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How Did So Much Middle Eastern Dna Get To Wales? Examining Three Possible Sources: Carthaginians, Romans, English Jews

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ABSTRACT: Wales has always been a land of myth and mystery; inhabited by painted people, saints, noble kings and ancient worship places. But perhaps Wales' biggest unsolved mystery is the very high level of Semitic/Middle Eastern DNA found among its southern population. Using recently available large-scale databases, we propose and test three hypotheses regarding the origin of southern Wales' unique DNA profile. Was it settled by Carthaginians, Romans or Jews, or a combination of these three peoples? We find that the latter is most likely the answer.

KEYWORDS: Wales, ethnic DNA, Romans, Carthaginians, Jews

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I. INTRODUCTION

Wales has always been a land of mystery and legend (Lloyd 1911; Ross 2014). By the late 1800s and early 1900s, Wales was also the focus of great archaeological interest as historians sought to uncover its lengthy and complex past-- excavating ruins, tombs and even entire towns left by early invaders and settlers (see e.g., Lloyd 1911). Wales currently serves as a touchstone for inquiries into the origins of the British people, for example what was their initial ethnicity, language, religion and culture (Davies 1993). In the most recent decades, Wales has become focused on its origins as a distinct region of Britain; one which was once fiercely independent in culture, spirit and self-image (Ross 2014). Efforts are now underway to resurrect the Welsh language (Cymraeg), identify noble Welsh lineages, celebrate Welsh religious customs and re-construct Welsh identity (Gower 2012; McAllister 2001).

The present research seeks to assist the Wales' identity project by examining a subset of its early settlers – those who carry DNA haplotypes from the Middle East, North Africa and the Levant. Most of these persons, we propose, arrived in Wales during the Bronze Age and Iron Age periods of Welsh history, dating from around 450 BCE and continuing possibly up until 1290 CE. There may be three distinct sets of Levantine settlers in Wales: (1) Carthaginians (450 BCE to 150 BCE), (2) Roman military and civilian settlers from Iberia, Syria and Palestine (68 CE to 400CE), and (3) English Jews, who were ordered to exit England in 1290 by edict of Henry I. These English Jews would have been of Ashkenazic (Eastern European) descent and so we will also look for a DNA haplogroup specific to this Jewish group.

The project uses genealogical DNA samples taken from contemporary Welsh inhabitants (Welsh DNA Project, FTDNA) and compares them to samples taken from different ethnic populations in the Middle East and North Africa. Phylogenetic trees are used to trace the Welsh samples to specific time periods within the Levantine/North African populations in order to determine their time of arrival in Wales.

II. METHODOLOGY

Phylogenetic trees are used to represent the development over time of Y-chromosomal DNA (Y-DNA) haplogroups. Each Y-DNA haplogroup is a group of men sharing the same series of mutations on their Y chromosome, which they inherit from a long line of paternal ancestors. A few new mutations, known as SNP's (single nucleotide polymorphisms), happen every so often and are passed on to men in the next generation.

Examining the accumulated mutations across generations makes it possible to **retrace the genealogical path** of a given lineage with great accuracy, to detect patterns within the **geographical distribution** of shared historical lineages, and to **retrace historical migrations of male lineages**. The present research attempts to trace the migration pattern(s) for Welsh men having Middle Eastern/North African haplotypes from their countries of origin to Wales.

The Middle Eastern haplogroups being traced (e.g. E-m35, J1, J2, G, T) are thousands of years old, often going back to the Mesolithic or Paleolithic period (see e.g., Bettinger 2019). The main subdivisions (clades) within a haplogroup often match large ethno-linguistic groups, which are usually displayed with a defining SNP (e.g. E-V13, G2a-L497, J1-P58). These main clades were usually formed during the Neolithic or Bronze Age. Deeper clades, which have an additional defining SNP (e.g.E-FT2926), represent the **youngest** lineages; these arose during the Iron Age, Middle Ages or even more recently. The "deeper" the subclade, the **more recent the shared ancestor** for men in the subclade. By comparing the deep clade haplotypes of current Welshmen with non-Welsh men belonging to the same original Middle Eastern/North African haplogroup, we may be able to determine when the Middle-Eastern/North African Welsh men arrived in Wales.

There is a large (N= 800+) genealogical database for Welsh men and women publicly available (Wales DNA Project:FTDNA.com). Persons listed in the database must be able to show ancestry or current residence in Wales. Given below is the distribution of males from the Welsh DNA Project found to have Middle Eastern/North African DNA haplotypes. Maps presenting the geographic distribution of each of these haplogroups are provided in the Appendix.

Table One: Wales Men's Semitic Haplogroup Composition

E-m35 25
G 18
J1, J2 4
T 5
R1a/512/198 4 (Ashkenazi Levites; a portion of this group descends from Middle Eastern/Caucasus sources; they are included to test the third hypothesis)

In addition, there are two haplogroups from the Baltic Region, which will also be discussed with regard to the Roman and English Jewish hypotheses. These are:

I-p37 26
I-m253 60

There is also a haplogroup specific to Ashkenazi Jewish men called R1a/512/198 which we will also investigate among Welsh men. There were four Welsh men in the sample who had this haplotype.

R1a./512/198 4

The balance of the remaining Welsh men's haplotypes are in various clades of the European R-M269 haplogroup. These men primarily represent European ancestry currently present in the male Welsh population. Because they did not originate in the Middle East/Levant Region, they are not included in the study.

Jones and Davis as Diagnostic Surnames

The two most common surnames in Wales are Jones and Davis (Jones: 170,633. Davies: 111,559 Wales/UK.net; both date from antiquity in Wales, suggesting they may have been found among the earliest arrivals. The haplogroup distribution for the Jones surname is shown below. The surname Jones is a derivative of the Hebrew name יְהוֹחָנָן (Yəhôḥānān) that is unique to Wales. As can be seen from the map below, Jones is tightly located in the coastal area of Wales. It is the surname of about 5.7% of the Welsh population (Wale/UK.net). Yohanan is first recorded in history as the name of the high priest of the Second Temple Period in Israel around 400 BCE. This is one of the three time periods we are interested in, since it corresponds to the rise of Carthage as a sea power in the Mediterranean (Markoe 2000).

Jones (Jones DNA Project: FTDNA)

R-m269 82
I-m253 17
I-m223 8
E-m35 9
G-m201 8

J-267/172 4
T 2

Distribution of the surname Jones in Wales.

The surname David dates to an even earlier time period in the Middle East – the reign of Israel's King David, ca. 1043 BCE. King David is said to have had 19 sons which would lead to a large, extended lineage over time. However, we are going to assume that the surname Davis/Davies/Davids) in Wales is being used in a *metaphoric* sense; that is, to possibly indicate that the bearers of the surname were of Jewish descent.

Davis/Davies Wales (Davis/Davies/Davids DNA Project:FTDNA)

I-m253	**54**
I-p37/230/170	**34**
E-m35	**17**
G-m201	**11**
J-m172	**11**
R-198/512	**10**
T	**1**

Welsh Womens Haplogroups

We also will be considering the ancestry of the women of Wales. Below are presented the female haplogroup memberships among the Welsh women. The ones we are interested in are the H, H5, H6, HV, J and J1, K, K1, K2, T1 and T2, U5 haplogroups, which are found in higher than average numbers among Jewish women of today (www.jewishgen.com). The Welsh women's DNA distribution appears to be more highly skewed toward Middle Eastern/North African haplotypes than that of the Welsh men.

Wales Women DNA Distribution (Wales DNA Project FTDNA)

H	**22**
H1	**12**
H2	**1**
H3	**1**
H30	**1**
H48	**1**
H5	**1**

H6 3
HV 1
I 2
J/J1 16
K 2
K1 5
K2 2
T1 4
T2 5
U3 2
U5 4

The History of Wales According to Welsh Historians

Popular Welsh histories typically portray Wales as a solidly Celtic country. John Davies' (1993) *A History of Wales* is perhaps the leading authority on the topic. Davies' book was first published in 1987 written in the Welsh language, and he, himself, is of Welsh descent. This personal history provides him with a deep admiration for the Welsh way of life, but may also serve to direct his vision to focusing primarily on evidence supporting his view that Wales was and is a Celtic, Christian nation.

