Pinpointing the TEMPLETON Genetic Homeland

A Scottish Case Study

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Dr Tyrone Bowes Updated 18th March 2013

Introduction

A commercial 37 marker Y chromosome DNA test will potentially provide one with the names of many hundreds of individuals with whom one shares a common male ancestor, but what often perplexes people is how one can match many individuals with different surnames? The answer is quite simple. Roughly 1,000 years ago one's direct medieval male ancestor, the first for example to call himself 'Templeton' was living in close proximity to others with whom he was related but who assumed other surnames like Jamieson and Turner. Given that 1,000 years have passed since surnames were adopted, there will be many descendants of these individuals some of whom will today undergo commercial ancestral DNA testing. Hence the surnames of one's medieval ancestor's neighbours will be reflected in today's DNA test results. Early 19th century census data demonstrates that Scottish surnames could still be found concentrated in the Counties from which they originated. In this manner one can examine surname distribution maps (for the surnames that appear as a DNA match) and pinpoint a 'Genetic Homeland.' The Genetic Homeland is the small area where one's ancestors lived for hundreds if not thousands of years. It is the area where one's ancestors left their mark in the placenames of that area and in the DNA of its current inhabitants. Since modern science can pinpoint a Genetic Homeland it can also be used to confirm it by DNA testing individuals from the identified location. The Case Study below will detail how I made sense of the test subject 'Templeton's' Y-DNA results and will provide a checklist at the end of the report on how to proceed in identifying your own Genetic Homeland.

Notes of caution!

- 1. In Ireland each of the estimated 1,500 distinct Clans had a single founding ancestor, that's an estimated 1,500 Adam's from whom anyone with Irish ancestry can trace direct descent. But science has demonstrated that only 50% of individuals with a particular Irish surname will be related to the surnames founding ancestor, the other 50% of people will have an association that has arisen as a result of what are called 'non-paternal events' usually a result of adoptions or infidelity. Since Scotland adopted a similar Clan based society these scientific findings can be applied to Scotland and people with Scottish ancestry.
- 2. Often people are looking for their DNA results to trace back to a specific area. One must remember that the results reflect one's ancestor's neighbours from around 1,000 years ago. As a result, if your recent Scottish ancestor was originally an Anglo-Saxon settler, Viking raider, or 12th Century Norman your DNA results will reflect earlier English, Welsh and possibly Scandinavian origin. One must approach this process with an open mind!

Interpreting the Y-DNA test results

To pinpoint a Genetic Homeland one must first identify the surnames that continually appear as genetic matches. These reoccurring surnames are less likely to be a result of non-paternal events (adoptions/infidelity) and reflect the surname of a medieval ancestors neighbour. Results for test subject 'Templeton' are shown in **Table 1**.

SURNAMES THAT REOCCUR AS A GENETIC MATCH TO TEST SUBJECT <u>TEMPLETON</u> FROM 67 MARKER Y-CHROMOSOME DNA TESTING

	67 marker level								37 Marker level				
Test subject	exact	-1	-2	-3	-4	-5	-6	-7	Ε	-1	-2	-3	-4
Templeton	Templeton (x13)	j.	3.		Jamieson/Jamison(x4) Durie(x2) Anderson(x6) ²	McCoy(x5) McDougail/Dougail (x4) Tate(x4) Cowan(x2) Turner(x8) Taylor(x7)1 Munn/McMunn(x4)	Miller(x8) [±] McLean/MacLean(x4)/McClain(x3) MacRae(x21) McKinley(x4) McDonald(x8)/MacDonald(x14) McGregor/MacGregor(33) Tagart(x2) Logan(x9)2 Davidson/Davison(x10) Napier(x3) Valker(x3) Arnett(x3) Stewart(x15) Moore(x7) ² MacNeill/McNeill(x2) Chisholm(x4)	MacPherson(x8) St.Clair(x3)/Sinclair(x3) Buchanan(>20) McAuley/McCauley(x7) Wilson(x12) Rocks(x2) Ferguson(x9) Campbell(>25) Patterson(x3) Valentine(x4) ² McMillan(x3) Kincaid(x12) Lindsey(x2) Wright(x4) McAlister(x5) Watson(x3) Robertson(x11) McLaren(x4) Curry(x3) McMabb(x3)			Trail (x5) ²	Sweeney(x5)	McCallum(x2) Lawrence(x2) Reddoch(x3) ² Allan(x2) Robinson(x8) ²⁷ Thompson/Thomson(x7)

Figure 1: Reoccurring surname matches for test subject Templeton. Surnames appear at the point at which they first occur as a genetic match e.g. the first match to an individual called Templeton occurs at 67/67 markers although not all Templeton's may match at that level. Figures in brackets represent the number of individuals with a particular surname who occur as a genetic match. Coloured font denotes the ethnicity associated with each surname; **Scottish**. Black font indicates surnames with multiple ethnic origins. ¹Most matches occur at 12 markers and may be coincidental and are excluded from analysis. ²Members of the same close family recruited for Y-DNA testing and therefore excluded from analysis. ³Y-DNA analysis has demonstrated that the Scottish Valentine's are McGregor's in disguise (<u>see Valentine Case Study</u>).

