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An Seanchas Synopsis

This document purports to correct some of the misunderstandings that became incorporated into and obscured the original sense of Irish traditional history over the course of its transmission. It demonstrates that Irish proto-history was at one time synchronized to the timeline of Sulpicius Severus' *Chronicorum Libri duo*. This paper reassembles that chronology and compares it to the timelines of literarily-attested "event-tokens"¹ and archaeologically-known innovations. It concludes that restored Irish proto-history genuinely preserves authentic Bronze-Age memories that precisely fit the geography and chronology of known genetic, linguistic, technological and cultural shifts.

Familiarity with the perception of Irish traditional history that has prevailed over the past eighthundred years via *Lebor Gabála Érenn* (*"The Book of Invasions"*) and its derivatives is presumed. The version of it best-known to modern readers is summarized here as:

Lebor Gabála Érenn Epitome

Ireland was first colonized by Noah's grandaughter Cessair. She was accompanied by her father Bith, her brother Ladra the pilot, her cousin Fintán mac Bóchra and fifty maidens representing the nations of the world. Ladra died, followed by Bith. Cessair and her retinue were drowned in the Deluge. Fintán supernaturally survived in the shapes of a salmon, an eagle and a falcon, witnessing the subsequent ages unfold until he told his tale before an assembly of sages in the late 6th-century.

A descendant of Magog son of Japheth son of Noah named Partholón took Ireland next, defeating a North African *Fomoraig* pirate named Cichol Clapperleg and his monstrous *Túatha de Domnu*, 'tribe of the deep'. His people opened plains in the unbroken forest; loughs supernaturally burst forth from the land. After many generations in Ireland the Partholónians were wiped out by the dog-head plague.

Soon after Nemed son of Agnomain of the Greeks of Scythia led a colony from the Caspian Sea to Ireland. His descendants lived under the oppressive tribute imposed on them by the Fomoraig from their Tory Island stronghold.

During that time the ancestor of the Irish Gaels left his Scythian principality for the gathering of nations in Babylon. He was Fenius Farsaid descended from Gomer (*aliter* Magog) son of Japheth son of Noah. Fenius cleverly profited from the Confusion of the Languages that shut down the construction of the Tower of Babel by opening a language school on the nearby Plain of Ibiténa.

Born at the Tower, Fenius' second son Nél was recruited to Egypt where he was given an estate on the Red Sea and a princess bride in payment for bringing his knowledge of all the languages to the service of Pharaoh. A few years later his son Gáedel Glas was cured of a deadly snakebite by Moses which left the infant colored "*glas*", green. Moses prophesized that Gáedel's descendants would live in a land free of serpents, foreshadowing their taking of Ireland. When the Egyptians pursuing the Hebrews approached, Nél took the royal fleet to sea, causing Pharaoh and his army to drown. Nél and his family prospered in the aftermath. Nél's son Gáedel Glas assembled *Gaeilge* from the best features of all the languages and the Irish tongue was created.

Two generations later Gáedel's descendants fled Egypt from a resurgent dynasty seeking revenge for Nél's refusal to join in the pursuit of Moses. Four-hundred and forty years before they would invade Ireland the Gaels stole Pharaoh's galleys again. They sailed the Red Sea to Sri Lanka and on to the River Indus, then crossed Central Asia to Fenius' Caspian-shore kingdom. The Gaels were welcomed by their cousins until they claimed equal right to rule, after which they became embroiled in a century of dynastic struggle.

¹ After McCarthy, 'The Chronology of the Irish Annals', *Proceedings of the Royal Irish Academy* 98C6(1998)203-255, here limited in understanding to the service of Biblical events as synchronisms anchoring another chronology.

After those five generations the Gaels were driven out from the border of Scythia onto the Caspian Sea. They sailed through the night guided by the shining hands of their leader Lámfhind. They sailed south past the Caucasus until they settled in the *Palus Maeotis*, the Ukrainian Sea of Azov.

In the meantime Ireland's Nemedian inhabitants had been impoverished and then decimated by the monstrous Fomorian pirates. After a desperate battle at the Fomorians' crystal tower all but one boatload of Nemedians were killed or drowned. The survivors abandoned Ireland and scattered abroad.

The Nemedians' *Fir Bolg* ('Men of Bags') descendants returned to Ireland two hundred and thirty years later, escaping slavery in Thrace in boats sewn from the leather bags that they had used to carry river-bottom soil up to fertilize barren hillsides.

Thirty-seven years later the Fir Bolg were defeated in battle and displaced to Ireland's western islands by another wave of Nemedian descendants who had spent the intervening generations learning magic and witchcraft among the Greeks and in the northern islands of the world. The supernatural *Túatha Dé Danann*, "the Tribe of the Goddess Danu", landed from a cloud onto an Irish mountain and used magic to defeat the Fir Bolg in battle, but then slipped under Fomoraig rule.

Rebelling against the Fomoraig the young Danann champion Lúgh Lámhfhada slung a stone through the monster Balor's enormous single evil eye, killing him. The sacred Danann defeated the unnatural Fomoraig. The gods then ruled Ireland for one-hundred and ninety-seven years.

Two hundred years after their colonization of the Sea of Azov a Gael named Brath led an expedition westward from Eastern Albania across the Mediterranean to Spain. He conquered the pirate-city of Briganza (modern A Coruŋa, Galiza province, Spain) at the northwest-tip of the Iberian peninsula. His son Breogán built a tower there, from which his grandson Íth saw Ireland on a winter's eve. Íth traveled to Ireland and met the gods there. Fearing that Íth coveted Ireland

the Danann kings killed him. His son and followers escaped to report his murder to their kinsmen the Sons of Míl, the warlords of Briganza.

Íth's nephew Míl had spent years abroad. He had taken a princess bride in Fenius' Caspian Sea principality, retraced his ancestors' route to Egypt as a mercenary and adventurer, learned sorcery and taken an Egyptian princess bride there before reversing his route back to the Caspian Sea and then to Briganza. After fathering two more children there he died of plague.



Míl's eight sons led an invasion of Ireland to avenge Íth's murder. The Gaels overcame the magic of the Túatha Dé Danann with the spells of their druid Amorgen, driving the gods

underground where they devolved into the fairies of the mounds. The Gaels took control of the half of Ireland above ground, completing the legendary invasions of Ireland.

Lebor Gabála Érenn survives in nineteen variously-mutated 12th-17th century manuscripts that preserve four "redactions" of a 10th-century compilation with 7th-century antecedents that assembled the Gaelach origin story, legendary invasions of Ireland, king lists, genealogies and Biblical exegesis into one document. Due to miscopying, misunderstanding and embellishment the narrative evolved with each redaction, culminating in the rich mythology of the 17th-century annals and histories best-known to modern antiquarians. Surviving elements of the core stories became indistinguishable from the debris. The compilations took on the appearance of an indecipherable morass of myth.

Sources

Several expressions of Ireland's traditional history that were earlier than the oldest surviving *Lebor Gabála Érenn* manuscript still survive. The most significant are the 1st-millenium AD poems of Cenn Fáelad, Mael Mura Othna and Eochaid ua Flainn, *Cormac's Chronicle* and *Reim Riograide* (the *Roll of Kings*). They tell a substantially different and far-less mythologized story than that of the later manuscripts.

There are Irish manuscript attestations to even earlier sources. The earliest-named scribe of Gaelach history was claimed to be Ethriel mac Íriel Fáid mac Eremon mac Míl, the 6^{th} Gaelach king of Ireland (*c*.1067-1047 BC), although there is no evidence of a written record of an Irish history, genealogy or king list back to his time.

However the baby should not be thrown out with the bath water. Presumption that Irish "tradition" was conceived in the Middle Ages to embellish synthetic genealogies invented by upstart dynasties requires that the Medieval Irish either had no origin traditions or that they were readily erased, neither of which seems particularly likely. Historically genealogy was central to Irish culture. It played the pivotal role in the political divisions of Ireland. Every aspect of

privilege from freeman rights to túath territorial claims and customary alliances was contingent upon carefully-counted descent from a Gaelach invader.

It should not be novel to presume that the invaders themselves carried that genealogical tradition to Ireland and that it was recited down to the Latin-literate era just as the Sanskrit *Vedic Samhitas* and the Iranian *Avesta Yasna* were. The *Rigveda* has been shown to have been composed before 1100 BC and the other *Samhitas* not more than a couple centuries later. They were orally transmitted until the 11thcentury AD, centuries later than many Irish narratives. Keating (*Foras Feasa ar Eirinn*, 1634) asserted that standard narratives were earlier maintained by regularly-scheduled recitals before critical conventions of the learned. The histories were so esteemed that they could only be narrated by *ollamhs*, 'professors' who had spent twenty years learning them. The testimony describes a regulated, professional and orderly system of oral transmission.

Not so the manuscript record. Modernly accustomed as we are to the standardization inherent in mechanical replication most people are unaware that manuscript copyists regularly butchered their exemplars. Jerome said of the Bible that there were "as many readings as copies…by stupid interpreters badly translated, by presumptuous but unskilled men perversely amended, by sleepy copyists either added to or changed about." Sulpicius Severus concurred: "But I do not doubt that the truth had been falsified by the carelessness of copyists, especially since so many ages intervened, rather than that the sacred writer erred. In the same way, in the case of this little work of ours, we believe it will happen that, through the negligence of transcribers, those things which have been put together, not without care on our part, should be corrupted."

The Irish testimony to the regulation of oral transmission "with witnesses according to the rules and catalogues" stands in stark contrast to the wild mutation of the manuscript narratives over the course of their transmission. Given the multi-millennial oral communication of the *Rigveda* and the *Avesta* there is no defensible reason for dismissing like transmission for Irish traditions out of hand.

Attestations to two pre-6th century Irish chronicles, the 3rd-century *Saltair Temhra* and the 5th-century *Cín Droma Snechta* abound but no copies of the works themselves exist. The 6th-century *Dindshenchas* (*History of Places*; the oldest manuscript is from the 12th century and some scholars would place its composition there, but it catalogued place-names that became obsolete by the 5th-century) related that Cormac mac Airt ua Cuinn (*c*.233-273 AD) recorded the history and political affiliations of Ireland in the *Saltair Temhra*:

Cormac, who gained fifty fights, disseminated the Psalter of Temair; in this Psalter there is all the best we have of history. It is this Psalter that tells of seven warlike high kings of Erin; five kings of the provinces it makes, the king of Erin and her viceroy. In it is set down on every hand what is the right of every king of a province, what is the right of the king of Temair eastward from the kind of every songful province; The correlation, the synchronising of every man, of each king one with another together; the limits of every province marked by a stone-rick, from the foot to the full barony.

The *Annals of the Four Masters* (1631) said that Cormac mac Airt "was a famous author in laws, synchronisms, and history". From the *Dindshenchas* and the 12th-century *Lebor na hUidre* the Four Masters concluded that:

It was this Cormac, son of Art, also, that collected the Chroniclers of Ireland to Teamhair, and ordered them to write the chronicles of Ireland in one book, which was named the Psalter of Teamhair. In that book were the coeval exploits and synchronisms of the kings of Ireland with the kings and emperors of the world, and of the kings of the provinces with the monarchs of Ireland.

In his retirement Cormac mac Airt was also said to have composed the *Teagasc na Rioigh* (*Instruction of Kings*), a copy of which survives in the 14th-century *Book of Ballymote*. If the *Saltair Temhra* genuinely existed, its absence is not particularly surprising. Even much later material hasn't survived, including any copies of the original 10th-century *Lebor Gabála Érenn* (itself successor to a 7th-century exemplar known to Nennius). Most surviving manuscripts date from later than the 12th century and the late-12th-century *Book of Leinster* said that only a "few fragments" of the *Saltair Temhra* still existed in its time.

Cín Droma Snechta is another lost "Irish World Chronicle"². The Book of Leinster said that:

² World Chronicles synchronized king lists and events with Christian Biblical chronology.

Ernin, son of Duach, that is son of the King of Connacht...it was he that collected the Genealogies and Histories of the men of Erinn in one book, that is the Cin Droma Snechta.