Davies anchors his Welsh history in the LaTene people (a late Iron-Age Celtic culture) from Central Europe, noting that there is evidence of their artifacts dating from around 400 BCE in Conwy, Wales which lies in the Northwestern area of the country. This is significant for our purposes, because it does not include the southeastern region of Wales, which is where most of the Semitic/Middle Eastern DNA is found.

Davies describes the arrival of Celtic peoples in Wales as "The first culture of true splendor to develop in Europe north of the Alps (p. 23)… Around the year 300 BCE, the Celts were the most powerful people in Europe, with a territory which extended from Ireland to Anatolia …They possessed energy, talent and pride" (p. 25").

Davies next notes that around 49 CE, the Romans arrived in Britain and focused specific attention on southeastern Wales, near the Bristol Channel. Here, Davies reports, they quickly located **existing** copper, tin and lead mines – which we will argue had earlier been developed by Carthaginians. Over the next three centuries, the Romans set up a series of towns and fortresses throughout southern Wales. Davies describes in detail the enormous scope and specialization of the Roman activity here. For example, the towns contained bath houses, expansive villas, theaters, cemeteries, a 40 room hotel, and multiple temples and houses of worship honoring a variety of gods. Davies relates that the Silures, a Welsh tribe already living in the area, quickly became adapted to the new inhabitants. One hypothesis in this present research is that the Silures were not Celts, but a Mediterranean people, very possibly of partial Carthaginian descent.

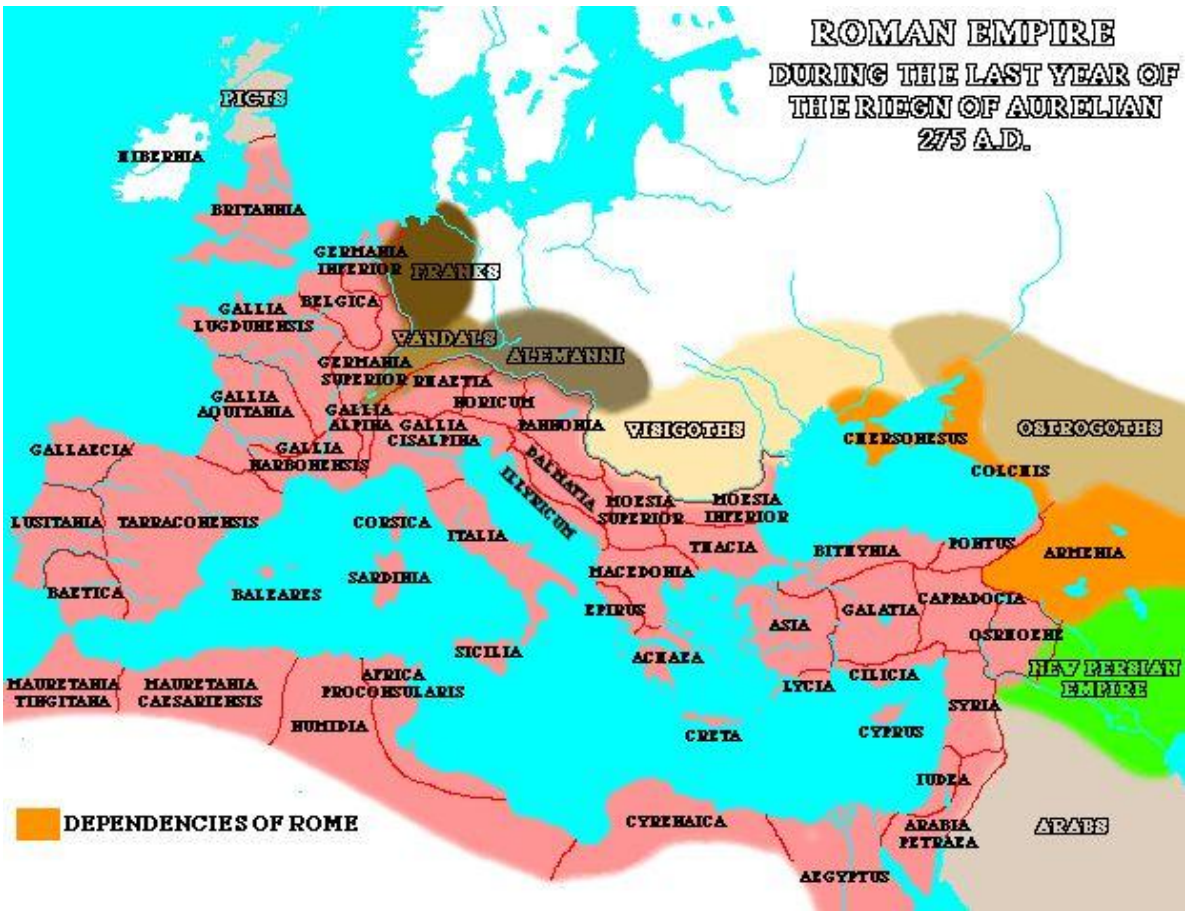
Below we quote a key passage from Davies (p. 36):

"In religious matters, the [Roman] Empire permitted a variety of faiths as long as they lacked anti-Roman implications. In the legionary and auxiliary forts, the official rites of Rome were celebrated…, but on the outskirts a range of mystery religions [these involved secret ceremonies known only to those initiated into the cult] flourished, most of which had their origins in the Neat East – the cult of Mithras for example which had followers at Caernarfan and Caerleon…." Davies later states (p. 36), "a generation or two after 367 CE, there would be no evidence of any religion apart from Christianity among the ruling classes of the Britons…" (This seems like a rather strong assertion given that Emperor Constantine of Rome did not even permit Christianity in his realm until he, himself, converted in 313 AD,)

We next turn to the *Catalog of the Roman Inscribed and Sculptured Archaelogical Collection Catalog* (1911) published by the Grosvenor Museum in Chester, UK, which houses artifacts collected from Roman sites in Wales. One group of Roman Empire soldiers in Wales who left materials behind was a regiment from **Samosata, Turkey**, which is situated on the Euphrates River. There are also inscriptions in **Greek** on some of the monuments and tombstones. Other "Romans" in Southeast Wales were from **Thrace**, on the borders of modern-day Bulgaria, Greece and Turkey near the Adriatic Sea. Another group hailed from **Savaria, Pannonia** which was lodged between Hungary and Austria. A woman's headstone states she was from Aequum, Dalmatia on the **Adriatic Sea**; another grave marker is from Osroene in **Syria**. An additional carving cites Lusitania, Merida in **Spain**.

Additional carved materials in the museum's collection dating from the Roman 350 year habitation cite Lyons in **Gaul**. There is also evidence that **Greek** traders were present in the colony; figures of Hercules and others with **Phrygian** caps are present. Many symbols and inscriptions cite the **Indo-Persian** cult of Mithra. Another mentions the town of Arelate in southern **France** and Emerita in **Spain**. **Cordoba/Cordova** in Spain –

which had a large **Jewish** colony at the time – is also mentioned. Further, there are several monuments and grave markers for children and women, indicating that family life was present in the colony. Wales was not just a military outpost, but a wealthy, multi-cultural colony for over three centuries. Thus it is very likely that when the Roman Empire fell in 406 CE, many of these descendants considered Wales their home, and decided to stay. It is also important to keep in mind the scope of the Roman world when it was in full development. Rome's trade channels ran from the Far East in India and Persia to the western coast of Wales, making
possible not only the import and export of cargo, but also of people, religions and scholarship. (See the map below).



Davies notes that although Rome collapsed in 400 CE, Wales retained its economic connections to the Middle East. As late as 625, Wales was still actively trading with the Baltic and North African coast: "inscriptions provide evidence of links with France, North Africa and the Eastern shores of the Mediterranean…the Black Sea, Athens and Bordeaux (p. 55)" The present study proposes that these trade routes were maintained over the next several centuries through personal and familial relationships between persons living in the Roman-Welsh settlements and their relatives living in the distant ports cited above.

