Sub-Hypotheses | Subjective Probability | Subjective Certainty | Calculated Confidence ^{xxxv} |
|---|------------------------|----------------------|---------------------------------------|
| a. Individuals with R-A8053 Ydna formed part of the Germanic Western Corded-Ware tribes in the South Baltic area. | 0.9 | 0.85 | 0.83 |

| | | | |
|---|------|------|------|
| b. Norway's Hordaland coast was settled by Germanic Western Corded-Ware tribes of the South Baltic having R-A8053 Ydna. | 0.7 | 0.5 | 0.45 |
| c. Norwegian Vikings having R-A8053 Ydna from Norway's Hordaland coast populated Lancashire. | 0.6 | 0.2 | 0.2 |
| d. Lancashire Magnus Thane of Halton (c980CE) is descended from Norwegian Vikings with R-A8053 Ydna. | 0.5 | 0.5 | 0.25 |
| e. The Nettleton family in Lincolnshire and Yorkshire received its R-A8053 Ydna from Lancashire Magnus Thane of Halton. | 0.95 | 0.85 | 0.88 |
| Markov Argument Model assessment of independent Sub-Hypothesis evidence ^{xxxvi} | 0.78 | 0.51 | 0.52 |

Table 1: Calculated Confidence of Progenitor Hypothesis based on Markov Argument Model of Independent Evidence and Subjective Probability and Subjective Certainty of Sub-Hypotheses

6. Assessing the Progenitor Hypothesis

It may be noted in Table 1 that the Progenitor Hypothesis has a moderately high probability of 0.78 with medium certainty of 0.51 and that this implies a overall calculated confidence of 0.52. Notwithstanding an encouraging probability, the confidence in the hypothesis is therefore somewhat lacklustre, just “ok, but so what, what next?” This is due to the lack of a compelling certainty in the result. This outcome doesn't satisfy Carl Sagan's aphorism that “big claims require big evidence.”

Table 1 also shows that to increase the confidence further evidence is required in (c) and/or (d) to nudge the overall hypothesis confidence higher:

- a. The presence of R-A8053 in Hordaland needs to be confirmed in ancient burials or in modern individuals. If this was possible then the probability and certainty in (c) would each increase to say 0.7. The Assessment probability, certainty and confidence would then increase to 0.82, 0.64 and 0.64 respectively. Confirmation of the presence of R-A8053 in Hordaland leads to a confidence of 0.64, which marginally approaches the Carl Sagan Standard but is still not convincing.
- b. If, in addition to confirmation of the presence of R-A8053 in Hordaland, confirmatory Ydna evidence was available from the Assheton/Ashton or Kirkby descendants, then the probability and certainty in (d) would increase to say 0.95 and 0.85 respectively. From this the combined Assessment probability would increase to 0.99, the certainty to 0.71 and the overall confidence to a material level of 0.84. Therefore, further confirmatory Ydna evidence from Magnus Thane of Halton's other male descendants in say the the Assheton/Ashton or Kirkby families would be necessary to meet the Carl Sagan Standard.

Conclusion

The quest to evaluate “The Magnus Thane of Halton (c980CE) Progenitor Hypothesis: Progenitor of the Assheton, Kirkby and Nettleton Family Branches” with a progenitor hypothesis that “Modern

Nettleton R-A8053 Ydna, land ownership and genealogy information confirms that Magnus Thane of Halton (c980CE) in Lancashire is the Nettleton family's earliest known ancestor in Britain" was assessed through five sub-hypotheses. At this stage the lack of available evidence and consequential methodological reliance on inference leads to lacklustre confidence in the progenitor hypothesis of just 52%. In other words, the hypothesis would pass the civil criterion of balance of probabilities but would not yet pass the criterion used in criminal cases of being beyond reasonable doubt.

While a conclusive result is not available, investigation of the sub-hypotheses has highlighted and integrated relevant information about Magnus Thane of Halton's potential Norwegian Viking heritage and his Assheton, Kirkby and Nettleton family branches.

Confirmation of both the presence of R-A8053 Ydna in Hordaland and in modern individuals of Magnus Thane of Halton's other descendent family branches is required to establish that Magnus Thane of Halton is the progenitor of the families and thereby satisfy Carl Sagan Standard that "big claims require big evidence."

Fortunately, every week more land records, family genealogies and other documents are digitised, and more ancient burial Ydna and modern Ydna contributors add to Family Tree DNA's Ydna Haplotree. This progression in objective knowledge will ultimately permit the progenitor hypothesis to be conclusively decided one way or the other.