Ernin mac Duach was said to have done so at the behest of St. Patrick, a reasonable scenario given that Patrick's mission would have been the principal beneficiary of intertwining Irish traditional history with Christian canon. Although scattered citations derived from an 8th-century copy (many scholars take that as its date of creation) of it survive, *Cín Droma Snechta* itself was lost in Cromwell's 17th-century pillage of Ireland.

The earliest surviving account of the seven pre-Gaelach invasions of Ireland is the redaction of the long poem *Scél Tuáin meic Chairill* by Eochaid ua Flainn (936-1004). Ua Flainn himself, however, said that the learned Columcille (d.597) of Iona composed it from the recitation of his abbot (and later adversary) Finnian of Moville (c.560), who in turn is said to have heard it from the hermit-prince and poet Túán mac Cairill, Fintán's Partholónian double.

The poem *Doluid Mílid asin Scithía* attributed to Cenn Fáelad mac Aillelo (*d*.679) recounts the adventures of Míl and the invasion of Ireland by his sons. Cenn Fáelad was said to have had an unfailing memory and to have recorded scholars' daily recitations nightly. Whether or not the ascription to Cenn Fáelad is accurate (and it may not be; the language and meter of the poem belong to a later period) the narratives recorded would have had earlier traditional, oral origins.

The *Reim Riograide* (*Roll of Kings*) absorbed by *Lebor Gabála Érenn* dated back to the 8th century. It listed the kings of Ireland along with the lengths and notable events of their reigns. The *Roll of Kings* was the anchor of the Irish chronology of antiquity; the timeline of the earliest *Irish World Chronicle* must have fit the *Reim Riograide* record.

Mael Mura of Fathain's (*d*.887) poem *Duan Erenach* (aka *Can a mbunadas na nGaedel*, '*The recitation of the origins of the Gaels*') tells the origin-story of the Gaels from Fenius Farsaid down past the invasion of the Sons of Míl to the genealogies and patrimonies of their descendants. It is the oldest surviving source for the origin story of the Gaels. Although it was

transcribed (and curiously translated) a century and a half ago, it has never been seriously studied.

The jumbled *Laud Synchronisms* survive in a 15th-century copy of an 11th-century *Psalter of Cashel* containing *Cormac's Chronicle*, ascribed to Cormac Mac Cuillenan (*d*.908). It is an *Irish World Chronicle* epitome beginning with the landing of the Fir Bolg in Ireland and continued down to Brian Boru, the seventh Munster king following Cormac. The reason why no earlier copies of any *Irish World Chronicle* may survive was stated by Conell Macgeoghagan in his 1627 *Annals of Clonmacnoise*: that Brian Boru commissioned the *Psalter of Cashel* and distributed copies of it to the five provinces "wth straight Charge, that there should be noe credit giuen to any other Chronicles thenceforth, but should be held as false, Disannulled & quite forbiden forever". The measure of how effective Brian Boru's revisionism may have been is the fact that no earlier *Irish World Chronicle* than *Cormac's Chronicle* survives.

Interestingly, although it dated "event-tokens" using Bede's *Chronicon major* (725), *Cormac's Chronicle* was set in Eusebian *Chronikoi kanones* (326) columnar format, known to the west via Jerome's Latin *Chronicon* (391) translation and continuation of it. The reigns *Cormac's Chronicle* gave for the "Kings of the World" were Eusebian while those for the Hebrew judges and kings followed Bede. It appears that contemporarily-orthodox Biblical dates from Bede overwrote an earlier, discredited Eusebian timeline while preserving the latter's distinctive format and its secular chronology.

World Chronicles

That fits the record of the Christian orthodox "*World Chronicle*" being replaced twice over the course of the 1st millennium AD to accommodate Doomsday reckoning. The concept that *Sex Aetes Mundi*, the six ages of the world between Creation and Armageddon, were almost over was a powerful tool of Christian proselytizing. The interpretation of *Septuagint (LXX) Bible (3*rd century BC) chronology by Josephus and Africanus and the chronicles of AD 121, Hippolytus, *Chronographus Anni CCCLIIII (Liber Generationis)*, the *Barbarus of Scaliger (Chronicle of Alexandria)* and Sulpicius Severus' *Chronicorum Libri duo* was that Christ was either born or

crucified in *Anno mundi* 5500. By that chronology chiliasm predicted that the world would end in AM 6000, or sometime between AD 495 and 532.

When the Second Coming failed to materialize by AD 532 the *c*.5500 BC Creation chronologies were discredited. The scholar Eusebius of Caesarea had published a variant *LXX* chronology in AD 326 that collated Biblical and dynastic chronologies in columns. Eusebian chronology placed Creation in 5200 BC and postponed Judgement Day to AD 801. Through Jerome's Latin *Chronicon* continuation its chronology became orthodox in the Roman church after AD 532. The Deluge was moved from 3261 to 2958 BC, Exodus from 1686 to 1512 BC and Solomon's Temple from 1098 to 1033 BC. The reformation was so thorough that worldwide only a single Vatican copy of Sulpicius Severus' *World Chronicle*³ modernly survives.

In AD 800 Pope Leo X created the Holy Roman Empire and anointed Charlemagne its Emperor in expectation that the City of God was about to materialize. When the world continued to turn Eusebian chronology was in turn rendered irrelevant. Christians chose between two options. The first was that each of the Six Ages necessarily included a thousand years, postponing Armageddon until the millennium, two hundred years away. The second was to repudiate chiliasm altogether, a position championed by the scholar Bede in his influential AD 725 *De Temporum Ratione*.

Chronologies	Sulpicius		Jerome		<i>ps-</i> Philo		Bede	
Event Tokens	AM	BC	AM	BC	AM	BC	AM	BC
Creation	1	5503	1	5200	1	3760	1	3952
Deluge	2242	3261	2242	2958	1652	2108	1656	2296
Abraham	3311	2192	3183	2017	1944	1816	1948	2004
Tower					2002	1758	1757	2195
Exodus	3817	1686	3688	1512	2444	1316	2453	1499
Temple	4405	1098	4167	1033			2933	1019
Nativity	5500	4	5198	2			3952	1

See <u>nemhnain.net/chronologies.html</u> for more Biblical chronologies of antiquity.

³ Online at <u>http://www.ccel.org/ccel/schaff/npnf211.ii.vi.html</u>

Bede introduced his own *Vulgate-Bible* based chronology in the same volume. His *Chronicon major* adopted BC/AD dating, placed Creation in 3952 BC, the Deluge in 2296 BC, the Tower of Babel in 2195 BC, Exodus in 1499 BC, Solomon's Temple in 1019 BC and declared that the date for the end of the world was known only to God. The Irish clearly embraced Bede in the centuries following Eusebius's *c*.AD 800 demise.

The columnar format and *Reges Mundi* time spans of the 9th-century *Cormac's Chronicle* are powerful indications that Irish tradition was previously synchronized to Eusebius (although it should be noted that surviving Eusebian synchronisms besides the "Kings of the World" in *Cormac's Chronicle* appear to have been composed later than the 10th century). Other circumstances suggest that the *Irish World Chronicle* was recorded before AD 500 synchronized to Sulpicius Severus' *Chronicorum Libri duo* 6,000-year timeline, and that it was overwritten twice, first by Eusebian chronology and in turn by Bede's. The choice between whether the *Irish World Chronicle* was an invention of the 9th century or that Bede's overwrote an earlier chronology is clear. Besides the fact that *Cormac's Chronicle* clearly had earlier antecedents it is absurd to propose that a Christian-era fabrication of any magnitude could have been foisted upon a population in spite of and in place of their own cultural and political traditions.

Patrick's mission brought Sulpicius Severus' *Vitae Martini* (and probably his Paschal table) to Ireland; it would be unlikely that his AD 401 *Chronicorum Libri duo* did not also accompany the Christian mission. Also known as *Historia sacra*, it editorially continued the *Chronographus Anni CCCLIIII* (the *Chronography of 354*, itself a continuation of the AD 235 *Chronicle of Hippolytus*) down to the end of the 4th century AD. Irish *Reim Riograide* chronology fits together with Sulpicius' event-token anchors like pieces of a puzzle. The sorted sum of kings' reigns listed in *Cormac's Chronicle* from the invasion of the Sons of Míl to the 4th year of Loiguiri Mac Neill subtracted from 1100 BC places the arrival of Patrick in AD 431. The error is one year over a span of 1,532 years⁴.

The synchronism of Irish proto-history to the *Chronicorum Libri duo* is ultimately confirmed by "computus"-derived invasion dating, but it is also indicated by the positioning of the Tower of

⁴ see <u>nemhnain.net/kinglist.html</u> the list in *Cormac's Chronicle* sorted according to *LGE* R2 551.

Babylon in Irish chronology. No *World Chronicle* timeline ever placed the Hebrew Exodus only a generation after the Dispersal from the Tower as it occurs in Irish narrative. For instance the antecedents of *Chronicorum Libri duo* placed the Dispersal about 2700 BC and Moses' Exodus 1690-87 BC. *Chronicorum Libri duo* echoed them in placing Exodus at 1686 BC but left the passage dating the Dispersal entirely out of its chronology.

The Irish almost certainly derived their Tower of Babylon dating from *pseudo*-Philo's *Liber Antiquitatum Biblicarum*, a pre-AD 70 Biblical commentary which placed the Dispersal in 1748 BC (the modernly-accepted date for Hammurabi's death is *c*.1750 BC). Only the Tower chronology of *Liber Antiquitatum Biblicarum* fills the void in *Chronicorum Libri duo* in any way that explains the timeline of Irish Biblical event-tokens. Computus (see below) clearly confirms the textual evidence that the *Irish World Chronicle* was synchronized to Sulpicius Severus' *Chronicorum Libri duo* before it was rewritten into Jerome's chronological table which was in turn overwritten with dates from Bede.

The Irish World Chronicle

Lebor Gabála Érenn stated that it recounted eight ancient colonizations of Ireland. By the 10th century AD the invaders came to be understood as Cessair, Partholón, Nemed, the three battalions of the Fir Bolg, theTúatha Dé Danann and the Gaels. Internal evidence makes it clear that this was not the original pantheon. Cessair was a late invention and *The Book of Lecan* explained that the three peoples of the Fir Bolg invasion should correctly be counted as a single invasion. Cessair was created and the Fir Bolg multiplied to fill the void left by three earlier invaders that had been written out of the narrative.

The lost invaders were Banba, the trio Capa, Luasad and Laigne, and Cichol nGricenchos. An earlier understanding appears to have recognized the eight invaders as Banba, the Iberian triad, Cichol, Partholón, Nemed, the Fir Bolg, the Túatha Dé Danann and the Gaels.

The Biblical "event-tokens" that the Irish manuscripts used to date their traditional history were the Deluge, the Dispersal and the kingship of Solomon. *Chronicorum Libri duo* gave 3261 BC as the Deluge year and 1101 BC as the first year of Solomon. The landing of the Gaels in Ireland

was assigned to the second year of Solomon, while the invaders Banba, the three Iberian fishermen, Cessair, Cichol and Partholón were synchronized to the date of the Deluge.

Placements of some persons within the spans are not well defined. Pre-invasion Gaelach chronology does not specify the lengths of the reigns of the kings between Níl and Sru and between Brath and the Sons of Míl. Reconstructed *Chronicorum Libri duo/ Liber Antiquitatum Biblicarum*-synchronized Irish chronology supplies plausible time-spans for the Gaelach genealogy: the five prosperous reigns in Babylon and Egypt average forty-six years; the five turbulent generations in Scythia average twenty-one years; the six less-eventful reigns in *Golgatha Gaethlaigib* thirty-three years and the five generations of the Briganzan period twenty-seven years.