Davies (1993) reiterates his assertion that the Welsh populace post-Rome was "undoubtedly Christian", although he does note that "in those years Christendom had very little uniformity either in ritual or organization (p. 72)". However, we question whether genuine Christianity was being practiced in Wales from about 50 CE to 1100 CE, at all. There are several reasons for this. First, there are virtually no documents – e.g., bibles, scrolls, crucifixes, or monuments relevant to Christianity found in Wales during this time period. There were very few, if any, ordained clerics in Wales during this same time period. And further, the list of Welsh 'saints' – though lengthy – provides no supporting evidence of their teachings. Instead, the names of many (listed below) suggest they were holy persons of Jewish, Spanish, Greek and Indo-Persian origin. See Table Four below:

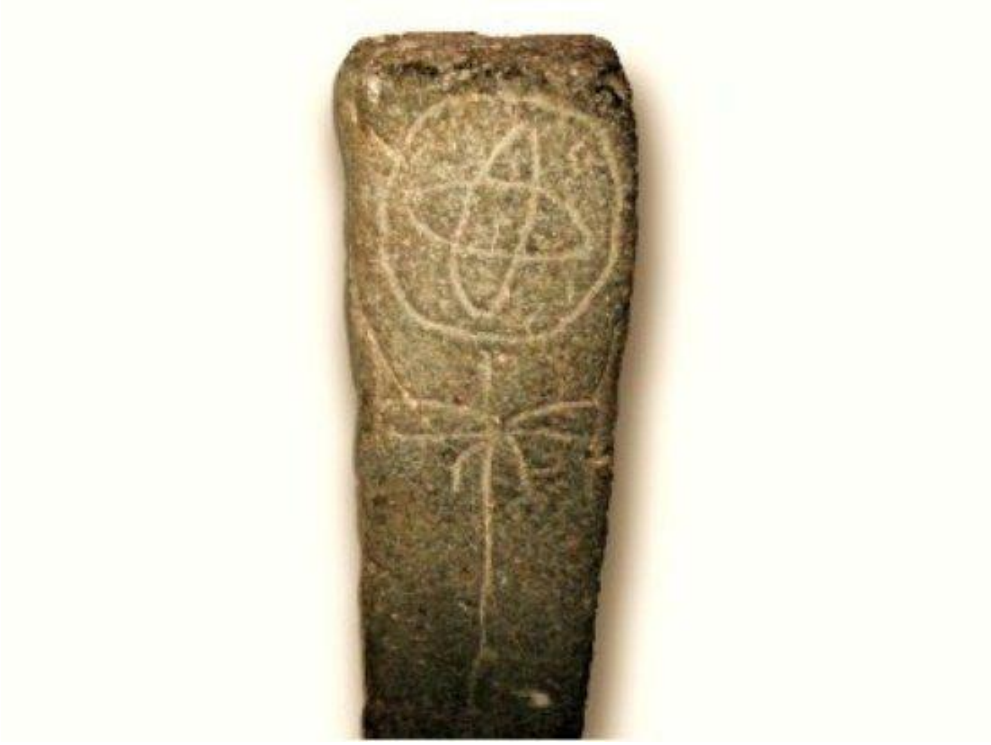
Table Four: Names of Welsh Saints Having Semitic/Indo-Persian/Spanish Names
Aaron 3rd century (Hebrew)
Aaron 6th century (Hebrew)
Afan 6th century ("eagerness", Sp.)
Asaph 6th century (Hebrew)
Baglan 5th century (Hindu)

Baglan 6th century(Hindu)
Baruch 6th century (Hebrew)
Bueno/Bono 7th century ("good", Sp.)
Buon ("good", Sp.)
Bugi 6th century (Indonesia)
Caffo 6th century (Italian)
Caian ("to drop", Sp.)
Cain/Keyne 5th century (Hebrew, son of Adam and Eve)
Caron 3rd century (Greek, "pure")
David 6th century (Hebrew, King of Israel). David is the Patron Saint of Wales
Daniel 6th century (Hebrew, "God is my judge")
Dona ("lady", Sp.)
Eleath/Eleth 6th century.Eleleth is a highly important character in Gnosticism and Gnostic lore. He or maybe she, is also known as Heleleth or Sophia. Being the Angel of Peace, Perfection and Wisdom. v. t. e. Gnosticism (from Ancient Greek: γνωστικός, romanized : gnōstikós, Koine Greek : [gʸnɔ̟s.tiˈkos], "having knowledge") is a collection of religious ideas and systems which originated in the first century AD among early Christian and Jewish sects.
Gallo 5th century, Italian
Isan 6th century Isan is an Indian name of Sanskrit origin. The name's meaning is 'bestower of riches."
Issui Vedic India
Nidan 7th century Nidan is a boy's name in the Hindu religion/ Hindi. Nidan means "cause".
Noethan/Nathan From the Hebrew name נָתָן (Natan) meaning "he gave". The name of a prophet during the reign of King David.
Peirio Greek, "stone/rock"
Samson of Dol 5th century From the Hebrew name שִׁמְשׁוֹן (Shimshon), derived from שֶׁמֶשׁ (shemesh) meaning "sun".
Samson of York 6th century
Saul From the Hebrew name שָׁאוּל *(Sha'ul)* meaning "asked for, prayed for". This was the first king of Israel.

Additional evidence of non-Christian religious practices continuing in post-Roman Wales are the so-called "Celtic Crosses" dating from the 300 CE to 900 CE time period; these are actually Roman and Greek adaptations of the Indo-Persian god Mithras as shown below:

"Celtic Cross" above

Mithraic Symbol below



Not mentioned by Davies (1993) is that in 1290 all Jews living in England were officially banned from the country by Edward I (Samuel 2004). Many of these English Jews were already living in Bristol, England – directly across from the earlier Roman-settled areas of Southeast Wales. They were joined there by other Jews from throughout England (although evidence indicates many English Jews simply converted (outwardly) to Christianity). From Bristol, it was a simple boat-ride across the Bristol Channel to Caerleon, Wales where, we propose, many persons of Middle Eastern and North African descent had been living since the Roman era. The present study will show that many of the English Jews who decided to 'leave' England simply ventured across the water to Wales.

However, it is significant that Davies – who never mentions the 1290 Expulsion of Jews in his book – does write the following: "A number of Welsh towns (by the early 1300s) had a thriving commercial life which gave rise to wealthy burgher families… Some of the ports were particularly prosperous. In 1326 Carmarthen was recognized as a Staple – a head port for export purposes, one of fourteen in the territory of the King of England. In the 1350s an average of 525 stones of fleeces was exported annually from the port, and in the 1390s the leading wool trader there was John Owen…Each year several ships entered the port of Carmarthen laden with the wines of Bourdeaux (p.190)" In particular, Davies (1993) mentions the Bohun family whose enormous sheep flocks helped support textile mills and weavers throughout Wales (p. 191). Notably the Bohun family has an ancestral DNA relationship with Colonial American explorer Daniel Boone who has already been determined to have Jewish ancestry (Hirschman, Vance and Harris 2019). Their shared DNA scores are shown below:

Bohun/Boone DNA Haplotype Scores

133	403372	Henry Harrison Boon, b 1819 TN	Unknown Origin	R-M269	13	25	14	10	11-14	12	12	11	13	13	28	18	9-9	11	11	25	15	19	31	15-15-17-17	11	11	19-23	16	15	18	17	35-37	12	12																												
134	74958	Henry DeBohun	England	R-M269	13	25	14	10	11-14	12	12	11	13	13	28	18	9-9	11	11	25	15	19	31	15-15-17-17	11	11	19-23	16	15	18	17	35-37	12	12																												
135	674596	George Boone II, b. 1646 and d.1696	England	R-M269	13	25	14	10	11-14	12	12	11	13	13	28	18	9-9	11	11	25	15	19	31	15-15-17-17	11	11	19-23	16	15	18	17	35-37	12	12	11	9	15-16	8	10	10	8	10	10	12	21-23	18	8	12	12	15	8	12	24	20	13	12	11	13	11	11	12	12
137	198236		Unknown Origin	R-M269	13	25	14	10	11-14	12	12	11	13	13	28	18	9-9	11	11	25	15	19	31	15-15-17-17	11	11	19-23	16	15	18	17	35-37	13	12																												
138	5155	Humphrey de Bohon, 999-1085	France	R-ZP112	13	25	14	10	11-14	12	12	11	13	13	28	18	9-9	11	11	25	15	19	31	15-15-17-17	11	11	19-23	16	15	18	17	35-37	13	12	11	9	15-16	8	10	10	8	10	10	12	21-23	18	8	12	12	15	8	12	24	20	13	12	11	13	11	11	12	12
139	4258		Unknown Origin	R-M269	13	25	14	10	12-14	12	12	11	13	13	28	18	9-9	11	11	24	15	19	31	15-15-17-17																																							
140	132384	Daniel Marion Boone, b. 1848 Bradley County Ark	England	R-M269	13	26	14	10	11-14	12	12	11	13	13	28	18	9-9	11	11	25	15	19	30																																								

Finally, Davies mentions two significant Welsh men -- Sion ap Rhisiart, an abbot of Valle Crucis (p.211) and Sion Dafyd Rhyss (p. 251). Below is a brief discussion of the given name **Sion**:

wikipedia.org/wiki/Zion
Zion (Hebrew: צִיּוֹן / Ṣîyōn, LXX Σιών, also variously transliterated Sion, Tzion, Tsion, Tsiyyon) is a place-name in the Hebrew Bible used as a synonym for Jerusalem, as well as for the Land of Israel as a whole.