References:

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3. Powell, Y. "Scandinavian Britain, Introductory Chapters by the late Professor York Powell" in Collingwood, W. G. 1908 Scandinavian Britain, Cumberland and Westmoreland Antiquarian and Archaeological Society, London ([http://www.public-library.uk/dailyebook/Scandinavian%20Britain.%20With%20chapters%20introductory%20to%20the%20subject%20by%20F.%20York%20Powell%20\(1908\).pdf](http://www.public-library.uk/dailyebook/Scandinavian%20Britain.%20With%20chapters%20introductory%20to%20the%20subject%20by%20F.%20York%20Powell%20(1908).pdf))

End Notes:

- i Known as the “Hitchens’ Razor”, the aphorism against *ad ignorantiam* "What can be asserted without evidence can be dismissed without evidence" is Christopher Hitchens’ 2007 expression of Occam’s Razor.
- ii Known as the “Sagan standard,” the aphorism “extraordinary claims require extraordinary evidence” was popularised by astrophysicist Carl Sagan on the 1980s television show Cosmos. The principle is at the heart of the Scientific Method.
- iii R-S1194 ancient burial IND005, R-Y54774 a deeper subclade of CTS4528, 400-800 CE, Inden, North Rhine-Westphalia, Germany, about 157km South West of Antwerp
- iv R-A8053 ancient burial DUN002, 886-989CE, in Dunum, Lower Saxony, Germany, on the North Sea about 37km West of Wilhelmshaven
- v Family Tree DNA’s 295,992 modern samples at December 2023 show approximately 36% are R1b/R-M269, which in 2010 represented about 110 million European men. R-L151 represents 89% (98 million European men) of these R1b/R-M269 samples, comprising 71% (60 million European men) R-P312, 26% (26 million European men) R-U106, 1% (950,000 European men) R-S1194 and 0.1% (95,000 European men) R-A8053.
- vi The Bell-Beaker and Corded-Ware peoples civilisations are different to the Yamnaya civilisation that remained on the open Pontic Caspian Steppe plus a pocket in the Hungarian Plains. Yamnaya is a sibling branch of the Steppe Nomads in the Volga-Ural region, who stayed on the Pontic Caspian Steppes that stretched from a pocket called Afanasievo (Altai Mountains, Mongolia) to the east side of the river Tisza on the Hungarian plains. The Yamnaya remained while other the other Steppe tribes with R1a and some R1b (R-L51) migrated into western Europe. The Yamnaya buried their dead in Kurgans. Yamnaya corpses in the Kurgans have no R-L51, just R-L23-Z2103 and some I2. Yamnaya stayed on the PC Steppes although one group moved up the Danube into the Carpathian Basin into Hungary in 2900BC via the Carpathian Basin and remained to the east of the Tiza River. (See Douglas Stuart Marker, Facebook posts "South Baltic DNA - L11/P310/P311/L151" on 9 Aug 2019, 8 Apr 2020, 26 Jun 2020 and 11 & 18 Dec 2021)
- vii See <https://phylogeographer.com/scripts/heatmap.php> and the frequency [heatmap.js](#) plugin visited on 11 January 2023. [9 January 2024 update: revisited a year later on, additional Spanish YFull samples had shifted the dominant heatmap of R-A8053’s distribution to Spain’s Mediterranean coast. The origin of R-A8053 in Spain may be either from the Visigoths, whose capital was Toledo; or Dutch or Flemish settlers who repopulated the Spain following the Reconquest. Further investigation of R-A8053’s downstream SNPs demonstrates this skewed geographical result and therefore anomalous outcome is attributable to R-A8053’s child SNP R-FT91873, whom it is thought migrated from Germany. The previous R-A8053 characteristic of a South Baltic concentration remains the dominant feature of the R-FGC57291 branch that currently terminates in YFull’s R-FGC37084 and FTDNA’s R-FTB79423. With further samples it is expected that the anomalous Spanish result will regress to the expected geographical location.]