Interval	Year
240 years before the Deluge	3501 BC
Anno Mundi 2242	3261 BC
300 years after the Deluge ended	2960 BC
190 years after Cichol	2770 BC
550 years after Partholóns landing	2220 BC
30 years after the Partholónian plague	2190 BC
630 years later	1560 BC
230 years later=1330=4 year disconnect.	1334 BC
30 years later	1304 BC
204 years later	1100 BC
340 years after LAB's 2108 BC Deluge	1768 BC
leader of the sons of Japheth at the Census	1768 BC
350 years after the Deluge	1758 BC
10 years later	1748 BC
40 years after departing from home	1728 BC
Anno Mundi 3817	1686 BC
440 years before Gaelach invasion	1540 BC
100 years later and 7 years wandering	1433 BC
200 years later	1233 BC
133 years later	1100 BC
2 years later, Anno Mundi 4405	1098 BC
	 240 years before the Deluge Anno Mundi 2242 300 years after the Deluge ended 190 years after Cichol 550 years after Partholóns landing 30 years after the Partholónian plague 630 years later 230 years later=1330=4 year disconnect. 30 years later 204 years later 340 years after LAB's 2108 BC Deluge leader of the sons of Japheth at the Census 350 years after departing from home Anno Mundi 3817 440 years before Gaelach invasion 100 years later and 7 years wandering 200 years later 133 years later

Chronicorum Libri duo dates shown in blue; *Liber Antiquitatum Biblicarum* chronology in green. For sources of *Lebor Gabála Érenn* time spans shown above see <u>nemhnain.net/invasion_dates.pdf</u> No intervals given for Nemed fit any chronology synchronized to any *World Chronicle*. The lengths of the Nemedian occupation and post-Nemedian abandonment quoted here were chosen solely and spuriously because they yield the least chronological disconnect between the invasions of the Nemedians and the Fir Bolg: four years.

Computus

The Sons of Míl were said to have conquered Ireland on Thursday, May 1st the 17th of the moon. The odd dating expression is a relic of ecclesiastical calendar Paschal reckoning. Easter was celebrated on the Sunday on or following the first full moon after the Spring Equinox; if that day was Passover then Easter moved to the following Sunday. The dates of future Easter Sundays were calculated and listed in calendrical Paschal tables. Conversely, given a particular day of the week (the ferial) and age of the moon (the epact) on any given calendar date the year could be determined by calculation or by reference to a Paschal table.

Weekdays can be counted backward or forward through the years simply by subtracting or adding a day for each year and an extra "solar" leap-day every fourth year. The age of the moon was counted through the year by mixing 30- and 29-day lunar months so that each New Year the age of the moon increased by 11, except in "lunar" leap years where it increased by 12. By assorted calculations the "saltus" lunar-leap-year was counted every 16, 12-or-14 or 19 years in cycles of ferial-epact combinations that repeated every 112, 84 or 532 years.

Several variations of those three cycles were used over the course of the first millennium AD (in the mid-7th-century AD the Irish bishop Cummian knew of ten). Many cycles were used over time because all Easter cycles eventually drifted out of synchronicity with the actual phases of the moon. As cycles fell out of parallel with observable lunar phases they were updated or replaced with new calculations.

The old Greek 8-year astronomical cycle inspired Hippolytus' AD 222 112(16)-year Roman cycle begun AD 217. Its wild inaccuracy led to its swift replacement by the Roman 84(12)-year cycle and its "Celtic" 84(14)-year variation. The Roman and Celtic 84-year cycles differed not

only in their twelve- and fourteen-year saltus cycles and the sequence of 29- and 30-day lunar months but also because they counted the age of the moon a day differently. Romans began the day at midnight. Celts advanced the day count when the sun set. Celts counted the moon on the evening before the calendar day, Romans counted it after sunset on the calendar day.

The earliest known Roman 84(12)-year cycle was that of Augustalis, begun in AD 213 or 222 and adopted in AD 235. Because it accumulated a one-moon-day error every 64 years the 84-year cycle was periodically restarted until its latest use in the late-7th century.

In Alexandria Christian computists had adopted a 19-year saltus cycle by mid-3rd century. It only gained a day every 316 years. Over time its greater accuracy became obvious. Two variations of the 532(19)-year cycle were unevenly adopted in the west beginning in the mid-5th-century, the Victorian and the Alexandrian. 19-year reckoning came to replace the 84-year cycle in Ireland over the course of the 7th century.

Regarding 84-year cycles, only 84-of-210 (7*30) possible ferial-epact combinations appeared in any given cycle. Each of those ferial-epacts repeated every 84 years. In 19-year cycles 133-of-210 possible ferial-epacts occurred and repeated in 95-year cycles on an average of every 133 years. The odds against any ferial-epact randomly appearing in a single given year of a particular 84-year cycle are 1-in-525 (210/84*210). For a 19-year cycle the odds are1-in-332 (210/133*210). Especially where multiple ferial-epacts within a single Paschal cycle match invasion dates synchronized to a single chronology their occurrences are very unlikely to be coincidental. For instance the odds against two ferial-epacts appearing in calendar years that synchronize to a particular *World Chronicle* in a given computus cycle increase to 1-in-275,100 (525*524) and 1-in-109,892 (332*331) respectively.

Analysis⁵ of the manuscript ferial-epact dates that fit time spans and *World Chronicle* eventtokens shows that almost all of them occur clustered in an 84-year cycle synchronized to

⁵ See <u>nemhnain.net/summary.html</u>. For the complete Paschal Cycle tables see <u>nemhnain.net/cycles.html</u>.

Chronicorum Libri duo and in 84- and 19-year cycles keyed to Jerome's *Chronicon*. The correspondences are very, very unlikely to be merely coincidental.

The clusters of ferial-epact dates that occur synchronized to *Chronicorum Libri duo* are substantial evidence that Irish proto-history was originally synchronized to Sulpicius Severus' chronology. The odds against the *Chronicorum Libri duo*-synchronized ferial-epact dates for the Gaelach and Danann invasions randomly appearing together in any one of the fifteen 84-year computus cycles examined are greater than 18,000-to-1 (275,100/15). It is almost certain that Irish proto-history was once synchronized to Sulpicius Severus' *Chronicorum Libri duo*.

It appears that ferial-epacts for the invasions by the Sons of Míl and the Túatha Dé Danann (and probably for the Fir Bolg and Banba as well) were synchronized to *Chronicorum Libri duo* event-token dates using a 3rd-century 84-year cycle⁶, perhaps one that did not survive. The earliest 84(14)-year cycle modernly known to have been used in Ireland was that of the *Padua Latercus*. By Celtic preceding-evening count its epacts best fit actual lunations (derived using the astronomical software *Redshift 5*) keyed to an AD 354 start year. Since the cycle does not yield the series of invasion ferial-epacts that a cycle synchronous with 3rd-century lunations produces it appears that just such an earlier cycle must have been operative previous to the *Padua Latercus* cycle's deployment⁷. Its 3rd-century start date leaves the possibilities open that it was employed in Cormac Ua Conn's 3rd-century *Saltair Temhra* and that the time spans relating it to *Chronicorum Libri duo* were a later addition, or that it was introduced to Ireland by Patrick's mission.

⁶ The ferial-epact data given for the invasions by the Sons of Míl, the Túatha Dé Danann and possibly the Fir Bolg and Banba could all occur synchronous with Sulpician chronology in 84(12)-year cycles if they were begun in AD 216-220, 228-233 or 240-244, and in 84(14)-year cycles if they were begun in AD 209, 222-223, 236-237, 250-251, 264-265, 278-279, 292-293 or 306-307, when the January 1st epacts necessary to produce the invasion chronology were synchronous with actual lunations. In later years the epact cycles capable of producing those combinations would have progressively drifted out of synchronicity with observable lunations. The cycle that produced them became less and less likely to remain operative. In fact, the 4th-7th century 84(14)-year cycles that modernly survive (including the 84(14)-year cycle begun in AD 437 that was employed by the *Annals of Ulster* and the *Annals of Inisfallen*) do not produce any clusters of invasion ferial-epacts. It appears that the original ferial-epact dating of the Irish invasions was made using a 3rd-century Paschal calendar. See 3rd-century computus cycle analysis at nemhnain.net/fit.html.

⁷ See <u>nemhnain.net/exodus.html</u>. A single lunar date in *Liber Generationis II* appears to have been applied by Eusebius himself to a 3rd-century 84-year cycle to derive 1512 BC as the year of Exodus. Separately and less-elegantly the computist in *Liber Generationis II* applied the lunar date to a different 84-year cycle to give 1688 BC.

An isolated ferial-epact synchronism (3-17) for Partholón's landing 300 years after Jerome's date for the Deluge appears in several 3rd-5th-century 84-year cycles. The 3-17 ferial-epact also appears in 4th- and 5th-century 84-year cycles 311 years post-Deluge, another time-span given for Partholón; it looks suspiciously like 311 years was calculated by a later computist who was unaware that the intended 300-year synchronism to 3-17 could only be derived using an earlier Paschal cycle.

Three synchronisms to Jerome's chronology occur in most 19-year cycles. The ferial-epact 7-15 fits Banba 240 years before the Eusebian 2958 BC Deluge, just as it does in many 84-year cycles. The ferial-epact 3-14 accommodates both Cichol 300 years after the Deluge and Partholón 190 years following Cichol, which seems to have been the original understanding. The cluster of three dates appearing in one cycle, even though two of them are tentative, is unlikely to have been serendipitous. They appear to have been derived by synchronizing existing manuscript time-spans to Jerome's chronology and the 19-year Paschal table that was currently in vogue.

The pattern of synchronisms suggests that those for Cichol and Partholón were made separately and later than those for the Gaels, the Túatha Dé Danann, and the Fir Bolg; that Banba was still in the pantheon when Cichol and Partholón were added; and that Cessair was a later invention who replaced Banba and absorbed her ferial-epact date along with her identity. The evidence indicates that the ferial-epacts were derived over a succession of Paschal cycles and that Sulpicius' chronology was replaced by Eusebius' *Chronikoi Kanones* via Jerome's translation before *Cormac's Chronicle* adopting Bede's chronology was recorded in the late 9th-century. The Irish would logically have known an 84-year cycle pre-AD 532 when *Chronicorum Libri duo* was *en vogue*. Both 84- and 19-year cycles were employed by Irish computists between *c*.AD 532 and 800 when Jerome's translation of Eusebius' *Chronikoi Kanones* was the canonical chronology of western Christendom. The literary evidence suggesting that the tales of the Gaels, the Túatha Dé Danann, the Fir Bolg and Banba were later joined by those of Partholón and Nemed, and that Cessair later replaced Banba, perfectly fits the chronological order in which their invasion ferial-epacts appear in the succession of Paschal cycles.

The accumulated evidence clearly indicates that the *Irish World Chronicle* was synchronized to *Chronicorum Libri duo* event-token dates sometime before AD 500. Other observations regarding the legendary invasions of Ireland indicate that this earlier understanding of Irish traditional history was fundamentally different from that which has been modernly presumed.

The Invaders of Ireland

The occupations of Ireland by Banba, Capa, Luasad and Laigne and Cichol are only sketchily attested to. However testament to Banba is firmly rooted by its attribution to the allegedly-5th- century *Cín Droma Snechta*. Cessair, Partholón and Nemed are first encountered packaged together in two 10th-century poems that attributed their narratives to 6th-century sources contemporary with the recording of the *Dindshenchas*⁸. *Scél Tuáin meic Chairill* credited its story to Columcille via Finnian via Túán. *Incipit Do Suidigud Tellaich Temra (The Settling of the Manor of Tara)* was said to have been narrated by Fintán to Ard Rí Diarmait mac Cerbaill and assembled sages.

Given that Fintán was summoned from his residence at *Dun Tulcha* (Fort Hill) in late-conquered northwest Kerry and that Túán was a hermit of *Benna Bairche*, the wild Mourne Mountains of County Down and that their testaments came from outside of the Gaelach corpus, their tales may have represented the traditions of peoples more ancient than the Gaels who were marginalized to the refuge of the glens and mountains by the succession of invaders, but never lost their ancestral identities.

Columcille and Finnian split over the ownership of Columcille's copy of Finnian's *Psalms*. High King Diarmait judged in favor of Finnain, but was defeated at "the Battle of the Books" (c.560) by the kinsmen of Columcille. Fintan and Túán could possibly represent witnesses from separate traditions called up to recount the same material by the competing camps.

