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Introduction

Hello, and welcome to the December 2010 issue of DNA Tribes® Digest. This month's feature article will update our analysis of the Portuguese sub-region, based on more detailed genetic divisions presently identified by DNA Tribes® Europa analysis.¹

Best regards and Happy New Year, Lucas Martin DNA Tribes

¹ A map of current DNA Tribes® Europa sub-regions can be viewed at http://dnatribes.com/dnatribes-europa.html. The previous DNA Tribes® analysis of Portuguese genetic relationships is available at http://dnatribes.com/dnatribes-digest-2009-03-28.pdf. Since that analysis was performed in March 2009, the more general "Norse" zone has since been split into the more specific Norse (Scandinavian) and Belgic (Low Countries and Northern France) sub-regions; additionally, the more general "Balkan" zone has been split into the more specific Balkan (western Balkan Peninsula) and Thracian (Lower Danube, including present day Romania) sub-regions.



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An Updated Analysis of the Portuguese Sub-Region

Historical Background

The Portuguese sub-region characterizes populations of the Iberian Peninsula facing the Atlantic Ocean, including present day Portugal, Galicia in northwestern Spain, and (to some extent) Andalusia (see **Figure 1**). These lands have served as a western outpost of Iberia since ancient times, in contact with both North Africa and northerly parts of Atlantic Europe. More specifically, this Portuguese zone is associated with early contacts between Punic (Phoenician and Carthaginian) and Indo-European (Celtic, Lusitanian and Latin) speaking cultures.



Figure 1: Map of the Portuguese sub-region of Europe (highlighted in yellow).

Early Greek traders associated these westerly lands with the legendary city of Tartessos, known for its wealth in metals. Although the exact location of the semi-mythical Tartessos is unknown, it is thought to have been in Andalusia (the southernmost part of Spain), near the early Phoenician trading outpost of Gadir (present day Cadiz). Cadiz is one of the most ancient extant cities in the West Mediterranean and was the location of an early Phoenician temple of Melqart "King of the City" and "Lord of Tyre," (known to the Greeks as the Tyrian Hercules). Early writing fragments found nearby include Celtic vocabulary and personal names²; however, this Tartessian language as a whole remains unclassified.

Possibly related to the early Tartessians were later peoples such as the Turdetani of Andalusia and the Turduli of Portugal. According to the Roman historian Livy, the Turdetani were peaceful and

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² For new scholarship exploring connections between Celtic cultures and the Iberian Peninsula, see the article http://ifc.dpz.es/recursos/publicaciones/29/54/26koch.pdf and the books Tartessian: Celtic in the South-west at the Dawn of History and Celtic from the West by John T. Koch.



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civilized. However, beyond the territories of these old city populations was a frontier inhabited by fiercely independent Lusitanian and Celtic cultures, which had long provided soldiers for the Iberian urban centers as well as mercenaries for the Carthaginians (based in North Africa).

These more westerly cultures spoke Celtic languages, related to ancient languages spoken in Ireland and Britain as well as France and northern Italy. The antiquity of Celtic cultures in Atlantic Europe is unknown. However, Celtic languages are sometimes thought to derive from an Italo-Celtic branch of the Indo-European languages, possibly related to early Bell-Beaker cultures of Western Europe.³ Another pattern of western coastal contacts emerged during the Atlantic Bronze Age, fueled by the exchange of prestigious metal goods between the British Isles, northwest France, and the Iberian Peninsula. These Atlantic Bronze Age contacts collapsed around 700 BC, to be replaced in northwest Iberia by the more localized Castro culture, which dotted the landscape with its many *castros* or hill forts.