- viii See “Hordaland” <https://en.wikipedia.org/wiki/Hordaland>
- ix Powell [3, pp16-19] provides the following description of the Harudes in Norway: “ ... we must turn back to Norway. Aloof from the secular struggles which created and welded the tribal confederacies of the Baltic shores, Danes, Swedes, Wandals, Burgunds, Bards, and Goths, there were growing up along the coast and in the upland dales of the North way, in primitive isolated tribes, Throwends, Reams, Aens, Neams, Haurds, Rugians, Granes, Heins, Thules, and the like, each under their own rulers, ... colonised the long and narrow winding strip of soil between sea and glacier which was called Haloga-land ... In this part of Norway there are three great inlets - Sogn, belonging to the Haurds; Hardanger, the HAURDS’ Firth, with the famous stations, Bergwin (Bergen) and Alrecstead (Alrecsstad) on the coast; and Stafanger, the Firth of the RUGIANS, with Stafanger, Ogwaldsness, Outstone (Ut-stan) on its isles and coastlands, and the Goat’s Firth (Hafrs-Firth) just outside it ... The southern-ness of Norway with its port, Qwin, and the coast eastward halfway to the head of the Great Wick, belongs to the Egda-folk, a division of the Haurds.”
- x All of the Germanic Subi tribes came from the South Baltic area and settled the Rhine River down to Karlsruhe from the north, which was later called Suabia. They were a Germanic confederation of warlike tribes. Tacitus wrote that the most distinguished of the Suebic tribes was the Semnones, which lived in today’s Brandenburg. Other Suebic tribes came from today’s South Baltic area of Mecklenburg-Vorpommern, Sachsen-Anhalt and possibly Thuringia. The tribes included the Warns and Suardons in Mecklenburg, the Angles of Eastern Holstein around the Cimbrian peninsula, and the core Suebs tribes of the Hermundurs, Markomanns and Quads. Sometimes Sueb tribes were also known by their specific location, such as the Danube Suebs, Neckar Suebs or the Suebish kingdom in Galicia north of Portugal. In addition to the Suebs, other important tribes east of the Oder River included the Burgundians in eastern Brandenburg and the Rugians of South Baltic origin in Pomerania. The Rugians travelled down the Danube, almost to Vienna. (See Joachim Koch Facebook Posts 2018 in discussion with Douglas Stuart Marker).
- xi Julius Caesar first mentioned the Harudes in 60BC as a contingent of 24,000 men from one of the seven Suebi tribes that followed "rex Germanorum" Ariovistus across the Rhine to attack the Burgundy region. Strabo says the Suebi were seeking to control the Arar (Saône) River tolls. Caesar defeated the Germani forces at the Battle of Vosges near Vesontio (Besançon) in 58 BC. He wrote the Suebi forces comprised the "Harudes, Marcomanni, Tribocci, Vangiones, Nemetes, Sedusii, and Suevi". He noted that the Subi fled to the Elbe River region in what is now Germany and the Czech Republic. The Romans next encountered the Harudes near today’s Denmark. In the Res Gestae Divi Augusti compiled in 14CE, Augustus wrote that in 5CE Tiberius’ fleet "sailed from the mouth of the Rhine eastward as far as the lands of the Cimbri," where they met the Charudes. (See "Charudes")