⁸ The Four Masters said that Aimhirgin son of Amhalghaidh son of Maoilrian wrote the *Dindshenchas*. He was the filé of Diarmait mac Cerbaill but the composition of the *Dindshenchas* appears to date back nearer to the time of Cormac.

In any case the stories of the early invaders should be considered separately from those of the Gaels, Fir Bolg and Túatha Dé Danann. The latter three were woven together in a separate narrative synchronized to a disparate *World Chronicle* using a different computus table. The later invaders were also ostensibly directly known by the Gaels; descendants of the Fir Bolg were still enumerated in the west of Ireland into the 1st millennium AD, while Cessair, Partholón and Nemed seem only to have been known by testimony from outside the *Reim Riograide* corpus. Banba, the three Iberians and Cichol appear to have filled a literary niche lying somewhere between.

Banba

The copy of *Lebor Gabála Érenn* in the *Book of Fermoy* quotes the lost *Cín Droma Snechta* regarding Banba ('Unpastured land'):

Banba was the name of the first woman who found Ireland before the Flood, and that from her Ireland is called "Banba". With thrice fifty maidens she came, and with three men. Ladra, one of the three men, he is the first dead man of Ireland at that time: from him is named Ard Ladrann. Forty years were they in the island: thereafter a disease came upon them, so that they all died in one week.

Afterward Ireland was for two hundred years without a living person and thereafter came the Deluge. A year and forty days was Ireland under the Deluge.

Banba was replaced as the first invader but was never entirely erased from the invasion narrative. Cessair ('Spread, Carries') led the same fifty women and three men that Banba led. Banba sometimes survived as a woman of Cessair's company. *Duan Erenach* and *Lebor Gabála Érenn* after it made the Gaels' first battle in Ireland against Banba as the Túatha Dé Danann queen of *Tel Tuindi*, the 'Mound of Possession' on *Sliab Mish*, the 'Mountain of Judgement'.

By synchronism to *Chronicorum Libri duo*'s date for the Deluge the invasion by Banba and her colony of women would have been understood to be 3501 BC, a time that archaeologically has no particular significance. On the other hand Banba explicitly represented a relative understanding of the antiquity of Ireland's matrilinear heritage and antecedent right of possession over the claims of later male invaders. It is no wonder that as the pagan earth-mother of a society that honored the equal rights of women that Banba was overwritten with a Christianized double and drowned in the Deluge by the institutionally chauvinist monastic tradition.

The Iberian Triad

Cessair's fate of drowning in the Deluge was acquired from the second of the excised invaders. A poem, an interpolation in the first-recension *Book of Fermoy* and *Lebor Gabála Érenn*'s later recensions say that "another version" recorded that three Iberians named Capa, Luasad and Laigne were blown north to Ireland, explored its east coast from the River Bann south and returned with their households to colonize it before being drowned by the Deluge. The premise is sound: that the bulk of Irish colonization came via the Iberian peninsula is archeologically and genetically attested. Ireland lies only five-to-eight days sail from Briganza; because it is due north the route was simply navigated. A prevailing westerly "soldier's wind" and no intervening obstructions made it a relatively easy passage. Like Banba the Spaniards were dropped from the invasion count and replaced by Cessair sometime before the 11th century.

Cessair

Cessair took center stage in the poems of Eochaid Ua Flainn (*d*. 1004), but as late as the mid-17th-century the *Chronicon Scotorum* still understood that "*Heriu or Berba* (i.e., Banba) *or Cesair*" represented a single person.



This is the reason for her coming, fleeing from the Flood: for Noe said unto them: Rise, said he [and go] to the western edge of the world; perchance the Flood may not reach it.

Cessair's troop was composed of her father Bith ('Worldly'), her pilot-brother Ladra ('Crotch'), their cousin Fintán ("the White") son of Bóchrái ('King of the Sea') and fifty women representing the nations of the world. Cessair is said to have sailed to Ireland from the Meroe, the capital of ancient Cush on the upper Nile. Cessair's invasion was most often dated Saturday, May 1st, on either the fifth or the fifteenth of the moon. Her troop landed at Bun Suainme, overlooking the three rivers feeding Waterford harbor. The colony divided in three, each of the men being accompanied by a proportional division of the women. Ladra soon died from his buttock being pierced by an oar after he had suffered an excess of women. Bith died, and all the women were drowned in the Deluge. Only Fintán survived, by being reborn. He was credited with preserving the history of the invasions down through the ages, a role elsewhere filled by the Partholónian survivor Túán (see below).

Fintán is said to have been buried millennia later under another *Tul Tuindi* than that of Banba, his 'Mound of Possession' overlooking Lough Derg in Connaught.

Cichol nGricenchos

The third invader to be dropped from the count was Cichol nGricenchos d'Fhmórchaib, 'Kick of the Rattling Foot of the Sea Rovers', along with his three hundred followers. The *Fomoraig/Fomhoire* came to be conceived as monsters from under the sea (*fo-* understood as 'at the foot of, below', and *-muir* 'sea', otherwise construed to identify them as being from the African coast), but it appears clear that they were originally understood to be pirates (from the *fo-* root of 'exile, outlaw', and *-muir* 'sea'). A speculative etymology might associate the name with the modern Irish *fómhar-árech*, 'autumn-tribute', the season of the pirates' annual tax collection, but the net result still describes pirates. The Middle Irish *fomórach* and Scots Gaelic *foghmharach*, 'pirate, sea-robber', retained the original sense.

The Fomoraig reappeared throughout the invasion history of Ireland. The name did not seem to identify a single people periodically reappearing, but rather confederacies formed by disaffected warriors in the particular periods in which they appeared, exactly like the Vikings and buccaneers of historic times. Cichol's troop can only be identified with the Fomoraig's earliest appearance.

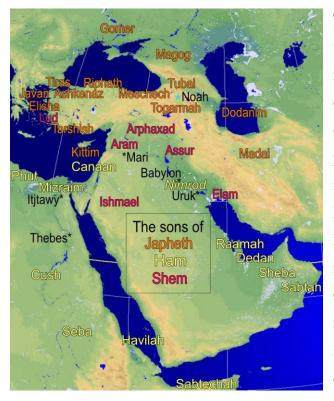
Cichol nGricenchos d'Fhmórchaib: 7 fir con óen-lámáib 7 con óen-chossaib ro fersat friss in cath. Kick of the Rattling Foot of the Sea rovers: and men with single arms and single legs they were who joined the battle with him. Post-10th-century manuscripts understood the description of the Fomoraig as "men with single arms and single legs" (and the later Fomoraig king Balor with his single evil eye) to identify them as monsters. The description more probably matches the modern-day image of the one-eyed, peg-legged, hook-handed pirates of the Caribbean. Cichol nGricenchos's poetic sobriquet would be modernly expressed as "peg-leg". The Fomoraigs' description reflects the historic incidence of maimed and crippled men driven to piracy by desperation.

Cichol's alleged Caucasus Mountains origins are also thought-provoking. The Caucasus was the cradle of Early Bronze Age technological innovation and diffusion. Technologies that appeared in Ireland originated there. The Irish invasion saga described rapid, long-distance movements of peoples quite unlike the "demic" diffusion model modernly hypothesized for archaeological shifts across Eurasia. While border-exchanges might explain the diffusion of Stone Age technologies, the manuscripts' descriptions of far-flung trade networks more plausibly accounts for the industrial scale of metals movement in the Bronze Age. Much of the transport must have been accomplished by sea-going groups that we would modernly characterize as pirates, trading and raiding depending on the opportunities at hand. Even going back to the Neolithic it is not impossible that an opportunistic cohort could have sailed from the Black Sea gateway of the Caucasus civilization to the western outer limit of the Eurasian trade network.

Cichol's father was identified as Guil son of Garg son of Tuathach son of Gomer, and his mother as Loth Luamnach ('Harlot the Restless') daughter of Neir. By the second and third rescensions of *Lebor Gabála Érenn* both parents were said to be from Mount Emoir in the Caucasus.

Cichol's great-great-grandfather was named Gomer. According to *Genesis X* and *I Chronicles* Gomer was a son of Japheth (Irish 'Iafeth') son of Noah. Noah's ark was said to have landed on the Trans-Caucasus Mount Ararat (in ancient Urartu, later part of Armenia, modernly eastern Turkey), and his descendants to have radiated out from there. Gomer and his sons Ashkenaz, Riphath and Togarmah were the *Table of Nations* progenitors of peoples that ringed the eastern Black Sea: the Phrygians, Paphlagonians, Cimmerians (and their descendants the Gauls and Galatae) and the Trans-Caucasus Georgians, Armenians and Iberians.

Ultimately all of the invaders of Ireland were given Caucasus/Central Asian origins. A poem that concluded the first redaction of *Lebor Gabála Érenn* declared that Partholón, Nemed, the Fir Bolg and the Túatha Dé Danann all descended from Japheth's son Magog. Although Magog was commonly portrayed elsewhere as the ancestor of the Scythians, the *Chronographus Anni CCCLIIII* made him the ancestor of the Celts: 'Magog, de quo Celtae et Galatae'. Gomer and Magog were variously given as the ancestor of the Gaels; the more-likely earlier understanding that the Gaels descended from Dodanim son of Javan son of Japheth still placed them at the borders of Scythia and the Caucasus.



The *Table of Nations* assigned that part of the world between the Atlantic Ocean and India north of the River Tigris to Japheth's descendants. Historically the mid-north latitudes of western Eurasia have been predominantly populated by Indo-European-speaking Caucasoid males belonging to the HG1 (P, Q, R, R2, and R1b, including the Irish R1b1c signature) and HG3 (R1a1) Y-chromosome groups. Modernly most linguists and geneticists identify the Caucasus or the neighboring steppe as the locus from which the descendants of both the proto-Indo-European language and the genetic "P" Y-chromosome signature radiated outward.

Nor did the Irish assertions stand alone. The Welsh *Cymry* were often associated with the steppe Cimmerians. The early-9th-century *Anglo-Saxon Chronicle* stated that "The first inhabitants were the Britons, who came from Armenia, and first peopled Britain southward. Then happened it, that the Picts came south from Scythia, with long ships..."

As incredible as it may seem, there is nothing genetic, linguistic, archeological or technological that refutes the Irish literary evidence for how Caucasus/Central-Asian genes, language and technologies reached Ireland. Irish proto-history preserves descriptions of mechanisms by which Indo-European languages and Caucasus technologies could have reached Atlantic Europe. Irish manuscripts appear to preserve a Bronze Age traditional history in a class with, and even less mythologized than, Homeric legend, the Hebrew *Bible*, the Iranian *Avesta Yasna* and the Sanskrit *Mahābhārata* and *Vedic Samhitas*.

Partholón

A hundred-and-ninety years after Cichol was understood to have set his wooden leg on Irish soil Partholón son of Sera was said to have arrived. The copies of *Lebor Gabála Érenn* almost universally agreed that Ireland was deserted for three hundred years after the Deluge, but apparently in ignorance of Cichol's place in the invasion sequence presumed that as the year of Partholón's landing. There seems to have been an earlier understanding that Partholón landed one-hundred-and-ninety years later than Cichol. After ten years in Ireland the Partholónians were said to have massacred the Fomorians at the first battle in Ireland at *Mag Ítha*, the 'Plain of Fat', ending their two-hundred-year tenure.

Partholón found only one unforested plain in all of Ireland, *Sén Mag*, the 'Old Plain' of Edar (also known as *Mag nElta* 'the Plain of the Flocks') west of Howth and north of the Liffey, "for there was unbroken forest in Ireland after the flood". Ireland remained heavily forested until the 17th century. Partholón and his followers legendarily settled the shores of nine rivers and three lakes. That detail fits the Neolithic (4000-2400 BC) pattern of agricultural introduction beginning on rich, easily-tilled bottomland soils. During his lifetime seven more lakes were said to have "burst forth", likely a fanciful mythologization of what must have originally been described as pioneering their shores.

Partholón himself was said to have settled on *Inis Samer* (Fish Island) below Assaroe Falls (*Ess Ruaid*, 'Waterfall of the Red One') and Lough Erne (*eorna*, 'barley'). The letter 'P' is a foreign sound in Irish (*Gaeilge*), indicating that the name Partholón was non-Gaeilge in origin. His name

is thought to be cognate with *Bartholomaios*, Greek for the Aramaic *Bar-Tholmai*, meaning "son of the furrows".