Although the Iberian Celts were eventually conquered by Rome, traditional Celtic lore preserved in other parts of Europe includes several legends about the Iberian Peninsula⁴. One group of legends describes the Milesians, a group of Scythians who conquered Spain and later made their way to Ireland to become the ancestors of the Goidel (Irish and Scottish Gaels).⁵ One of these Milesians was Breogán, who built a notable tower in Galicia⁶; it was from here that an expedition to settle Ireland was organized. According to legend, Ireland and Spain had been engaging in trade for some time before this expedition, so the Milesian migration to Ireland took place in the context of existing maritime contacts.⁷

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³ One possibility is that the Italo-Celtic languages developed within the Bell Beaker zone, which was in contact with the more easterly culture Corded Ware and therefore (by extension) with the Yamna culture of the European steppe. The Yamna steppe culture is sometimes associated with an early unified Proto-Indo-European language that spread throughout most of Europe and parts of Asia. For a discussion of genetic evidence related to these language theories, see "Old Europes" at http://dnatribes.com/dnatribes-digest-2009-08-29.pdf (Part One) and http://dnatribes-digest-2009-08-29.pdf (Part Two).

The seventeenth century *Foras Feasa ar Éireann* ("History of Ireland") assembled information from Irish seanchaithe, traditional storytellers whose art derived from the more ancient *fili* (bards). An online version is available at http://www.exclassics.com/ceitinn/forintro.htm. An earlier written source is the medieval *Lebor Gabála Érenn* ("Book of the Taking of Ireland"), available at http://www.maryjones.us/ctexts/leborgabala.html.

⁵ The Milesian legends were discussed in relation to Bronze Age archaeological links in "A Closer Look at the Celtic Sub-Region of Europe" at http://dnatribes.com/dnatribes-digest-2010-08-31.pdf. Incidentally, some narrative elements in medieval Irish lore about the "Goidel" (migration links with Scythia and military contacts with Egypt) distantly resemble legends of the "Gutar" assembled in Jordanes' *Getica* (written during the Migration Period).

⁶ Several early West Mediterranean cultures were associated with towers, among them the early Nuraghic civilization of Sardinia and the later Etruscans of the Italian Peninsula, whose name *Tusci* was said to mean "towers." A discussion of genetic evidence of trans-Mediterranean contacts possibly related to early Etruscan cultures is available in http://dnatribes.com/dnatribes-com/dnatribes-digest-2010-11-30.pdf.

In legend, the Milesian settlers and native Irish were able to communicate using a shared *Scoitbhearla* ("Scotic Language"). The *Foras Feasa ar Éireann* states, "*Scoitbhearla* was the common tongue of Scythia when Neimhidh [Nemed] set out from that country... and accordingly of every colony sprung from him or from his descendants who came to Ireland, not to mention the descendants of Milidh, whose native language was *Scoitbhearla* from the time that Niul left Scythia to the present time. "More explicitly, Keating states, "*Scoitbhearla*, which is called Gaelic, was the mother tongue of Neimhidh and his tribe, and therefore also of the Fir Bolg and the Tuatha De Danann." See http://www.exclassics.com/ceitinn/foras.pdf, p. 109. Unexpectedly, these archaic legends (collected by Keating in the seventeenth century) are generally consistent with the modern scholarly understanding of the origins of Proto-Indo-European (the hypothetical root language from which local Indo-European languages later developed) in Bronze Age cultures of the Eurasian Steppe (the zone known in Classical antiquity as "Scythia").



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In the Migration Period that accompanied the fragmentation of the Roman Empire, northwestern Iberia was settled by new waves of immigrants, including Germanic speaking Suebi and Visigoths as well as Iranian speaking Alans. Both the Visigoths and Alans came from the Eurasian Steppe (fleeing Hunnic conquests in the east), recalling the (possibly more ancient) legends of multiple dynastic origins in Scythia and providing opportunities for contacts between Spain and geographically distant populations. Another new settlement was Britonia, founded by Romanized Britons fleeing the Anglo-Saxon invasions of England during the same period. These Britonic newcomers were assimilated by local Romanized Celtic cultures to form the Suebic Kingdom of Galicia, which in turn was absorbed by the larger Kingdom of the Visigoths.