<https://en.wikipedia.org/wiki/Charudes>)

- xii R-S1194 is recorded as its older designation R-L11* before R-S1194 and R-CTS4528 were fully established as primary R-L151 child haplogroups.
- xiii Pre-Viking R-S1194 ancient burials in Britain have provided the following results:
I7632, Slonk Hill, UK, 2400-2300BC
DUX010, Duxford, Cambridgeshire, 63 to 163 CE
HAD017, Hatherdene 17, Cambridgeshire, 425-539CE
- xiv Viking R-S1194 ancient burials in Britain have provided the following result:
VK175, Oxford, thought to be a victim of St Brice's Day massacre in November 1002CE, 880-1000 CE
- xv Snorri Sturluson (1179-1241), the well-known Icelandic poet and chronicler, wrote in King Harald's Saga (*Heimskringla*) that the Normans were Vikings from More on Norway's West coast. The Icelandic poetry quoted by Snorri was composed by late 9th-century skalds (persons present at the events). In these poems Rognvald Eysteinnsson of Møre is Ragnall, son of Albdan, King of Lochlann, who lived above Bergen, near Ålesund on Norway's West coast. Albdan is Halfdan the Black, King of Vestfold, also father of the first king of a unified Norway Harald Fairhair. Albdan's name is the same Norse name as Halden, Halfdane and perhaps Halton. Albdan expelled his eldest son, Ragnall or Rognvald from Norway because he feared losing his kingdom to him. (See <https://en.wikipedia.org/wiki/Lochlann> & https://en.wikipedia.org/wiki/Rognvald_Eysteinnsson). In the case of Ganger-Hrolf's mother, she composed a rhyme in an attempt to influence King Harald Finehair to not exile her son. In contrast to the Norwegian poems, the Latin biographies of the Dukes of Normandy claim Danish descent but are thought to be written to curry favor during the Danish Svein Forkbeard's ascendancy.
- xvi Collingwood [2]
- xvii Emma was the wife of Cnut the Great, king of England (r. 1016–1035), Denmark (r. 1019–1035) and Norway (r. 1028–1035); she also was wife to the Anglo-Saxon king Æthelred the Unready and their son was Edward the Confessor. William the Conqueror's primary claim to the Throne of England was that Edward the Confessor, his first cousin once removed, had promised him the Throne upon his death. Instead, Edward the Confessor named the powerful English earl Harold Godwinson as king, whom William the Conqueror claimed had promised to support Edward the Confessor's promise of the Throne to William.
- xviii Collingwood [1, p.189]
- xix Key events in the property trail are:
(i) William the Conqueror granted Roger Poiteivn (of Poitou) immense estates including the future Nettleton land of 75 acres in the village of Nettleton (½ the Wykham Knights Fee of soldier John Nouill) and lands in Kirton-in-Lindsey (2 Knight Fees).
(ii) Before 1094, Roger Poiteivn granted Albert Grelly I (Albert Gresle, abt.1050-bef.1127) the Nettleton and Kirton-in-Lindsey land.
(iii) In 1086, the Domesday Book shows Albert Grelly I holding lands under Roger Poiteivn in Lincolnshire, Norfolk, and Suffolk. He succeeded to Nigel's estates in Manchester not long after. Enjoying the favour of Henry I (1068-1135, reigned 1100-1135), Albert Grelley I avoided the forfeitures of 1102 or 1106. He retained his former estates and may have received additional estates.
(iii) Henry I (1068-1135, reigned 1100-1135) created Roger Poiteivn's Honour of Lancaster (sometimes called the Honour of Poitevin). Albert Grelley I became the largest tenant of the honour with a fee held by the service of 12 knights, which his descendant Robert Grelly I held in 1187.
(iv) The Roll of Lindsey made in 1114-16 shows Albert Grelly I and his son Robert Grelly I were tenant in chief (i.e. paid fees directly to the King) for Nettleton and Goltho, in Lindsey. These lands were later were amassed into Roger Poiteivn's Honour of Lancaster.
(v) The Testa de Nevill (Book of Knight's Fees) compiled in 1302 for the period 1242-1293 showed Albert Grelly I no longer held the land in Nettleton. Instead it is held by Orm's great grandson Benedict. In about 1120 Albert Grelly I granted these lands to his daughter Emma and her husband Orm son of Ailward (abt.1095). In about 1154 or 1155 Albert Grelly I additionally granted Heaton-in-Lonsdale, the remaining part of Ashton-under-Lyne, and other land to Orm and Emma. The Nettleton and Harpswell land appear to be part of this gift but there is no record of the grant available at present.
(vi) The reason for Albert Grelly I's grant of Ashton-under-Lyne to Orm appears to be a grand reconsolidation Magnus Thane of Halton's Ashton-under-Lyne estates under the Thane's great-grandson Orm, whereupon Orm became Lord of Kirkby Ashton and Lord of Ormskirk. The way that this took place was that Orm's brother William granted Orm that part of the Magnus Thane of Halton's Ashton-under-Lyne land that hadn't been confiscated (or hadn't been confiscated in practical day-to-day terms) by William the Conqueror; and Albert Grelly I and his wife Matilda de Halton (Matilda was daughter of the same Orm's brother William) granted Orm that part of Magnus Thane of Halton's Ashton-under-Lyne land which had been confiscated by William the Conqueror.
(vi) Orm's estates and titles passed to his son Roger (abt.1124-bef.1175). Roger bequeathed the primary Ashton-under-Lyne and titles to his son Orm Fitz Roger (1155-1201). William (abt.1150) inherited the miscellaneous estates, such as those of Nettleton and Harpswell in the Soke of Kirton-in-Lindsey. The Nettleton land was just 5 oxgangs or bovates (the amount of land an ox can plough in a day), which is 75 acres or 0.3 square km.
- xx "Through the marriage of Ormeus Fitz -Ailward with Emma, daughter of Albertus de Greslet, the Asshetons traced their ancestry back to the first barons of the great city of Manchester, and were by the same union undoubtedly of