What is particularly striking in Mr Templeton's Y-DNA results is the sheer volume of surnames that appear as a genetic match which are associated exclusively with Scotland and Scottish ancestry, see **Figure 1**. The Y-DNA results also reveal that Mr Templeton is a genetic match to other 'Templeton's' which indicates that he has retained the surname of the Templeton 'Adam' who lived approximately 1000 years ago. Surname distribution mapping reveals that Templeton is a Scottish surname, see **Figure 2**. The Surname distribution mapping also demonstrates that the surname Templeton is associated with a single geographical location found within Ayrshire in Scotland. This implies that there may have been a single 'Templeton Adam' from whom the test subject is directly descended.

When one examines the 1881 surname distribution maps for Jamieson and Turner, which appear as Mr Templeton's closest and most frequently genetically reoccurring surname matches the paternal ancestral link with Ayrshire is confirmed, see **Figure 2**. Jamieson is a Scottish surname found within Ayrshire, while Turner although predominantly English in origin is also found in Argyllshire which borders Ayrshire.

WHERE DO THE SURNAMES THAT OCCUR AS THE CLOSEST GENETIC MATCHES ORIGINATE?

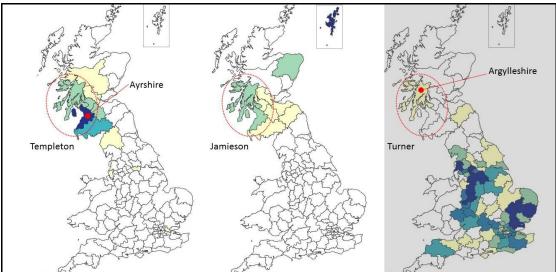


Figure 2: Surname distribution mapping reveals a paternal ancestral link with Ayrshire. Templeton is a unique surname associated with a single geographical location found within Ayrshire in Scotland's southwest (red broken circle). Similarly the surnames Jamieson and Turner which appear as the test subjects closest most frequent genetic matches are also found associated with Scotland's southwest.

Pinpointing the Scottish Templeton Genetic Homeland

The method of using reoccurring surname matches as revealed by commercial ancestral Y-DNA testing to pinpoint a Genetic Homeland works by exploiting the link between the Y chromosome, surname, and land which are typically passed from father to son through the generations. In the absence of a link to the land the process becomes more challenging. One must therefore determine whether the Scottish Templeton's had a link to the land by examining where farmers with this surname were found. The earlier in time that a link can be established the better as over time (particularly in the UK due to the industrial revolution) the link with the land is lost.

By examining the number of Templeton, Jamieson, and Turner farmers in 1841, in the Counties of Scotland's southwest, one sees a strong link with Ayrshire emerge, see **Figure 3**. Although no Scottish-Turner Farmers can be found in Ayrshire (possibly a result of the industrial revolution) they can be found in neighbouring Lanarkshire and Argyllshire. The ancestral link to Ayrshire can be further explored by examining where within Ayrshire the Templeton and Jamieson farmers lived, the area where these communities overlap will reveal the Templeton Genetic Homeland, see **Figure 4**. In 1841 the Templeton and Jamieson farming communities co-localised in the area where the modern borders of East, South and North Ayrshire meet.

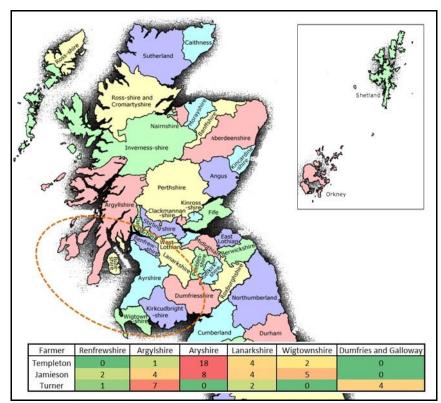


Figure 3: The 1841 Templeton, Jamieson, and Turner farming communities in southwest Scotland. The highest density of Templeton and Jamieson occurs within Ayrshire, while Turners appear concentrated in neighbouring Argyllshire and Lanarkshire.

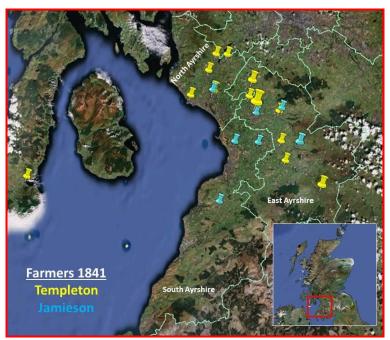


Figure 4: The Templeton and Jamieson Ayrshire farming Communities in 1841. Pins have been placed where Templeton and Jamieson farmers lived in 1841 (pin size indicative of frequency). These communities co-localise close to where the borders of North, South, and East Ayrshire meet.