Gerald of Wales: A Journey through Wales (1188)
Born in 1145, Gerald was raised on the coast of South Wales, the son of Norman knight William de Barri. Members of Gerald's family had been bishops at St. Davids religious house and he studied under a monk named Haimo (note: this is a form of the Hebrew name Chaim). In 1188 he set out on a six week trip across Wales during which he visited several religious sites and took copious notes. Along the way he reports meeting with a youth named Hector, whose name refers to the Trojan champion killed by Achilles at Troy, a bishop named William de Salso Marisco, Spanish for "seafood sauce", and visits the Welsh town of El Fael, a name commonly found in Lebanon (indicating a possible Carthaginian connection). Gerald also discusses meeting a knight named Mahel, which is common in Sanskit, and references many Old Testament figures, including Elijah, Baalshazzar, Eli, Samuel, Elishah, Enoch and Daniel.

Gerald also reports several folk-tales and medicinal beliefs he encounters along the way. For example: "A remarkable event occurred. A certain knight named Gilbert…after a long and unremitting anguish which lasted three years…gave birth to a calf, an event which was witnessed by a great crowd of on-lookers…This was probably a punishment for some unnatural act of vice (p.88)"

He also reports: "It appears from ancient yet authentic records that while Saint Illtyd was living as a hermit,…the mare which used to carry his provisions for him was covered by a stag (i.e., impregnated) and gave birth to a creature which could run very fast, its front part being like that of a horse and its haunches those of a deer (p. 88). "

This suggests that the level of cultural development and medical knowledge in Wales at the end of the twelfth century was not especially high, and that many superstitions and remnants of earlier cultural belief patterns were still widespread.

John Gower, The Story of Wales (2012)
The most recent Welsh history book is based on a BBC series about the country. It is useful for our purposes because it provides the most current assessment of Wales' self-image. Gower (2012) up-dates Davies (1993) perspective by broadening the ethnic history of Wales, but still does not dig deeply into its pre-Roman past. Gower, as with Davies (1993), places his emphasis on promoting a Celtic identity for Wales: "During the periods referred to as the Bronze and Iron Ages, the first intimation of a Celtic identity emerged through a shared set of aesthetic values, beliefs and respect for early gods., which would connect Wales with parts of England, Ireland and Scotland and…a large swathe of Western Europe (p. 22)." And yet he also notes that

Wales' merchants were already trading as far away as the Mediterranean, Scandinavia and the Baltic regions, which would indicate commercial – and perhaps familial -- connections to these lands (p. 28). If Carthage had established mining and trading settlements in southeastern Wales during the 450 BCE time period, this would explain the ability of the Welsh inhabitants to be trading on the Mediterranean and Baltic shores, *prior to* the arrival of the Romans.

Gower next moves to the arrival of the Romans in Britain in 48 CE, noting that, "Well before the invasion.., the Romans had known about the Iron Age society in Wales through trade (p. 37)." At the time of their arrival, the Romans reported encountering five different ethnic groups living in Wales. Those in the southeast region – nearest the Roman settlement -- were the Silures who were described by the Roman Tacitus as "ruddy and swarthy,…Their hair was unusually curly, leading him to conclude that they had migrated from Spain (Gower, p. 38)" [Notably, in this description, the Silures do not look like ethnic Celts…We propose that they were originally from Carthage].

Gower notes that the Romans had come to mine Welsh copper, tin, iron, gold and lead, of which they were already aware through existing Mediterranean trade channels. By 70 CE, Gower (2012) reports, around 30,000 Romans were stationed in Wales and a road system of 637 miles had been constructed connecting 30 forts spread throughout the country. The majority of the Roman population lived in the southern portion of the country, especially in the southeast/Silurian region near the Bristol Channel. The Roman capital in Wales was Caerleon (see map below)

A reconstruction image of Caerleon, Wales under Roman rule

Gower (2012) describes several religions observed during the Roman occupation of Wales; among them Mithraism, the Greco-Roman pantheon, Celtic nature gods and – by 304—Christianity. He bases this early Christian claim on two Welsh men named Julius and Aaron were reported martyred in Caerleon that same year (Gower 2012, p. 49). We question the accuracy of this event, because Justinian, Emperor of Rome, did not convert to Christianity himself until 312 CE. Prior to that Christianity had been banned from Rome and its provinces. Additionally, Aaron is a Hebrew given name and Julius is a patrician Roman name; neither is Christian. Indeed, their martyrdom may not have occurred at all, since the first accounts we have of their existence and possible martyrdom were not written until **three centuries later**.

The earliest surviving account of Aaron and Julius comes from Gildas, a monk writing in Western Britain during the sixth century. Gildas' account was later repeated by the eighth-century Anglo-Saxon monk Bede. References to Aaron and Julius were included in the writings of later medieval authors like Geoffrey of Monmouth and Giraldus Cambrensis and it is from these sources that Gower (2012) makes his claim of Christian martyrdom.

In 400 CE, Roman military personnel departed from Wales to help fend off predations against Rome by the Celts; the Empire was collapsing and its fighting men were needed elsewhere (Gower 2012). Yet there would have been little incentive for the Romano-Welsh population occupying the towns to leave with the soldiers. Rome was falling, and the townspeople already had trades, homes, families, customs and lives. Thus, we propose that a portion of Wales' population, especially in the South, is descended from the stay-behinds of the

350 year period of Roman occupation

Turning to discussion of Welsh religious practices in the post-Roman era, Gower (p.104) writes, "The Welsh church was decentralized. This resulted in religious practices varying widely throughout Wales...[Later] under the Normans, the Welsh church came increasingly under secular control…The king insured that all successful candidates (for bishop) were also political nominees…A number of the Marcher lords (along the Welsh border) were also made bishops". Thus by the 1100s CE, the Welsh church was essentially a financial extension of the English King's domain. All tithes, donations, and bequests coming to the church became monies available to the king. This arrangement effectively gave the English King control over the Welsh Church's teachings and theology, as well as a large flow of funds into his treasury.

John Edward Lloyd: A History of Wales (1911)

Now we turn to an early, but very well-documented book, Lloyd's (1911) Wales history. Written at the beginning of the twentieth century, this volume pre-dates both World Wars; at the time, Britain still ruled the waves, academic anthropology was embedded in theories of racial hierarchies, and archaeology was unearthing ancient civilizations from Egypt to the Indus Valley. Given this *zeitgeist*, writers were not inhibited from speculating about the relative "levels of evolutionary development" various peoples had achieved and went into great detail to describe their material culture and physical appearances. It was also well before the discovery of the role DNA played in human genetics and almost a century before the widespread use of DNA testing for genealogical and ethnic identification.

Lloyd begins his narrative in the Neolithic Period of Wales (4,500 BCE) and states that the inhabitants were likely of dark complexion and had black, curly hair (p. 14). He notes that similar dark complexions, eyes and curly hair are still common in Southern Wales. This perception was shared, as he reports, by the Roman Tacitus: "Tacitus long ago recorded the observation…that the swarthy visages and twisted locks of the South Welsh tribe of Silures pointed to their Iberian origin (p. 15)" Lloyd (1911, p. 15) continues, "This early Neolithic race type was uniform throughout Northern Africa, Spain, France, Italy." This group of people, he writes, had slender, small body-types and tended to be "impulsive and wayward" and "susceptible to the influences of music and religion" (p. 15). He notes that this is termed the "Mediterranean" culture and temperament. The present research will show that Lloyd's conclusion of the "Mediterranean" origin of the Silures is correct, but that they arrived well after the Neolithic period. Lloyd also describes in detail linguistic similarities within this same group of peoples, classifying their languages in the "Hamitic" family (p. 16). And, important for our purposes, he also describes the similarity of the tombstones and burial customs of South Wales with those in North Africa – i.e., the dolmen type burials with a single standing stone (p. 17).