Partholón was credited with bringing late-Neolithic agricultural technologies to Ireland. Whereas the Fomorians were described surviving by Mesolithic "fishing and fowling" he was said to have introduced animal husbandry, oxen and ale-drinking from Sicily. Ale required barley cultivation and oxen provided the power for plowing. Partholónians were named as introducing the house and guesthouse, the cauldron over a fire, brewing, suretyship and "the first age of property".

A passage in the third redaction of *Lebor Gabála Érenn* amplified the poet Eochaid Ua Flainn's (*d*. 1004) chronologically-coherent details regarding the Partholónian colonization. It attributed the share-and-colter plough, the grinding quern, butter-churn, the house and the first poet, leech, gold merchant and cattle merchant in Ireland to the Partholónians.

It described Tairrle ('Leading') as the "head-ploughman" and Rimead ('Drilling') as the "tailploughman" and named the share and colter of the moldboard-plow *Fodbach* ('Cutting') and *Fetain* ('Bolt'). The primitive *ard* (scratch-plow) of the early Near Eastern Neolithic simply cut a trench in soft silty soils for seed planting. By the 5th millennium BC oxen were domesticated as draft animals in the Tigris-Euphrates and the Indus River valleys. The harnessing of oxen provided the traction to pull a share-and-coulter plow that could cultivate less pliable soils. The cattle were led by one ploughman while another maneuvered the plough.

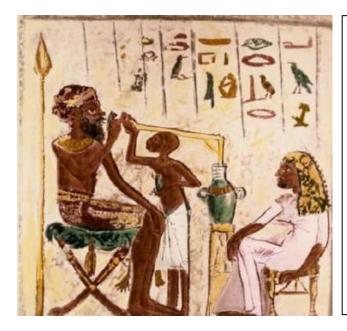
The "Celtic" plough added a horizontal plowshare and angled moldboard behind the vertical coulter that cut the trench. The plowshare cut the sod between the coulter's furrows while the mouldboard lifted and turned it over, suffocating weeds, killing grubs and insects and bringing nutrients to the surface. The Celtic plow made it possible to effectively cultivate dense and upland soils.

If Cichol's landing is fitted to the common Irish account that Ireland was empty for three hundred years after the Deluge ended, then by Sulpician chronology his arrival was 2960 BC. Partholón was said to have arrived a hundred-and-ninety years later, or 2770 BC ⁹. By *c*.4000 BC the moldboard plow had arrived in Britain but the archaeological record doesn't clearly show it in Ireland until the 3rd millenium BC. Cattle also made their first appearance in Ireland in the 3rd millenium BC. The assertion that Partholón brought harnessed oxen and the moldboard plow to Ireland comfortably fits within the timeline of the archeological evidence at hand.

It was the ancient Egyptian and Near Eastern custom to drink beer through a reed straw from the amphorae in which the barley was mashed and fermented. Clay amphora were tall two-handled

⁹ If counted from the year of the Deluge by Jerome's chronology, 2468 BC.

jars with narrow necks and bases. The choice of the Irish word *lestar* to describe Partholon's vessel possibly implies that an amphorae was meant: Old Irish *less* meant 'thigh'; Scots Gaelic *leasdair* means a vessel or lamp, both of which echo the amphorae shape.



The Book of Lecan narrated a scene where Partholón drank from a *measracha* 7 *cuislenna*, a dipper and a straw.

A Lebor Gabála Érenn poem agreed:

A lestar is a cuislenn... his vessel and his straw...

and

Partholón... Lestar do lind somilis/tomilis... Triasan cuislind n-óraigi. Partholón... A vessel of delectable beer... Three straws of red-gold.

Amphora were displaced in Europe by beaker service employing cups shaped like the crucibles that were used for smelting ore in furnaces. Beakers were a sophistication of beverage service over the unwieldy communal amphora. Beakers were introduced to Ireland by copper-working pastoralists after *c*.2500 BC, contemporary with the export of Irish Ross Island copper to Britain and the Continent. Elsewhere Beakers are presumed to represent the influence of proto-Italo-Celtic populations. Partholón drank from a chronologically-correct amphorae through a straw, not directly from a beaker cup. It is impossible to believe that Medieval monks could have conjured up the archaeologically-accurate Late Neolithic technologies that Irish manuscripts attributed to Partholón. The details regarding Partholón testify favorably to the authenticity of the Irish narrative.

The Partholónians were said to have been struck by a plague while gathered at Sén Mag on the first of May, centuries after the death of Partholón. Five thousand men and four thousand women were said to have died in a week's time.

Only Túán son of Starn survived, enduring the millennia as a stag, a boar, a bird and a salmon. After the salmon was eaten by Cairill king of Ulster's queen she gave birth to a son Túán mac Cairill. A commentary in the *Book of Lecan* said that "The learned say that he was Fintan Fineolach", Túán's double in Cessair's company. Fintán and Túán told similar stories.

Nemed

Nemed mac Agnomain do Grécaib Scithía, 'Sanctuary son of Fear-of-conflict of the Greeks of Scythia', was said to have landed in Ireland thirty years after plague wiped out the Partholónians. The first redaction of *Lebor Gabála Érenn* stated that he first set out a year-and-a-half earlier on the Caspian Sea in a fleet of forty-four longships, but that his alone reached Ireland.

Nemed defeated the Fomoraig *loingsig na fairgge*, 'rovers of the ocean' in three battles. He dug two *ríg-ráith*, 'royal forts' and cleared twelve plains; four lakes "burst forth" before he too died of plague. If there is an Irish personification of Beaker intrusion into Ireland, Nemed's 2190 BC invasion date fits the archaological time-line, albeit without any supporting manuscript evidence.

The Ancestry of the Gaels

Hundreds of years following the date of Nemed's invasion Fenius Farsaid was introduced as the Gaelach patriarch, traveling from his Caspian Sea homeland to the census of nations in Mesopotamia. By the timeline of the pre-70 A.D. Biblical commentary *Liber Antiquitatum Biblicarum* that year was 1768 BC. The reign of Hammurabi was *c*.1792-1750 BC. His empire succeeded by breaking the trade stranglehold of the Assyrians and spreading his rule of law to northern trade routes, allowing Central Asian resources to be carried directly to Babylonian markets. His empire collapsed via the same mechanism: bereft of strong leadership, power was usurped by the "Kassite" immigrants. Fenius' journey fits both the archaeologically-documented, contemporary influx of Central Asian Kassite charioteers into Mesopotamia and the modernly-accepted dates for the reign of Hammurabi, the Biblical *Nembros* (Nimrod) son of Ham son of Noah of Tower of Babel fame.

Liber Antiquitatum Biblicarum made one Feneth son of Dodanim son of Javan the leader of the sons of Japheth son of Noah at the Census and Tower of Babel. Feneth's brothers were named Itheb and Beath. The Welshman Nennius knew the genealogy as Baath son of Jobath son of Joham son of Japheth. *Lebor Gabála Érenn* made Fenius Farsaid the son of Bath son of Ibath of the line of Iafeth (Japheth). Fenius, Bath and Ibath are cognate with Feneth, Itheb and Beath.

The *LXX* (Greek *Septuagint*) Bible named "the sons of Jovan, Elisa, and Tharseis, Cetians, Rhodians" (the peoples of Ionia/the eastern Aegean, southern Anatolia/Iberia, Cyprus and Rhodes). The *Chronographus Anni CCCLIIII* named Javan as the ancestor of the Ionians, Greeks, Sicilians, Iberi, Etruscans, Latins, Romans and Rhodians. *Duan Eireannach* indirectly attributed Fenius' descent through Javan, ancestor of all the"Greek" peoples:

> The royal son of Noah, Japheth from him is our patrimony of the Greeks we are in our origin in our laws.

Incipit Do Suidigud Tellaich Temra agreed:

From the children of Míl of Spain and the Greeks are we from.

Fenius Farsaid was clearly earlier understood to have descended from Dodanim son of Javan son of Japheth son of Noah, not Gomer or Magog as *Lebor Gabála Érenn* later misconstrued.

The place identified as Fenius' Caspian Sea principality would seem to confirm that. The Biblical *Table of Nations* usually made "the Balkans" home to Dodanim. The Balkans, 'Ridges', are modernly understood as the mountainous country north of Greece, but the *Amu Darya* river of Turkmenistan anciently fell into the Caspian sea through a fault in a mountain range that is also called the "Balkhans". Those are the "ridges" that the original understanding of the origins of nations may have meant to identify the home of the descendents of Dodanim.

That would fit the statement in *Liber Antiquitatum Biblicarum* that Dodanim's descendants "were scattered abroad and dwelt on the earth among the Persians and Medes and in the islands that are in the sea". *Duan Eireannach* described the route leading to Fenius' homeland:

Don Don scithia co mbrig... for muncind mara caisp gabsat cethirn dilis... glass in coronis ar muir libis...

To the border of scythia... on the straits of the caspian sea they seized the fortress of their birthright... the stream to the corona in front of the muddy sea...

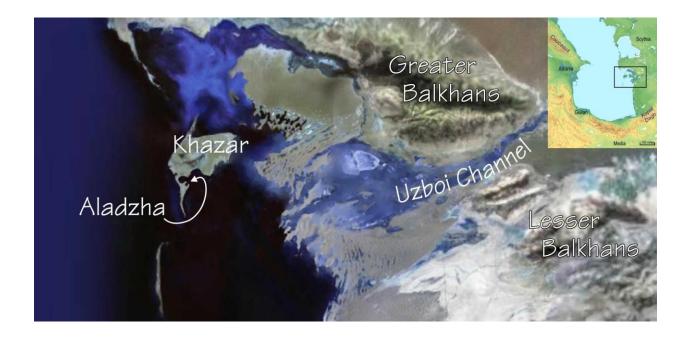
Muir libis meant 'muddy sea'(*láib*, mud, *liobh*, slime on water surface). *Amu Darya* is Turkish for 'Muddy Sea'. In ancient times that *Amu Darya* 'Muddy Sea' flowed west from the metal-rich Altai, Tien Shan, Pamir and Hindu Kush mountains through the narrow straights of the Uzboi Channel into Balkhan Bay, shielded from the open Caspian Sea by the arcing embrace of Khazar ('Wanderer') Island. The corona-shaped island lay at the borders of Scythia and the Persians and the Medes 'in front of the Muddy Sea'.

Lebor Gabála Érenn identified Fenius' principality as "the shielding arm of Scythia", The late-11th-century poet Gilla Coemáin mac Gilla Shamthainne called Fenius' homeland *Scithía scíath-glain*, 'the bright shield of Scythia' and *Scithía scíath-bricc*, the 'speckled shield of Scythia'.

The Irish *glain* means bright, glassy, polished. The ancient Greek word for 'bright' was *Oksi(s)*. It looks suspiciously like the river name *Oxsos* 'Oxus' was misread by a Greek-literate Irish compiler as *Oxsis* 'bright', although the pools of petroleum, ozokerite wax outcrops, *solonchak* salt pans and zinc-salt-crusted shores of Khazar could also plausibly explain a 'bright' association. In the 1st century BC, Strabo wrote that: "They say, diggers opened oily springs near the Okh River", referring to the *Oxsos*.

The Turkish word for 'speckled' is *aladzha*. Aladzha is the name for a bright, speckled wax of rare quality that was Khazar's chief export as well as the name of the island's superb harbor.

The identical, unusual meanings of the ancient Irish and modern Turkish place names appears to confirm that Fenius' principality was the port of Aladzha, 'Speckled', on the corona-shaped shielding arm of Khazar Island embracing Balkhan Bay and the ancient Uzboi Channel, the ancient Caspian outfall of the Amu Darya, the 'Muddy Sea'. Most of the rivers emptying into the Caspian Sea do so via broad deltas. No other river entered the Caspian Sea through "straits" other than the Amu Darya through the Uzboi Channel.