Norman extraction . Ormeus , distinguished by many valiant deeds, was held in great repute among the minors of the Great Barons of Manchester, and gained the esteem of Albertus de Greslet ; and as we have already seen, won the hand of his daughter in marriage. He transmitted to his descendants the same ardent chivalrous spirit, by which he himself had been inspired, and which burned at times with a fervent desire to excel in deeds of gallantry.” Glover. W. 1884 “History of Ashton-under-Lyne and the surrounding district,” ed. J. Andrew, J. Andrew & Co., Reporter Office, Ashton-under-Lyne, pp.50-51

- xxi Henry Sinclair appears to have been a minor noble who wasn't a Norman. In 1162 Henry purchased the Herdmanston Lothian lands (near Edinburgh) of Norman knight Hugh de Merville's from Hugh's son Richard de Merville.
- xxii Henry Sinclair is R-A8053's child R-A8062 branch.
- xxiii Ormeskirk church no longer exists and there are no other records or archaeological evidence to support which Orm may have been the builder.
- xxiv On the Halton Cross the face of the shaft shows Christian symbols such as the Horse, John and Mary; and, on the obverse, the legend of Sigurd with the headless Regin forging the famous sword on his furnace, together with his bellows, hammer and pincers; and higher up the shaft, Sigurd roasts the Fafnir's heart, and the birds in the tree tell the secret of the plot against him.
- xxv The legend of Sigurd is also in Sweden at Versos Vestergotland, Narum Bohuslan, and on the Ramsund rock cast in the Stockholm Museum.
- xxvi Apparently Magnus Thane of Halton's obligation for "border service" had not survived him.
- xxvii Albert Grelly II was grandson of Albert Grelly I and the son of Robert Grelly I. Robert Grelly I (1174-1230) was one of the Barons that forced King John to sign Magna Carta in 1215. King John confiscated his lands after Magna Carta, which Henry III restored after King John died in 1216.
- xxviii Roger fitz Orm's first son William fitz Roger granted William's second son Orm his share of Ashton-under-Lyne. William retained Kirkby-Ireleth and Heaton-in-Lonsdale. Orm FitzRoger 1155-1201 was also called Orm fil' Eward, Ormeus The Norman, Ormeus Fitz-Eward, Orm Fitz Edward de Assheton and Orm de Ashton.
- xxix William's bother Orm FitzRoger (1155-1201) was also called Orm fil' Eward, Ormeus The Norman, Ormeus Fitz-Eward, Orm Fitz Edward de Assheton and Orm de Ashton.
- xxx William fitz Roger was closely associated with the Gilbertine Order Priory of Sixle in Market Rasen, very near Nettleton vill, which had been founded by Albert I Grelly. This Priory had strong associations with the Knights Templars and their sponsoring order the Cistercians. In 1148, Gilber the founder of the Gilbertine Order had applied to Pope Eugenius II to merge his Order with the Cistercians and in 1229 the Priory of Sixle expanded to South West Scotland under the patronage of Walter the Steward who was a major benefactor of the Knights Templars in 1185.
- xxxi Benedict's wool scouring and dying was probably in Yorkshire because the same nettle in tun and stylised Fleur-de-lis becomes the heraldry device of the Yorkshire Nettletons.
- xxxii John de Nettleton sold the remaining 58 acres of Nettleton land, including his house, to the Prior of Sixle for 8½ silver marks.
- xxxiii The Nettleton's Thornhill Lees Hall land may have been an original property of the Albert Grelly I's gift to Orm and Emma. Ronald Mortimer, a recently deceased the owner of the Nettleton's Thornhill Lees Hall, maintained that the Hall's dovecote was the only part of the building to survive from Viking times and that it was build by a Viking called Orm.
- xxxiv The terms Probability and Likelihood are used interchangeably.
- xxxv Calculated Confidence is Probability less 50% of the Uncertainty, where the Uncertainty is calculated as 1-Certainty. Calculated Confidence represents the "actionable certainty" or the core actionable probability excluding the "don't know" uncertainty. The Calculated Confidence is only indicative for Sub-Hypotheses as prima facie Probability and Certainty are inputs. The Calculated Confidence of the Hypothesis is the most important output of the Markov argument model.
- xxxvi The Probability of the Hypothesis is assessed with argument model where each piece of evidence contributes directly to Hypothesis in a Markov Net. The Progenitor Hypothesis has a non-informative prior of 0.5. The conditional probability distribution for the Independent Evidence is 0.7 Yes and 0.3 No (i.e. the Bayesian Probability of a piece of Evidence given the Hypothesis is True is 0.7). The Certainty of the Hypothesis is derived from the uncertainty blanket over the Evidence, in this case approximately the average of the Certainties.