Next Lloyd (1911) turns to a discussion of the first sailing ships to reach Wales and proposes that they were likely Carthaginian (with which we agree). He believes that the Carthaginians, who were in Southern Spain by 800 BCE, may have begun making trips to Southern Wales to acquire tin which was in rich supply there. Tin was used during the Bronze Age to mix with copper in order to form stronger weapons of bronze.

Lloyd also proposes that the Roman arrival in Wales brought soldiers from the Central Asian, Mediterranean, Baltic and Middle Eastern regions. As he notes, these people remained in Wales for their entire tours of duty, marrying, having children, dying and being buried, continuously joined by additional people from these same regions over an almost 400 year period. This too would have significantly contributed to the DNA profile of the Welsh population, especially in the southern portions where the major Roman towns, forts, ports and road system lay (Lloyd 1911). In particular, lead smelting and gold-smithing were heavily developed in southeastern Wales and across the Bristol Channel in Cornwall (Lloyd 1911, p. 64-65). This, we propose, could have brought Roman Jews to the area, as they specialized in working with these metals.

With the review of Welsh history concluded, we now turn to a consideration of the DNA results.

COULD CARTHAGINIANS HAVE SETTLED IN WALES?

The first hypothesis to be examined is: **Could Carthaginians have settled in Wales**? Current historians are shying away from using the earlier term "Phoenicians" to describe the peoples who lived in Tyre, Sidon and Carthage during Biblical times (see e.g., Quinn 2018). Markoe (2000, p. 10), for example, states "The modern term 'Phoenician' is, in fact, a Greek invention from the word *phoinix (dark red rising bird)*."

The original Levantine traders who lived in what came to be called Phoenicia by western historians, spoke a language called Canaanite, which was contemporaneous with and closely related to Hebrew. These sea-traders first occupied the coastal areas along what is now the country of Lebanon. Starting about 1500 BCE and lasting until around 350 BCE, they composed a federation of inter-related merchants whose shared focus upon **maritime mercantilism** linked them together (Markoe 2000).

The sea traders operated during the time of Israel's King Solomon and King Hiram of Tyre, traveling throughout the entire Mediterranean region. Importantly, Markoe (200, p. 13) states that, "Carthaginian sea-traders ventured far beyond the Straits of Gibraltar (the ancient Pillars of Hercules) and along the Atlantic coasts of Spain and Morocco. In pursuit of tin, the Carthaginian navigator Hamilcar reportedly traversed the English Channel, landing along the southern coast of Britain (p. 13)". Tin, as already mentioned, was mined and available for barter along the coast of Cornwall and the Bristol Channel. There, the Carthaginians would have either encountered the native Welsh Silures, (or perhaps settled in Wales, themselves, and become known as the Silures by the time the Romans arrived). They also would have learned of the rich copper mines in southern Wales. By combining tin and copper, they could manufacture bronze. We believe that this trade pattern would have occurred around 500 BCE, a time during which Carthage had become a fully independent city-state on the coast of what is now Tunisia.

Carthage's emergence as a political and military power is traditionally ascribed to the mid-sixth century BCE when the city, under the aegis of King Mago and his descendants, "embarked upon an aggressive campaign of conquest and colonial expansion. It is around this time…that Carthage first intervened militarily in both Sardinia and Sicily in an effort to safeguard holdings there" (Markoe, p. 54".

Following these successful efforts, there was rapid expansion of Carthage's maritime empire. In 480 BCE, a Carthaginian force of three hundred thousand men under King Mago's descendant Himilco landed in Sicily. The army included soldiers drawn from the Western Mediterranean – North Africa, Spain, Gaul, Liguria and Sardinia (Markoe 2000). Importantly, this military force is known to have included persons from Gaul, i.e., modern France, and also southern Spain. This makes it likely that Carthaginians *had already ventured into the Atlantic* encountering not only the eastern coast of England, but also establishing trading relationships with the inhabitants of southern Wales, especially if valuable metal resource were known to be there.

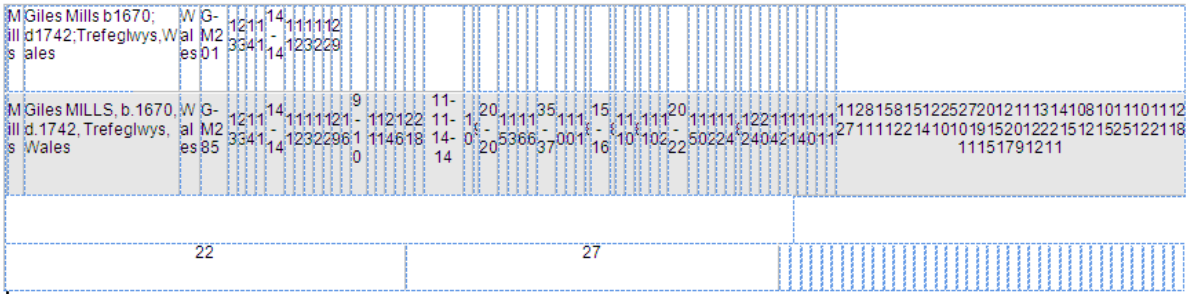
As Markoe (2000, p. 56 writes: "The Carthaginian expeditions of Hanno and Hamilcar along the African and North Atlantic coasts reveal a keen interest in exploring new avenues of trade **beyond the Mediterranean Straits (**emphasis added**)…. "**The archaeological record at Carthage documents a renewal of imports, especially from Cadiz (southern Spain) and the far west during the final decades of the fifth century BCE. (p. 56)." This is the time period during which Carthaginians would have visited and traded with southern Wales. If correct, what DNA traces would one expect? Since the Carthaginian population was primarily composed of Canaanite peoples from the coast of Lebanon, one would expect genealogical haplotypes, both Y DNA and also possibly mtDNA, to reflect Levantine ancestry. This would include Y haplotypes J1, J2, G, E-m35, and T.

HYPOTHESIS ONE: THE CARTHAGINIANS

Hypothesis One: Carthaginians reached southern Wales around 400 BCE and left descendants in the southeastern portion of the country. These descendants may be the same people as the Silures.

Below is presented the first set of Welsh men's DNA scores supporting this hypothesis. For Haplogroup G-m285/G-m201 there are closely matching haplotypes shown for a Wales DNA Project participant and current residents in Iraq and Saudi Arabia. There are also closely matching scores for two men in England; one of them, Abraham Lees may be of Jewish ancestry. This suggests that the haplotype found in Wales originated in the Levant. We believe this makes it most likely that its source in Wales (and England) was from Cathaginians. An alternative possibility is that the haplotype came to the British Isles with the Roman occupiers between 48 CE and 405 CE.

G-m285/M201



Al Anizi Saudi Arabia 13 23 14 10 14-14 11 12 11 13 12 31 16 9-9 11 11 24 16 22 29
Iraq 13 23 14 11 14-14 11 12 11 13 12 30 15 9-10 11 11 24 16 22 29

A second set of possible Carthaginian-based data concerns haplotypes in group E-m34. There were four men in the Wales DNA project who carried the E-m34 haplotype. E-M34 is prevalent among Ashkenazi and Sephardic Jews, as well as among **Ethiopians**. There is some agreement that it is a paternal lineage that emerged from **Egypt**, and then spread throughout western Asia and Europe from the Levant. We believe that this may also be evidence of Carthaginian settlement in Wales, because the haplotype **originated** in Northern Africa, where Carthage was located, and then spread outward. That both Ashkenazic and Sephardic Jews carry this haplotype indicates that it entered the Levantine Jewish community early-on and then spread outward as Jews split into Sephardic and Ashkenazic lineages.