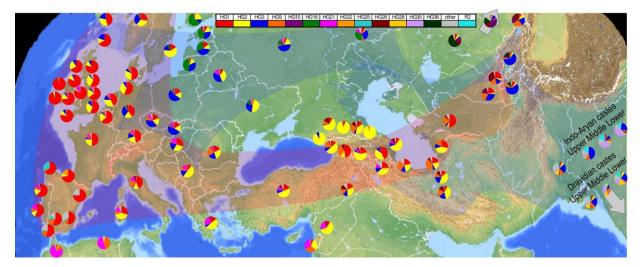
Linguistic and genetic evidence accommodate that location. *Gaeilge* is distinguished by many archaic grammatical conventions characteristic of the Centum Indo-European language spoken in Central Asia in the Middle Bronze Age. The Celtic languages are distinguished by old Indo-European strongly functional particles, pervasive mutation of initial consonents by eclipsis (voiced stop or nasalization) and lenition (softening with an /h/) and inflected/conjugated prepositions. They also retained old Indo-European prefixing of the consonants /n/ or /h/ to vowel-initial words.

Celtic's extensive reliance on initial mutations was also characteristic of the Anatolian languages Hittite and Luwian. Celtic shared archaic Indo-European features with Hittite, Phrygian, Tokharian and Italic (e.g. the impersonal verb form *-r), yet stayed in proximal contact with continuing Indo-European language evolution long enough to absorb some Indo-Iranian innovations. On the other hand, Celtic did not adopt linguistic changes shared by the *Centum* Thracian, Messapic, Albanian and Germanic languages, indicating that it left Central Asia before those languages emerged and emigrated west.

Insular Celtic's strongly inflected prepositions are a remnant of old Indo-European shared by Vedic Sanskrit that disappeared from other languages of the family. Italic and Celtic languages share innovations with Phrygian (the language of the Bosporus and southern Black Sea coasts) that demonstrate that they were in close contact with each other after they had evolved into distinct languages. Celtic and Italic also share lexical correspondences with words from the farthest-eastern Indo-European languages Tokharian, Sanskrit and Fārsi.

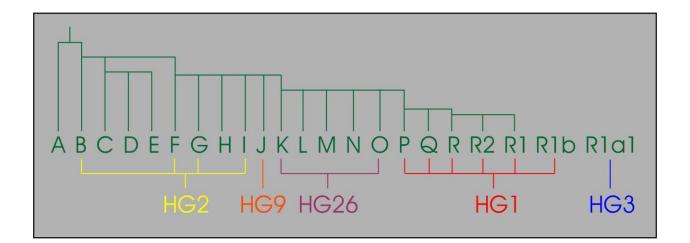
Goidelic (the insular Celtic language group composed of Gaeilge and its derivatives Manx and Scots Gaelic) is thought to have become distinguished from Celtic before 1200 BC. Gaeilge is the most conservative of the Celtic languages. Nothing about Gaeilge discredits Irish traditions regarding its origin and the manner and chronology of its evolution and transmission to Ireland. The Irish language might very well be linearly-descended from the Middle Bronze Age language spoken on Khazar Island.

The same holds true regarding Irish male genes. The HG1 Y-DNA signature of the R1b1c Atlantic Modal Haplotype and particularly the Gaelach Irish (Connaught males 98% HG1)



Eurasian Haplogroup Distribution, various sources. HG1 is represented in red radiating clockwise from 12 o'clock. clearly reflects "founder effect", a locally-pervasive genetic signature descended from a small invasive population. HG1 diminishes across Europe as one travel east, but despite millennia of occupation by Iranian and Turkish genetic groups HG1 still accounts for 52% of Turkmenistani Y-DNA, the highest percentage in any population east of Spain. R1b1c is also the most common R1b subclade in Turkey and Armenia.

European HG1 has conventionally been attributed to the post-glacial spread of Mediterranean Mesolithic genes northward. The presumption is largely based upon the perception that Basque male Y-DNA (89% HG1, largely R1b1c) must be as old as the pre-Indo-European Basque language. That position has been undermined by the calculated age of R1b1c (2200 BC). Caucasus-language features ascribed to the Basque tongue might be a better indication of the source of Basque male genetic stock, overlaid onto a culturally-resilient pre-Indo-European population geographically isolated from the operative language of the trade network continuum.



The Irish R1b1c sub-clade appears to be about three thousand years old. The insignificance of Iron Age Iberian R1b3 among Irish males suggests that the Gaels arrived earlier than 2,500 years ago. How closely akin Irish YCC R1b1c (ISOGG 2008 R1b1b2) may be to Turkmenistani HG1 will eventually become apparent as YCC results there are accumulated and published. Thus far the accumulated evidence accommodates linear descent; the ancestor of the Irish could very well have come from Bronze Age Aladzha exactly as the manuscripts state.

The Gaels

Duan Erenach recorded that Nél son of Fenius was recruited to Egypt by a "company of darkblue adornments". That detail identifies them with an Amun dynasty. Lapis Lazuli, "Egyptian blue", was the wind-god Amun's totem color. Nél's *c*.1730 BC journey to Egypt was contemporary with the *c*.1730 BC commencement of *Hyksos* ('Shepherd Kings') usurpation of Amun 13th-Dynasty power there. Neither Fenius in Babylon in the time of Hammurabi and the Kassites nor Nél in Egypt contemporary with the Hyksos annexation of the Eastern Delta would be unlikely; Central Asians are archaeologically known to have been central to both invasions.

The Irish language *Gaeilge* was legendarily assembled in Egypt by Nél's son Gaedil Glas. It is unlike all other Celtic languages in placing stress on the initial syllable. Goidelic is distinguished from all other Indo-European languages by unexplained Afro-Asiatic features (V-S-O syntax and the lack of the distinct verb "to have", for example; inflected/conjugated prepositions are also a feature of Afro-Asiatic). Elsewhere linguists explain adoptions of grammatical structure by close geographic contact during a language's formative period. It is not impossible that Gaeilge's peculiarities adapted Centum Indo-European to Afro-Asiatic language conventions for service as a *lingua franca* between Hyksos Central-Asian and Egyptian traders, exactly as the Irish manuscripts portray it.

The Irish manuscripts said that the Gaels under Gaedil's aged grandson Sru fled Egypt ahead of the revenge of Pharaoh "Tuir". Seqenenra Taa was the re-emergent Amun pharaoh who began the expulsion of the Hyksos several generations after their arrival. By Egyptian and Irish chronologies Taa (*c*.1558-1554 BC) and Tuir (1540 BC) are nearly contemporary. Taa was unknown to Manetho, so if the Irish "Tuir" meant Taa, the identification was not possibly a Christian-era embellishment. Unless Jerome's early-12th-centuryThuoris was meant, the Irish identification of Taa as Tuir can only have been a genuine contemporary identification or another in an improbable series of pure coincidences.

Irish accounts say that in the meantime the Nemedians had abandoned Ireland. After the death of Nemed his survivors had been forced to pay oppressive tribute of two-thirds of their produce, grain and milk to the Fomoraig sea-rovers. The Nemedians finally rebelled. Both parties fell in mutual slaughter, but thirty of the Nemedian warriors escaped. The survivors split up, some fleeing Ireland for *Móind Conáin* in Britain, others for *Domon* 'the sea' and the *Herdomon* 'the western sea', Great Lochland (the Western Isles and Scandinavia) and *daertha la Gregu*, the 'slavery of the Greeks'.

Six generations and a hundred years after their expulsion from Egypt the Gaels were driven off the Speckled Shield of Scythia "with a point". Razor-sharp and durable hollow-cast socketed bronze spearheads were beginning to spread westward out of the Altai mountains during the 15th-century BC, replacing the stone and bone spearheads used since the Paleolithic. The Gaels may have been run off by superior weaponry. The shining hands of Lámfhind that lit their Caspian voyage appeared in a poem by Gilla Coemáin as a less dim memory:

the radiance of the hand of Lamfhind shining, by means of noble candles.

Candles of Aladzha wax were historically known as Khazar's most valuable trade commodity. They were shipped to Iran aboard *kirzhim*, boats no more sophisticated than the Irish *currach*. Míl's use of wax to block out the songs of the sirens during his later voyage out from Aladzha reflects the same association.

The Gaels landing place was not the *Maeotic Marshes* (the Ukranian Sea of Azov), mistakenly identified by the corruption of *Medontachda* to *Meotacha*. The Irish origin story variously described the Gaels' landing place south of the Caucasus range as *nAlbain airteraig* ('eastern Albania'), *Golgatha gaethach* ('marshy Golgatha') and *Gaethlaigib Medontachda*, ('the Lagoon touching Media'). That place is identifiable today.

Anciently *Albania* meant modern *Azerbaijan*, south of the Caucasus between ancient Iberia and the Caspian Sea. Eastern Azerbaijan ("Eastern Albania") is a modern province of Iran, the land of "the Persians and the Medes".



Gaethlaigib Medontachda, 'the Lagoon touching Media', is the vast *Mordab-e-Anzali* lagoon (among the world's largest) separated from *Media* (central Iran) by the Elburz mountains. *Golgah/Gulgakh* is a place on the Caspian Sea coast at the midpoint of the corona that encloses the lagoon. It is in *Guilan*, the Iranian province at the 'Caspian Gate' outlet of the *Sefid Rud* river bordering Azerbaijan, Eastern Azerbaijan province and Media. Strabo placed the *Gelae* there; Pliny called the inhabitants *Gaëli* and Ptolemy the *Geloi*; modernly the *Guils* claim pre-Aryan Indo-European ancestry. 22% of modern Giulani men carry the R1b genetic signature, the highest percentage among any South Caspian populations. Dairy-cattle herders there are known as *gālěs* as opposed to the shepherd *kord*. The Gaels "sojourn in the marshes" clearly took place at Golgah on the Anzali lagoon in Guilan and not at the Sea of Azov. Golgah, Guilan south of the Caucasus headland at the border of the Persians and the Medes is where the Gaels understood that their ancestors spent the next two-hundred years.

By Irish reckoning the Nemedians abandoned Ireland while the Gaels were in Egypt. *Lebor Gabála Érenn* says that Ireland was then deserted for 200 (or 230) years until the return of the Nemedians' Fir Bolg descendents. In the Irish archaeological record the Collared and Cordoned Urn burial traditions disappear in the 16th-century BC followed by three centuries that left few artifacts. Once again *Chronicorum Libri duo*-synchronized Irish traditional history fits the archaeological record, in this case the lack of it.

The Fir Bolg

Keyed to Sulpicius Severus' *Chronicorum libri duo* the year of the Fir Bolg's landing was 1334 BC. That year may have been expressed by the same 84-year-cycle ferial-epact dating that was used to indicate the years of the Danann and Gaelach invasions. The *Book of Leinster* said that their leader Sláine landed on Saturday, August 1st. Macalister's *Lebor Gabála Érenn* poem LXXX stated that it was *nomad déc*, the 19th of the moon. If "*nomad déc*" was a scribal misperception of a poetic *nomad dech*, 'the superlative ninth' (one second recension manuscript wrote it *nomad dec*, not *déc*) then the date Saturday, August 1st the 9th of the moon was meant. That conjunction occurred in 1334 BC by most of the 84-year Paschal tables that yield synchronisms to the Danann and the Gaels. It appears to be very probable that the Fir Bolg were

once understood to have landed in Ireland on Saturday, August 1st, the 9th of the moon, in the year 1334 BC.

The Fir Bolg were said to have come to Ireland from "the Greeks' rough sea-clay" at *Inber Domnann*, 'the Estuary of the Dumnonii'. Ptolemy identified the Dumnonii as the people of Fal river estuary in Cornwall, the richest tin source in the world. The Fir Bolg confederacy was composed of the *Fir Domnann* "great estuary excavators", *Fir Bolg* ('Men of Bags') porters and *Gaileóin* (*Gall-Ionnai*, 'Ionian Foreigners'; regarding which, see the *Ciclaides* language of the Fomoraig, below) spearmen.

Fir Domnann ó anmain in inbir i r-ragbatar ainmnighther, .i. Inber Domnann, nó Fir Domnann, .i. fir domuin-fonn, .i. fir no.domnaigtis in mond .i. in talmuin. Fir Boleg dána, ó na bolgaig i nimarchuirtis in úir ro hainmnigter. Gaileóin, .i. gaei-lín, .i. o'n gaib ro hainmnigter; ar is ar a ngaib ro hairmidhe.