The Templeton Genetic Homeland; evidence in its placenames

Evidence for one's ancestor's long association with an area can be found in its placenames. In 1841 the greatest concentration of Templeton farmers could be found close to Kilmarnock town. An examination of the placenames just south of Kilmarnock reveals a place called 'Templeton' which may also denote the precise location of the origin of the Scottish Templeton's (or where the 'Templeton Adam' lived), see **Figure 5**. One also finds Templeton Bridge close to Templeton, but also a Templetonburn bridge on the eastern outskirts of Kilmarnock town. One can also find placenames that refer to Mr Templeton's genetic relatives the Turners and Jamieson's; in Turner's Gorse on the outskirts of Kilmarnock, Turnerhill farm to the south, plus Jamieson road to the east, see **Figure 5**.

Mr Templeton's Genetic Homeland is centred upon Kilmarnock town, it is here that his direct male ancestor, the Templeton-Adam lived when he first picked his surname approximately 1000 years ago, surrounded by relatives who assumed other surnames like Jamieson and Turner. It is also where his genetic relatives left evidence of their long ancestral link with the area in its placenames and in the DNA of the current inhabitants.



Figure 5: The Templeton Genetic Homeland centred upon Kilmarnock in Ayrshire. The 'Templeton' Genetic Homeland is centred upon the town of Kilmarnock (orange broken circle) where one finds the greatest concentration of Templeton farmers in 1841. Placenames (white balloons) associated with the Templeton's can be found in the surrounding area including Templeton, Templeton Bridge, and Templetonburn Bridge (a 'Burn' is a watercourse). One also finds placenames (white balloons) associated with Mr Templeton's genetic relatives including Turnerhill farm, Turner's Gorse, and Jamieson road.

Pictish DNA signature

The Clan system in Scotland has been extensively recorded and documented and is beautifully illustrated in Bartholomew's 30 year old Clan map. This map features the lands, or the areas of influence of the most prominent Clans and Families in Scotland from around 500 years ago. Almost everyone with Scottish ancestry will be genetically related to at least one of these prominent Clans and families. However there is no mention of the Templeton, Jamieson, or Turner families near Kilmarnock or indeed anywhere on this Clan map. But a closer examination of Mr Templeton's more distant genetic matches as revealed in Figure 1 demonstrates his shared ancestry to dozens of the prominent Clans that dominated the 'West Central Highlands' of Scotland, see Figure 6. Mr Templeton's Y-DNA results exhibit a Pictish Y-DNA signature. Whether Mr Templeton's Pict ancestors migrated south or simply remained in this area after the majority of the Picts had been pushed north of the Clyde estuary and the Firth of Forth as a result of the Roman conquest can only be guessed at. What is clear is that the DNA points to Pictish paternal ancestry, distinct from ancient Briton, Norman, and Hiberno-Norse Y-DNA that one usually encounters with test subjects with ancestral links to this area.

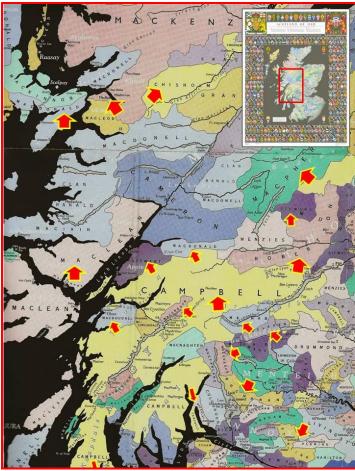


Figure 6: The Clan Territories of the West Central Highlands of Scotland. Mr Templeton shares common ancestry with many of the Clans (red arrows) that dominated the west central Highlands of Scotland. These genetic matches are indicative of ancient Pictish ancestry.

How to confirm the Templeton Genetic Homeland

Confirmation of the Genetic Homeland will require the commercial ancestral Y-DNA testing of farmers with the Templeton surname currently living in the area surrounding Kilmarnock.

HAVE YOU HAD A Y-DNA TEST? THEN ORDER YOUR OWN CASE STUDY BY CONTACTING ME DIRECTLY tyronebowes@gmail.com

The consultation for your own Case Study is free. At present there is an 80% success rate. If in the unlikely event that I cannot pinpoint your Genetic Homeland I will explain why and I will not charge you.

CHECK LIST FOR DISCOVERING YOUR OWN GENETIC HOMELAND

- 1. First you must order a Y-DNA37 test from Family Tree DNA. To order follow the 'are you a warrior' link from the <u>Scottish Origenes homepage</u>.
- 2. Publicprofiler World names database.
- 3. Census data (earlier the better).
- 4. Google Earth.
- 5. Scotland of Old, Clan Names Map.