Subclades of E Haplogroup

- E1 - E-P147
- E1a1 - E-M44
- E1b1b - E-M215
- E1b1b1 - E-M35
- E1b1b1a2 - E-V13
- E1b1b1c1 - E-M34

H MtDNA Haplotype found in Wales and Carthage.

An important piece of evidence for our first hypothesis comes from a recent excavation by Matisou-Smith et al (2018) in Carthage. The excavation team unearthed a Carthaginian male in a tomb on Byrsa Hill (Tunisia). His mitochondrial haplotype is an exact match to one of the women in the Wales DNA Project, Lydia Roberts. Her mtDNA haplotype and genealogical data are given below.

mtDNA Haplogroup **U5b2c1**

303940Lydia Roberts, b. c1836, d. 1891WalesU5b1

The presence of this haplotype in a Welsh woman and a recently-unearthed Carthaginian man suggests that Carthage had a settlement in southeastern Wales circa 450 BCE and descendants are still present in Wales today.

Haplotype E-M183

We next take a look at haplotype E-M183, to which five Welsh men in the Wales DNA Project belonged. We found matches for them in the Portuguese DNA Project, as shown below. These matches suggest these Welsh men's ancestors may have originated in Carthage, which was occupying the Iberian Peninsula from 900 BCE onward; a second, less likely, option is that they were among the Roman settlers arriving in 49 CE.

Silvestre de Carvalho, b.c. 1895, Alto Minho, Portugal	Portugal	E-M183	13	23	13 9
João Francisco Terezo, Bef 1680 - Aft 1710	Portugal	E-Y144601	13	24	13 9
Jose González, b. circa1830	Spain	E-M183			

Concentrations of G-P303 at certain sites.

There are two Welsh DNA Project men in haplogroup G-p303. In Western Europe, one of the highest percentages of this haplogroup is on Ibiza, an island off the eastern Spanish coast. All of the available G samples from Ibiza are typical G-P303 samples based on STR marker values. The percentage of haplogroup G among

available samples from Wales is overwhelmingly G-P303. Such a high percentage is **not found** in nearby England, Scotland or Ireland**.**

Ibiza was initially settled by the Carthaginians. In 654 BCE they founded the city of Ibosim, a strategic and commercial fortress, as well as an excellent port for their ships; they then began to surface mine the salt flats, salt being a valued commodity. Thus, it is quite possible that these Welsh men's ancestors arrived from the Mediterranean Region with the Carthaginians.

R-P25 haplotype

One Welsh man in the Davis DNA Project carried **R-P25**. This haplotype comes from Central West Africa and would likely be representative of Carthaginian ancestry.

A Jones DNA Project man also exhibited the haplotype R-P25 from Central West Africa, likely indicating his ancestors were originally from Carthage.

Haplotype T-M70

Three men from the Jones DNA Project had T-M70 haplotypes. Matches to their haplotypes are shown below. As can be seen, most of the matches come from current day residents in the Levant. The most probable DNA source for these three Welshmen would likely be Carthaginian settlers, since T is virtually unknown in England and Scotland.

T-M70

M1 009 1	محمد العثـال الناجد	Kuwait	T-BY31 799	1211 / 3330	12-16	1111121 / 1204395	9-9	112113 / 115465	13-14-16-17	11 / 10	22-25	1111 / 7434	33-36	1 9 1 8- / 2 1	17-17	11 8 1 8 1 / 20 1 2	20-20	11111 8 / 70225	1211111 1111 / 3396124 1121	3416815122226191111121312911101010123012122 / 2149111915181422141115251221191112179111 1
636 444	الناجد	Kuwait	T-BY31 799	1211 / 3330	12-16	1111121 / 1204395	9-9	112113 / 115465	13-14-16-17	11 / 10	22-25	1111 / 7464	33-35	1 9 1 8- / 3 1	17-17	11 8 1 8 1 / 20 1 2	20-20	11111 8 / 70225	1211111 1111 / 3396124 1121	3416815122226191111121312911110111230121222 / 149111915181422141115251221191112179111 1
319 845	الجش	Saudi Arabia	T-BY31 800	1211 / 3330	12-16	1111121 / 1204395	9-9	112113 / 115465	13-15-16-17	11 / 10	22-25	1111 / 7354	34-36	111 8- / 201	17-17	11 8 1 8 1 / 10 1 2	20-20	11111 8 / 70225	1211111 1111 / 2396124 1121	3316815122326191111121312911110111230121222 / 131011191518142214111525122118111217911 11

Haplotype Z-Z640

A Jones DNA Project member carried haplotype Z-Z640. The article excerpted below explains why this man's ancestors were likely Carthaginians.

Haplogroup J-Z640: genetic insight into the Levantine Bronze Age (Vadim Urasim et al, April 2019)

"Our data revealed that Haplogroup J-Z640 is a Y chromosome lineage found most notably in several minority groups within the Near East such as the Samaritans, Druze, Armenians and Jews. J-Z640 originated during the Bronze Age, most likely in the Levant. During the Bronze Age the haplogroup rapidly expanded with multiple ancient branches surviving to the present, evidencing population growth….Based on its geographic dispersal and age of the haplogroup and its subclades, the **founder population most likely belonged to Canaanites found in the Levant**. Following the collapse of the late Bronze Age culture …there followed a period of "differentiation by culture", with many of the ancient branches surviving to the present separated along ethno-religious lines."

Thus, it is likely that this Jones DNA Project member's ancestors were from Carthage.

HYPOTHESIS TWO: ROMAN SOLDIERS ARRIVE IN WALES IN 48 CE AND REMAIN UNTIL 400 CE

Three hundred and fifty years is a big stretch of time. We know from archaeological records that the Roman settlement in southeastern Wales included persons – both male and female – from what are now present day Samosata, Turkey (on the Euphrates River), Greece, Bulgaria, Hungary, Austria, the Adriatic, Syria, Spain, and France. This is a large, diverse collection of DNA haplogroups, many of which would include the most common European ancestries. Since the Roman military forces did not depart until around 1,500 years ago – likely leaving many descendants behind -- it is difficult to separate modern-day Welsh people who may descend from the Roman occupation period from other European-originated persons in Wales. But here are the proposed candidates. .

Haplotype G-Z727

Our first sample is shown below. These DNA markers matched three men in the Wales DNA Project and were used to search through possible candidate DNA websites for matches. Remarkably, the matches shown below actually span across several of the regions from which we know the Roman-Welsh settlers came. Assuming the soldiers may have left extended kinship groups back in their countries of

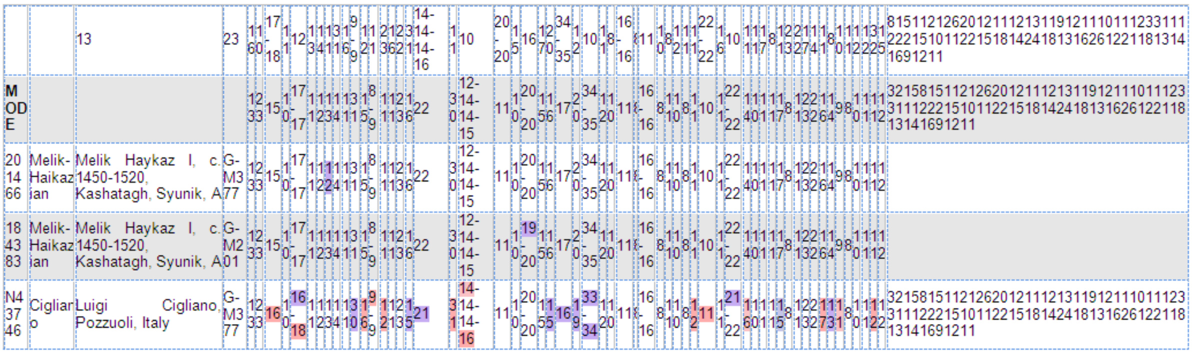
origin, this would support the hypothesis that some Welsh men descend from the Roman settlers.