The Men of Dumnonia their name from living in the estuary or from the rushing-bath impuritywashing, or the Dumnonia estuary, or else Men of Dumnonia, that is men earth-dutiful, or men used to digging into the mountain or into the surface-yield. The Men of Bags their trade, their name from the bags for the carrying of ore to the place of impurity-washing. The Ionian foreigners, or spear-lineage, that is named from the taking to the place of impurity-washing; from the downward tilling to the taking to the place of accounting.

The tradition of hauling Fal estuary "stream tin" in bags is preserved in the medieval arms of the Cornish Faull family. It depicts *bouget*, bags suspended from a yoke for carrying cassiterite (alluvial tin), exactly as claimed for the 'Men of Bags'. The Fir Bolg "hostages from the north" clearly spent their captivity at Falmouth in Cornwall (Old Irish *du Brethnaib Corn*, 'the Horn of Carrying') digging stream tin and carrying it up to the river terraces where the force of rushing water could be employed for sluicing. *Tracia* was possibly erroniously contracted from *Tráig-acían*, 'ocean-strand' meaning the beach-studded Cornish peninusla and never meant Thrace.

A tírib Gréc táncatar, for teched in chíssa doratsat Gréic fortho, .i. tarrudh úire for leccaib lomma, comtar muighe fo scothaib. Dorigensat na fir sin sithchurcha dóib dona bolcaib I mbertis in úir, 7 táncatar dochum nÉrenn, do ascnom a n-atharda.

To the Greek lands they were driven, their households laid under tribute by the Greeks, that is, hauling ore over bare bedrock, gathered by slaves below the cleavages. Those men made themselves long canoes of the bags in which they carried the ore and they reached Ireland, to reclaim their fatherland. The voyage was not a long one; the 4th-century *Ora Maritima* of Avienus said that from Cornwall it was "a two day journey for a ship to the *sacram insulam*", that is, Ireland.

In Ireland the immigrants did not prosper. The rule passed from the Gaileóin to the Fir Domnann and then the Fir Bolg. Eochu son of Rinnáll ('Stone spearhead') became king and the first man in Ireland to be killed by a "spear-point", meaning a metal spearhead: '*In his time points were placed on weapons*'. The Túatha Dé Danann, "the people of ships and of drinking beakers", are described defeating Eochu's Fir Bolg because they introduced lighter, sharper, more durable metal-tipped weapons. Damaged in battle, they were repaired overnight. By Sulpician chronology the Danann defeated the Fir Bolg in 1297 BC, the middle of the hazily-dated age range for the archaeological appearance of the socketed bronze spear-point in Ireland (variously given as 1600-1500 BC and 1250-950 BC; 1600 BC is preposterously early, 950 BC is improbably late).

Cor fás Rindail, ní bói rind for arm etir in Erind: for gaib garga cen chlith cain acht a mbith in a rith-crannaib... Tuscat Túath Dé Donand dil laigne leo i n-a lámaib...

Till Rinnal grew, there was no point at all upon a weapon in Ireland Upon harsh javelins there was no fair covering, but their being rushing sticks... The pleasant Tuatha De Danann brought spears with them in their hands...

That the "spear of Assal" plundered by the *trí nDee*¹⁰ was a socketed-spearhead is clear because it returned to its leather sheath; flat spearheads were bound and glued onto their shafts. Like rapiers, socketed spearheads are most likely to have appeared in Ireland sometime between 1500 and 1300 BC.

 $^{^{10}}$ Another labor of the *trí nDee* sons of Dianann was to recover the hide-wrapped hoard of the smith of the king of Fal from the bog where it was hidden; mistranslation presented this task as the abduction of a whelp that turned to a sheep by night and water thrown on it would turn to wine. The corrected passage stands as literary testimony to hoard-deposition that is otherwise only archaeologically known.

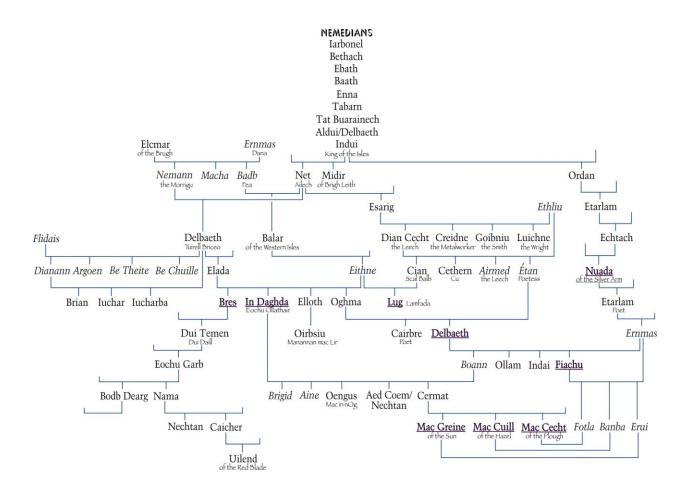
The Túatha Dé Danann

According to the second and third redactions of *Lebor Gabála Érenn* the Túatha Dé Danann landed in Ireland on Monday, May 1st. Macalister's poem LXXX added that they seized the seas on the 9th of the moon. By most 84-year Paschal cycles May 1st was Monday, the 9th of the moon in 1304 BC. By Sulpician count that exactly fits Irish chronology for the year that the Túatha Dé Danann seized the seas, seven years before they routed the Fir Bolg and two-hundred-and-four years before the invasion of the Gaels.

The *Túatha Dé Danann* were Nemedian cousins of the Fir Bolg. They shared even closer ancestry with their contemporaries the Fomoraig through *Indui* "lord of the horse-breeding people" *mac nDe Domnand*, 'son of the Dumnonii'. Elites that traded gelding horses and scrupulously guarded monopolies on stallions and mares were the aristocracy of the era; as the Bible recorded regarding the Philistines, metal-working societies enforced similar control over the proliferation of bronze weapons and even tools. The *nDe Domnand* Fomoraig appear to represent the northern Atlantic Seaway arm of a similar cartel from which the Túathta Dé Danann splintered.

A medieval text in *Silva Gadelica* (1892) alleged that the language of the Fomoraig was *Ciclaides*, the Irish spelling for the Cyclades islands that separate the Ionian, Aegean and Mediterranean Seas. The key to controlling the transportation of goods from the north and west to the Eastern Mediterranean was the passage through the Ionian Sea. The serial sea power wielded by Cyclades pirates followed by the dynasties of Crete, Mycenae and then classical Greece depended on naval hegemony over that passage as much as they did on the colonies that supplied them. The Cyclades pirates were the first to control trade through the Ionian Sea.

Greek legend said that the pirates of the Cyclades were destroyed by the King of Crete in the generation after Danaus settled Argos (Josephus' 1312 BC). Powerful Fomoraig pirates disappeared from the Irish manuscript chronology shortly after their 1290 BC defeat by the Túatha Dé Danann. Once again chronologies synchronize.



The appellation *Túatha Dé Danann* never really meant "the Tribe of the Goddess Danu" (*Túatha Ban-Dia Danann*). There is no Danann woman named Danu in the manuscripts, although Áine the non-Danann well-deity is sometimes called Anand. A Danann woman named Dianann and only by later manuscripts called Danand should not be deified by the mistranslation of her sons' sobriquet *trí nDee* as "the three Gods". *Trí nDee* meant 'the three of the [River] Dee' referring to their *Sliab nDee* stronghold at *Glendalough*, 'the glen of the lake of the Dee', from where *ndee n-airchelta* 'the plunderers of the Dee' preyed on the metal-rich Avoca River valley. Dianann's sons were clearly originally understood to be brigands, not Gods.

The relationship between the names of Dianann/Danand and her sister Argoen to Danaus and the Mycenaean city-state of Argos is far more significant. Legendarily the "Hyksos" Danaus founded the Mycenaean era from the citadel of Argos (the civilization that is modernly labeled "Mycenaean" was known to the Greeks as Danaan, Argive/Argoan or Achaean). The only other use of *Túatha Dé* in the Irish manuscripts occurred as 'The Sacred Tribe' identifying the

Hebrews. *Túatha Dé Danann* should accurately be translated as 'the Sacred Tribe of Danann', cognate with the appellation "the Sacred Race of the Danaoi" that the *Argonautica* of Appolonius (*c*.250 BC; Appolonius was the master of the fabled library of Alexandria) used to describe the Mycenaean heirs to Danaus of Argos (which also accommodates a mis-association with Áine; Danaus legendarily brought well-drilling technology to Greece and his daughters the fifty Danaïdes were condemned to an eternity of drawing well-water into leaking jugs).

Danaus legendarily established Mycenaean trade supremacy outside of the established patrilinear aristocracy via marriage alliances made by rewarding warrior-champions and adventurers with the hands of his fifty daughters. The ambitious opportunists of the "Sacred Race of the Danaoi" trade confederacy linked the resources of the north and west to Egyptian, Near-Eastern and Aegean markets. It is modernly widely accepted that the *Danu/Denyen/Denen* Sea-Peoples recorded by 13th-12th-century BC Egyptians were cognate with the Danaans of Argos.

The association with a far-away trade network is not anomalous in Irish proto-history. The literary appearance of the *Laigin* south of the Liffey about 300 BC chronologically coincided with the seizure of Mediterranean trade by the Alexandrian Ptolomaeus Lagi Soter (323-283 BC) and his *Lagian* followers. The Irish name for Ptolemy Soter was *Lairge* and for Waterford *Port Láirge*. The Laigin must have been associated with the Lagians in the same way that the Túatha Dé Danann were an extension of the Danaoi warrior fraternity.

Josephus began the reign of Danaus three-hundred and ninety-three years after Exodus (1312 BC), contemporary with the 1304 BC arrival of the *Túatha Dé Danann* by Sulpician-Irish chronology. The *Túatha Dé Danann* were clearly once understood to be confederates of the Danaan trade confederacy.

The Irish understanding that Cornwall was under "Greek" rule parallels other ancient traditions that placed descendants of Danaus along the Atlantic coast of Iberia in the same period. Greek legend claimed that Heracles came there to steal the cattle of Geríon in the 13th-century BC. Galizan legend avows that Heracles buried Geríon under the ancient *pharos* ('lighthouse'; the same tower that the Irish credited to their ancestor Breogán) at the port of *Briganza* (modern *A*)

Coruŋa, the port of the north-western province Spain, Galiza [Callaeci]; Briganza shares the same lexical root as the English language 'brigand' (highwayman, pirate) and 'brigantine' (the classic coastal pirate ship).

Justinus said that Heracle's companion Telamon's son Teucer settled Gallaecia (modern Galiza); local lore says that he founded the port of Pontevedra. Strabo said that the Danaan Amphilochus colonized the Minho River at the modern Galizan-Portuguese border; he called the people of its northern shore the *Heleni*. There was clearly a tradition of Mycenaean presence in Galiza fivedays sail south of Ireland in the same period claimed for the Danann invasion of Ireland.



Galiza was significant because it was the epicenter of Atlantic-littoral tin deposits, the most significant sources west of the eastern steppes. Most of the tin for bronze manufacture used by Bronze Age civilizations had to be obtained from one extreme or the other. Briganza would also have controlled much of the flow of Cornish tin and Irish copper eastward. According to Strabo, Posidonius said that the Greeks obtained most of their tin there.

The early manuscript testaments to the Túatha Dé Danann and Gaelach invasions chronologically correlate to Greek, Egyptian and archaeological reports of upheavals in the power that controlled the world metals'-trade system and its Atlantic colonies.

The four talismans of the Danann reflect the trappings of a metal-working elite. The bronze rapier, cauldron and socketed spearhead that they brought to Ireland also fit the chronological horizons for the archaeological appearance of those technologies in Ireland. Once again the narrative fits the chronological facts.