However, this pattern of conquests was reversed around 712 AD, when Roderick "Last King of the Goths" was defeated by the Muslim general Abd al-Aziz ibn Musa. Musa became the first ruler of the new state of Al-Andalus, part of the Umayyad Caliphate based in the Syrian city of Damascus. However, following the conquest of most of the Iberian Peninsula by Arab and Berber armies based in North Africa, a period of generally peaceful coexistence and flourishing of culture began, which was to last several hundred years. Also present during this period were *Saqaliba* slaves from Slavic speaking parts of Europe (including former Scythian and Sarmatian territories) who served as workers and mercenaries under Muslim rule. One of these *Saqaliba* was Sabur al-Saqlabi, who ruled the Taifa of Badajoz, a Muslim state in southern Portugal.

During this period, northern portions of the Iberian Peninsula were less affected by Muslim expansions, and the mountainous northern region of Asturias became seat of the Christian Kingdom of Asturias under the leadership of the Visigoth Pelagius. These northern areas developed as a base for the *Reconquista* ("Reconquest") movement, aided by crusading knights from France and other parts of Europe. As the territorial reconquest by Christian kingdoms progressed from north to south, the variety of Latin spoken in Galicia spread to become the Portuguese and Galician spoken today in the western Iberian Peninsula.

Genetic Analysis of the Portuguese Sub-Region

Genetic contributions to the Portuguese sub-region of Europe were identified. Results are summarized in **Table 1** and illustrated in **Figure 2**.

Region or European Sub-Region	Genetic Contribution
Spanish	50.0%
Belgic	24.9%
North African	15.2%
Finnic	4.5%
Other	5.4%

Table 1: Genetic contributions to the Portuguese sub-region.

Discussion: Results indicate genetic contributions from several parts of Europe. The largest contribution identified was Spanish (50.0%). This suggests a predominantly autochthonous origin of Portuguese populations among populations resident in the Iberian Peninsula since ancient times, perhaps including



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early relatives of Iberian speaking cultures and predating even the earliest prehistoric migrations mentioned in this article.

Results also identified a substantial northerly Belgic (24.9%) contribution. This is consistent with a long history of contacts within Atlantic Europe (perhaps dating to Bell-Beaker expansions and including later Atlantic Bronze Age contacts), including links with Celtic speaking cultures. More specifically, this suggests that contacts with Celtic speaking cultures took place primarily through lands of Gaul (present day France) and the Low Countries, despite legends of some direct contacts with the British Isles.

Results also indicated a North African contribution of 15.2%, which might express direct contacts with North Africa dating to early Punic (Phoenician and Carthaginian) trade links as well as contacts dating to the Muslim conquest during the medieval period.

In addition, results indicated a smaller but substantial Finnic contribution of 4.5%. This might in part express Migration Period contacts with Uralic speaking populations mediated by nomadic steppe cultures, such as the Goths and Alans⁸, by cultures historically living near Baltic Finns such as the Suebi, and by *Saqaliba* brought from Eastern Europe to Al-Andalus.

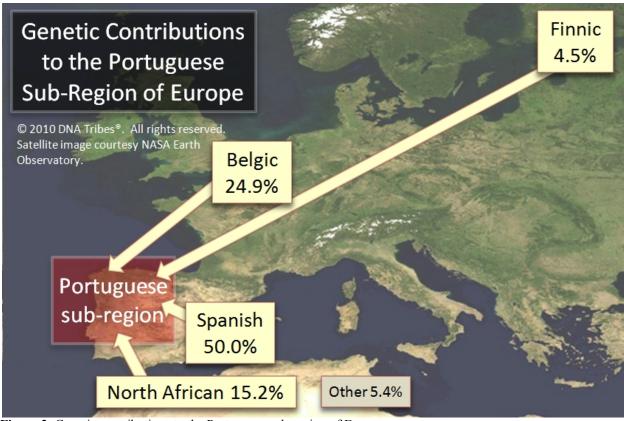


Figure 2: Genetic contributions to the Portuguese sub-region of Europe.

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⁸ Genetic analysis related to one Migration Period link in Central Europe is explored in "Two Magyars: Genetic Contributions to Hungary and Székely" at http://dnatribes.com/dnatribes-digest-2010-06-30.pdf.



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