Germany	G-Z727	13	23	16	10	14-14	11	13	11	13	11	27	17	8-9	11	11	23	15	22	31	12-13-13-14	10	10	20-20	15
Germany	G-Z727	14	21	15	10	13-15	11	14	11	12	11	30	17	8-9	11	11	23	15	21	30	12-13-14-14	10	11	20-20	15
Germany	G-M201	14	21	15	10	13-15	11	14	11	12	11	30	17	8-9	11	11	23	15	21	30	12-13-14-14	10	11	20-20	15
Canada	G-M201	14	21	15	10	14-14	11	13	12	12	10	30													
Unknown Origin	G-M201	14	21	15	11	14-15	11	13	13	12	11	30													
Croatia	G-M201	14	21	15	11	14-15	11	13	13	12	11	30	16	9-9	11	11	24	16	21	31	12-13-13-13	10	12	20-20	16
Austria	G-Z727	14	21	15	11	14-15	11	13	13	12	11	30	16	9-9	11	11	25	16	21	30	12-13-13-13	10	12	20-20	16
United Kingdom	G-Z725	14	21	16	10	14-14	11	13	12	12	11	29	16	9-9	11	11	23	16	22	32	12-13-13-14	10	11	20-20	15
France	G-Z725	14	22	15	10	13-14	11	13	11	12	11	29	16	9-9	11	11	24	16	21	33	12-13-14-14	10	11	20-20	16
Saudi Arabia	G-Z725	14	22	15	10	13-16	11	13	11	12	11	29	19	9-9	12	11	23	16	21	32	12-13-13-13-14	10	11	221	14

Haplotype G-M377

A second, very interesting Roman possibility is shown below. These markers matched a member of the Davis DNA Project; one of the entries is from Kashatagh, a small region in Armenia from which some of the Roman settlers were drawn. And the other match is to a man living in Pozzuoli, Italy. Pozzuoli has historic architecture from the Roman era coinciding with the settlement of Wales. Thus it is possible that one or more of the soldiers who left Wales to help defend Rome against the Celts in 405 CE, may have left behind kinfolk whose descendants still dwell in Wales.

G-m377



		13	23	815112126201211121311912111011123311122215101122151814241813162612211813141691211
MODE				3215815112126201211121311912111011123311122215101122151814241813162612211813141691211
201466	Melik-Haikazian	Melik Haykaz I, c. 1450-1520, Kashatagh, Syunik, A	G-M377	
184383	Melik-Haikazian	Melik Haykaz I, c. 1450-1520, Kashatagh, Syunik, A	G-M201	
N43746	Cigliario	Luigi Cigliano, Pozzuoli, Italy	G-M377	3215815112126201211121311912111011123311122215101122151814241813162612211813141691211

Haplogroup R-Z326

There was one member of the Wales DNA project who had Y DNA haplotype R-Z326. We include the material on its distribution below and believe it is most likely of Roman-Germanic origin:

R-Z326 is a fairly early branch off R-Z9. It is most notable for its high concentration in Germany: although it is only about 7% of R-U106 tested, it is roughly 15% of the R-U106 in Germany. It only ever approaches this frequency in neighboring countries, so we can assign a probably origin to it in modern Germany (www.Eupedia.com).

Haplogroup G-P15/G2

There were 4 members of the Wales DNA Project who carried haplotypes in haplogroup G-P15/G2.

This group makes up 5 to 10% of the population of Mediterranean Europe, but is relatively rare in northern Europe. The only regions where haplogroup G2 exceeds 10% of the population in Europe are in Cantabria in northern Spain, in northern Portugal, in central and southern Italy (especially in the Apennines), in Sardinia, in northern Greece (Thessaly), in Crete, and among the Gagauzes of Moldova. Other regions with frequencies approaching the 10% include Asturias in northern Spain, Auvergne in central France, Switzerland, Sicily, the Aegean Islands, and Cyprus (www.eupedia.com). Given this unique distribution pattern, it is most likely that these Welsh men's ancestors were part of the Roman settlement in southeastern Wales. The distribution pattern covers areas controlled by Rome during this same time period and the haplotype is not typical of native Celts.

T-M70 Hapl group

Below is a set of scores from the T-M70 DNA Project (FTDNA.com) which match an individual in the Wales DNA Project. What is interesting about this chart is the geographic distribution. One is in Saudi Arabia and another is in Tunisia, which might suggest a Carthaginian origin. But we also have an Italian man and a Romanian man in the same group. This would seem to most strongly suggest the Wales donor's ancestors came from the Welsh-Roman settlement and that at least one man from that settlement returned to Italy.

N90180	آل سعد المحمود الألمعي	Saudi Arabia	T-M70	1 9 11- 2 3 1 2 12115-1111131 11211313- 113-11117-1,1,7-,11,1,10-11111,1211111111 33411 1213318 13548316- 202 45793 1 1 1 20 2 22 70224 2393123 1121 6 9 19 3 9 7 0	321581512242819111214121291311101112301113211410111915161024151215261222209121791211
N47707	Carmen Milione 1841-?	Italy	T-L208	1 9 11- 2 3 12116-1111121 11211313- 113-11115-1, 33501 1222597 13649415- 002 54573 1 7 9 16 4 7	
202474	Sicily, Italy => Keniss,Tunisia	Tunisia	T-Y18956	1 12115-111112 33511 121238 6	
E30249	Georg Drotleff , b. 1898 and d. 1986	Romania	T-FGC40334	1 9 12115-1111121 112113 35401 1223397 137481 5 9	

G-M201 Haplogroup

Finally below is a set of G-M201 haplotype scores which match a man in the Wales DNA Project. What is especially interesting about these data is that they contain two entries from the Nasr/Daou Family which is from Sednaya, Syria prior to 1096 CE. Sednaya, Syria is important for our research purposes because it was a very early Christian religious site. See the description below:

N57208	Salem	Jim Salem, b. 1937, Beit Lahia, Lebanon	G-M201	14 1211 111113 3360 121411 18
N87567	Abboud	Kheir Elias Abi Abboud (Obeid), Lebanon, 1934-2000	G-M201	14 1211 111113 3360 121411 18
N56437	Rachid	- Obeid/Charabati, origin Ehden, Lebanon	G-M201	14 8 13- 20 33 16 21 1211 1111131 112123 14- 11 1111 111 11 111 1 11111 1121 11111 11 3360 121411 18 114611 14- 11 6567 201 10 311 31126 2826 31301 12 18 9 15 21 35 16 25
N19108	Awad	George Awad, b. 1860, Juweinat, Syria orig. Damasc	G-M201	14 1211 111113 3360 121412 18
159296	Nasr	Daou family, Sednaya Syria pre-1096	G-M201	13 1211 111113 3361 122412 17
N39323	Nasr	Daou family, Sednaya Syria pre-1096	G-M377	13 8 13- 1211 1111131 112123 14- 3362 1224127 114610 14- 17 9 15

Saidnaya (also transliterated **Saydnaya** or **Sednaya** from the Syriac: ܨܝܕܢܝܐ, Arabic: صيدنايا *Ṣaydnāyā*) is a city located in the mountains north of the city of Damascus in Syria. It is the home of a Greek Orthodox monastery traditionally believed founded by Byzantine emperor Justinian I, and where an icon of the Virgin Mary is revered by both Christians and Muslims. The town is noted for its large number of Aramaic speakers, along with nearby Maaloula (www.saidnaya.com). Thus, it is most likely that this DNA haplotype made its way to Wales through Roman-linked settlers during the 48-405 BC time period – a time period during which Rome occupied much of the Holy Land.

HYPOTHESIS THREE: ENGLISH JEWS EXPELLED IN 1290 RE-SETTLED IN WALES

The third hypothesis about the source of Middle Eastern DNA haplotypes found presently in Wales is that some may have arrived with English Jews who – after being expelled from England in 1290 – simply crossed the Bristol Channel and re-located themselves in Wales.

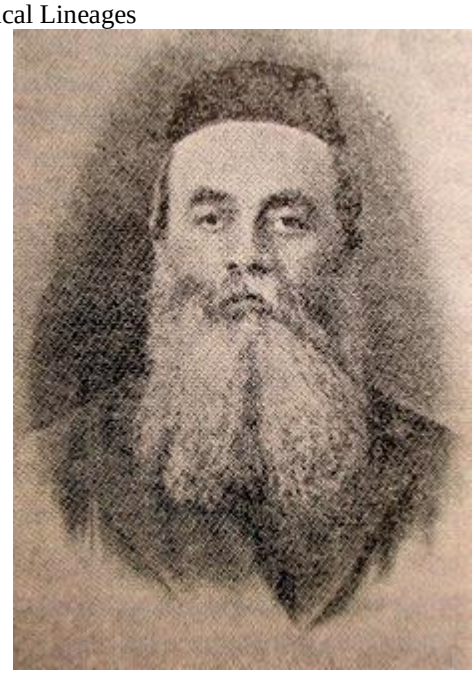
The first piece of evidence is Ranulph Payne, "The Moneyer", whose descendants are now living in Wales and members of the Welsh DNA Project. Since usury was forbidden to Christians in England, they borrowed from Jews, such as "Ranulph the Moneyer". Apparently, his descendants moved to Wales and have remained there since the Expulsion of 1290. Notably, the surname Payne was often given to non-Christians living in England, it derives from Payan/Pagan.