The sword is thought to have appeared in Ireland between about 1500 and 1300 BC. The earliest sword was the rapier, an elongated dagger designed for stabbing, not slashing. Its shape was aptly described by the name of the Fomorian Tethra's sword *Oma*, ' bar' or 'bolt', and Lug's *Fragarach* (*fraig*, 'stiletto' and *arach*, 'forepart'). These earliest mentions of the sword in Irish literature described chronologically-correct rapiers in connection with the Túatha Dé Danann.

Cauldrons appeared in Ireland in the same period. The metal cauldron was the most significant advance in domestic technology since pottery. Riveted Irish cauldron designs had Mycenaean precedents. The association of the Danann cauldron with a place called *Muirias* may preserve the significance of copper cauldrons acting as both vessel and mordant in the production of fabric colored with ultra-valuable *Murex* dye, worth twenty times its weight in gold. Monastic-era dog-whelk shell middens testify to historic Irish murex production.

The fourth talisman of the Túatha Dé Danann was the *Lia Fal*, "the stone of Fal" that was carried to Ireland from *Failias*:

Fál I tóeb dumnai na ngiall atuaid .i. cloch in sin no géissed fonti no gebad rigi nHerenn.Fál on the side of the mound of hostages northward, that is, the stone that used to roar vibrato when one took the kingship of Ireland.

When bent, tin emits a crackling "tin cry", plausibly explaining the *Lia Fal*'s "vibrato" roar when the rightful heir to the throne of Tara stepped onto it. The *Lia Fal*'s shape was described as a slab; metal ingots of the Bronze Age were most commonly shaped as "ox-hide" slabs.

The sobriquet of the celebrated smith Goibniu, "*engoba na Hiruaithi*" meant 'the peerless smith of the Ore-clay'. "Ore-clay" most likely described cassiterite, the dull-grey alluvial grains dug from tin-streams that supplied the Bronze Age: *'Uath' ainm d'úir, diamhair an dath*: *'''Uatha" the name of ore, hidden the brightness*'. The "stone" of Fal that roared vibrato beneath the step of a king must have been an ingot of tin from the Fal river estuary in Cornwall where the Fir Bolg "hostages from the north" had been enslaved.

The manuscript claim that the Danann Oghma introduced writing to Ireland could also be true. The era reported by the manuscrits for the invention of the cipher-based *Ogham* ('Scratching-time'; the 4th-century-AD Scythian Aethicus of Istria called it *ideomochos*, 'chariot language') alphabet by *Oghma Cermait* ('Wax-stick Scratching'; hinged wax *daltu* writing tablets were known since the 13th- century in the Aegean and have been excavated in Ireland) was contemporary with the replacement of Cretan Linear B text in the Aegean by the Canaan alphabet over the course of the 12th-century BC. The alphabet was legendarily carried to the Aegean by either Danaus or his cousin Kadmus of Tyre (Kadmus was also credited with introducing the technologies for gold mining and bronze casting to Greece).

Ogham's range of consonants is unlike those of Classical Greek or Latin. The Ogham consonants most closely match those claimed for Mycenaean Greek before its legendarily-post-Troy "Palamedian" modernization. Fourteen of its fifteen consonants match the purported early-Italic "Carmenta" alphabet reconstructed by Graves. Historic Irish never had the \ddagger D *nGeadal*, \ddagger Z *Straif* or \models Q *Ceirt* of Ogham. The D, the *eng/agma* (ng/gn/nn), was dropped by the Palamedes alphabet yet survived in Ogham characters. It may be significant to the dating of Iberian Celtic as well as Ogham; it survives in the Galizan name A Coruŋa (and perhaps Danann approximating Danoi, and Domnann from Dumnonii). Ogham could be just as ancient as Irish manuscripts say it is.

The Gaels' response to the Danann suit for peace, that they would split Ireland by giving the Danann that part of it below ground, was a sarcastic offer of no quarter. That was lost on later redactors who mistook it to describe a magical retreat into a subterranean otherworld. The myth of the gods was born. The association between the Túatha Dé Danann and the 'sacred tribe of Danaus' must have been an early casualty in the monastic massacre of Irish proto-history.

The Sons of Míl

About seventy years after the Túatha Dé Danann invasion of Ireland a Gael named Brath came to Briganza (*A Coruŋa*, 'The Corona') from Golgatha (Golgah on the corona of the Anzali lagoon) nine generations after his ancestors emigrated there from Aladzha (on the Khazar Island corona

of Balkhan Bay). All three coronas protected easily-defended (and easily escaped-from) harbors at significant hubs of the world trade system. There is absolute consistency in the topography of the places that the Gaels were said to have dwelled before their colonization of Ireland.

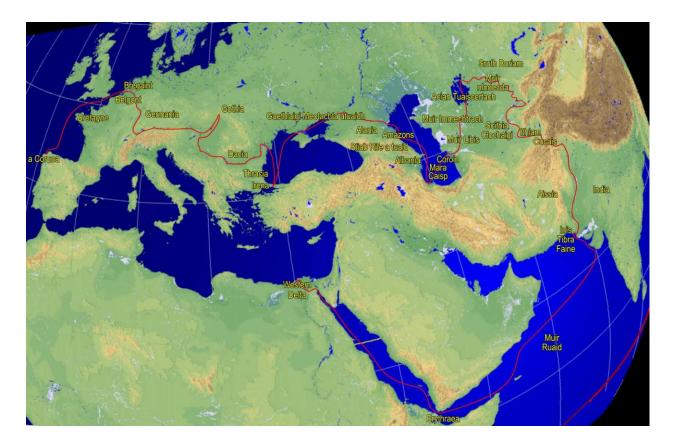
Brath's departure from Gaethlagib Medontachda ('the Lagoon touching Media') is chronologically coherent with archeological evidence for the arrival of Iranian Grey Ware to the southern Caspian. Guilan's opportunities would have contracted with the Central-Asian "Bronze Age collapse" precipitated by the Iranian intrusion; Brath's westward adventure would not have been an out-of-place response to events of the era.

His great-grandson Míl was said to have journeyed back to Fenius' Scythian homeland, then retraced the routes of his ancestors to Egypt and back again via the Indus and Oxus Rivers. Sulpicius-synchronized Irish chronology places Míl's journey in the mid-12th century BC, the era of the Sea Peoples. Like Fenius' Kassite-contemporary sojourn in Hammurabi's Babylon and Níl's residence in Hyksos Egypt, Míl's adventures were plausible in the era of Mediterranean-wide establishment collapse triggered by the fall of Troy and the Sea Peoples' destruction of the Hittite and Mycenaean trade monopolies.

It is significant that Cenn Faelad's transcription of a scholar's recital employed Míl in the defense of Egypt from sea-borne attack "at the western river-mouth shore". That detail rings authentic: late 13 and 12^{th} -century BC Libyan/Sea-Peoples attacks on the Delta were usually launched from the west bank of the Nile. Pharaoh Merneptah (*c*.1213-1203 BC) defeated the Libyans and Sea Peoples in a decisive battle there *c*.1208/1207 BC. Míl's near-contemporary Pharaoh Ramesses III (*c*.1186-1155 BC) had to defeat three great Libyan and Sea-Peoples invasions during his reign. Cenn Faelad placed Míl exactly where a mercenary warlord in service to the pharaoh would be likely to have been garrisoned: at the western delta's frontier. Once again a detail from Irish tradition fits contemporary chronological circumstance in a way that can't be explained by Christian-era fabrication.

Míl's route from the Caspian via the island of Irena at modern Constantinople overland back to A Coruŋa was very different than Brath's sea route west across the Mediterranean. Míl was said

to have joined a host in Dacia that plundered up into Gothia. The archaeological appearance of hoards and hillforts along the Danube in the mid-12th century BC testifies to the turmoil in Central Europe caused by sword-wielding eastern invaders. Like so many other events in the Irish record, Míl's legendary hosting up the Danube exactly fits the archaeological chronology for foreign intrusion there.



Slashing-swords were significant to the Mycenaean collapse and militarization of Eastern Europe because they were far more effective in battle than spears and rapiers. The leaf-shaped sword that appeared in Late Bronze Age Ireland (1200-950 BC) may be what gave the Gaels the military advantage to defeat the spear- and rapier-armed Túatha Dé Danann.

The date of the Gaelach invasion by ferial-epact dating was Thursday, May 1st the 17th of the moon. By Sulpician chronology it was *Anno mundi* 4403, the second year of Solomon, the year that we modernly identify as 1100 BC. By many 84-year Paschal cycles in 1100 BC May 1st was Thursday the 17th of the moon. 1100 BC was clearly the originally-understood manuscript year for the invasion of Ireland by the Sons of Míl.

Conclusion

Irish protohistory was clearly synchronized to the chronology of Sulpicius Severus' *Chronicorum Libri duo* before it was re-keyed to the chronologies of Eusebius/Jerome and Bede. The timeline of that *Irish World Chronicle* is chronologically coherent. It fits literarily-attested events of antiquity and the contemporary archaeological evidence.

The invasions of Ireland described colonizations by hunter-gatherers followed by late Neolithic farmers followed by Bronze-Age warrior bands. It characterized the Fir Bolg, the Túatha Dé Danann and the Gaels as participants in the western-Eurasian Bronze-Age trade network and in the movements of peoples and shifts in power that disrupted it.

No part of that story is impossible. Ireland was clearly colonized by sea from at least as far away as Spain long before the Iron Age; the Atlantic Seaway has been shown to have been used at least as far back as the Neolithic. There is no reason that the earliest invaders of Ireland could not have come to Ireland by the same route.

Even the detailed journeys of the Gaels that spanned nearly the entire breadth of the western-Eurasian Bronze-Age trade network are only implausible by the "demic" theory of cultural diffusion. Demic theory presumes that ancient technological, linguistic, genetic and cultural shifts only gradually diffused out from their places of origin, one tribal border at a time. While the demic model rationally explains most Paleolithic, Mesolithic and Neolithic changes it is absurd to apply it to the Bronze Age metals province.

The east-west extent of the Bronze-Age trade network was far broader than even any of the Iron Age empires that succeeded it because exploitable copper and especially tin ores were far less common than accessible iron ore. To feed the bronze furnaces of the Fertile Crescent trade extended east to the Altai and Tien Shan mountains and west to Atlantic Europe because only a few trivial tin deposits lay between those frontiers. Virtually all of the tin and much of the copper that was alloyed in Bronze-Age furnaces had to be obtained from one extreme or the other. Fertile Crescent demand for copper, tin and gold extended the Bronze-Age metal-trade system out into the Atlantic Ocean in the west and to the gates of China in the east. The archaeological evidence shows that Ireland was rich in gold and copper and traded in both beyond its shores. The island's significance was enhanced by its control over the northern Atlantic Seaway that linked northwestern Europe to the tin fields and the Mediterranean, and its proximity to Cornwall, the mother-lode of all Old World tin.

Until the inventions of the compass (*c*.AD 1190) and the chronometer (AD 1761) open-sea navigators had no advantage over their prehistoric counterparts; there had been no innovations in navigation since men had learned to plot their courses by observing the heavens. Scandinavian Vikings raided and traded as far east as the Caspian Sea in longships that were only marginally more sophisticated or seaworthy than prehistoric craft. There is no reason that Bronze Age warrior bands could not have moved in Viking fashion exactly where and when the Irish manuscripts say they did.

The chronologically-coherent observations assembled in this document could not have been invented by medieval monks. They defy all odds favoring coincidence. They precisely fit the geography and chronology of known genetic, linguistic, technological and cultural shifts. Irish traditions appear to preserve genuine Bronze-Age memories of the events that they claimed to portray. Those traditions appear to have still been understood in their original context and chronology in early Christian Ireland.

The fact that the observations and assertions made in this document have no precedent in historic Irish scholarship is due to the misfortune that the Anglocentric dismissal by Victorian intelligentsia of traditional Irish history as degenerate myth has left its serious study academically taboo even up to the present day. This document, flawed as it may be by its author's ignorance and the inevitable mistranslation, clearly shows that Irish proto-history ought to be dusted off, re-opened and recognized as a unique and invaluable tool not only regarding the study of things Irish, but in the study of Eurasian antiquity as a narrative of the causes, means and chronology of Indo-European language and R1b1c genome dispersal to Western Europe.

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