R-P312

Payne	Ranulf "The Moneyer" (bef. 1015 - bef. 1061)	United Kingdom	R-P312

E-L117 Haplotype
There are four men in the Welsh DNA Project who carry an ancient Chassidic Jewish haplotype.
A discussion of this haplotype is given below.

E1b1b1 L117 - Chassidic Rabbinical Lineages



" In a study focused on the Y-DNA ancestry of the Savran-Bendery Chassidic dynasty from Ukraine and Bessarabia during the nineteenth century, it was found that all patrilineal descendants of the Wertheim-Giterman rabbinical lineage share the same L117 SNP of Y-DNA haplogroup E.

The founder of the family was Rabbi Shimon Shlomo (circa 1750 – 1802), son of Rabbi Avraham ha-Rofe. He was the disciple of the Maggid of Mezeritch, the primary disciple of the Baal Shem Tov, the founder of Chassidic Judaism.

The Savran-Bendery Chassidic lineage is of interest due to its many marriage connections to other iconic rabbinical lineages and dynasties throughout Europe and the Russian Empire. Notable among these interrelated rabbinic families is the Spira/Shapira/Shapiro rabbinical lineage, which traces its descent from Rashi (1040-1105) through the Treves rabbinical lineage, which produced a long line of distinguished rabbis over the centuries. This lineage may have arisen in the Near East or the Middle East, and then expanded into the Mediterranean with the spread of agriculture."(www.eupeia.com/31184-E-L117Haplogroupinfo).

G-P15 Haplotype

There were five men in the Wales DNA Project having the haplotype G-P15. These matched three Germans and one German immigrant, Jacob Stark, inLancaster PA, as well as a man surnamed Hutton in the UK. Since two of these men (Stark and Braun) are of Ashkenazic Jewish ancestry, the Welsh men likely are as well. Their ancestors likely moved to Wales from England in 1290.

G-p15

887641	Jacob Stark b. 1826 d. 1917 Lancaster, PA	USA	G-M201	1211/4250 13-14 111/130 1/2 121/197 9-9 112123/112612 12-13-13-14 11/01 20-20 1111/5256 36-36 11/10
89311	Nicholas Beard b. 1808 d.1871	Germany	G-P15	1211/4250 13-14 111/130 1/2 121/198 9-9 112123/112610 12-13-13-14 11/01 20-20 1111/6257 37-38 111/101 8 15-16 8 11/10 8 111/104 20-22 11111/40224 8 12211111111/21282230112
N102100	Georg Peter Braun, abt 1852 - 1893	Germany	G-L140	1211/4250 13-14 111/130 1/2 121/198 9-9 112123/112611 12-13-13-14 11/01 20-20 1111/5257 37-37 111/101 8 15-16 8 11/10 8 111/104 22-22 11111/40224 8 12211111111/21292230112
E4491	Illbruck, of Rheinhausen, Germany	Germany	G-M201	1211/4250 13-14 111/130 1/2 121/199 9-9 112123/112611 12-13-13-14 11/01 20-20 1111/5257 36-38 111/102 8 15-16 8 11/10 8 111/114 22-22 11111/40224 8 12211111111/21282230112 32159151123272112121313129912101012 271012221411928151915241613152612201911141991111
15998	Hutton	United Kingdom	G-Z31358	1211/4250 13-15 111/130 1/2 121/197 9-9 11212/11261 3

EV-13 2
EV-13 and ev36 and cts9320 2
EV-13, ev36, e-L542 1
EV-1313 and e-v36+ 4

There were nine Wales DNA Project entries under Haplogroup EV-13 or extended along its phylogenetic tree. Current origins of persons in this same group include Bulgaria, Russian Federation, Macedonia, Turkey, Spain, Poland, Italy, Czech Republic, Albania, Greece, Kuwait, United Arab Emirates, and Morocco. Thus they are widespread across Eastern Europe, the Baltic Region, and the Levant. Importantly, three high-level matches to the one Wales member listed in the EV-13 DNA Project (FTDNA), itself, are found in Hungary and Poland. We therefore posit that the Welsh EV-13 haplotype carriers are likely Ashkenazic Jews. If this is correct, they would likely have arrived in Wales with the Expulsion of the Jews from England in 1290.

Haplotypes R-Z18 and R-M512: Ashkenazi-Levites
Two men from the Jones DNA Project matched the Ashkenazi-Jewish Levite sect (Jewish Heritage Project, FTDNA). Thus their ancestors were likely among those exiled from England in 1290.

Haplotype I-L22
The haplotypes of the men shown below matched two members of the Jones DNA Project. They are known to belong to Sephardic or Ashkenazic lineages (Jewish Heritage DNA Project, FTDNA). Thus these Jones ancestors were most likely English Jews who entered Wales in 1290.

Isaac Greathouse - 140-years ago	Germany	I-L22	13	23	14	10	13-14	11	14	11	12	11	28	15	8-8	11	22	16	20	29
Dmitry Pozharsky, b.1612 and d.1711	Russian Federation	I-L22	13	23	15	10	14-14	11	14	11	12	11	28	16	8-9	11	23	16	21	29

CARRIÇO of Portel, Alentejo, Portugal	Portugal	I-L22	13	24	14	10	14-14	11	14	12	13	11	30	16	8-9	8	12	23	16	21	29

III. Discussion

It is indisputable that there is Middle Eastern-origin DNA within the Southern Welsh population. In specific cases, the levels are higher than anywhere else in Britain or Ireland. The research question, therefore, becomes one of identifying viable candidates as sources of this DNA. It is known that two sources could include Roman-era settlers (48 CE – 405 CE) and/or Jewish emigres from England in 1290 CE. A third potential source is the long-rumored Carthaginian ventures into the Atlantic which may have reached southern England and Wales circa 450 BCE and perhaps resulted in an extended trading settlement until the onset of the Punic Wars between Carthage and Rome in 264 BCE. The wars continued until 146 BCE with Rome victorious (Markoe 2000; Quinn 2018).

This timeline would have provided the Carthaginians with over 200 years to establish and enlarge a trading settlement on the Bristol Channel, accessing and enlarging the existing lead, copper, silver, gold and tin

mines in the area. Smelted ore would have been shipped to Carthaginian processing centers on the coasts of Spain and its out-islands, e.g., Ibiza, or to Carthaginian-held Sicily. Two centuries is a long time. It would have made economic and military sense to create a large-enough settlement to look after these valuable mining activities. However, by 260 BCE Rome was becoming a dominant sea power in the Mediterranean. Carthaginian vessels sailing to Wales would have had to be diverted to protect their more important interests along the Mediterranean Coast. Just as we propose the Roman-Welsh settlement was left to fend for itself in 405 CE, the Carthaginian colony would also have been left to fend for itself. No ships were coming to get them.

And then in 48 CE – after a 300 year hiatus – sails again appeared on the horizon! Roman settlers had arrived. We will likely never know if the descendants of the Carthaginians who remained behind had passed down folk-tales of their earlier identity or if they had come to assume themselves to be native Welsh. But their Mediterranean appearances remained virtually unaltered, indicating that little, if any, out-marriage had occurred. When the Romans landed on Welsh shores their first thoughts were: "These people must be Spaniards; look at their curly hair, their dark eyes and skin, their slender bodies". And, ironically, they were correct.

APPENDIX: HAPLOGROUP DISTRIBUTION MAPS (Available on www.Eupedia.com)

Y haplogroup J1

Y Haplogroup E-m35

Baltic I Y haplogroup map

MtDNA haplogroup J

MtDNA Haplogroup T

MtDNA H

MtDNA

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