



DNA Tribes® Digest November 30, 2010
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Introduction

Hello, and welcome to the November 2010 issue of DNA Tribes® Digest. This month’s feature article will update our analysis of the Italian sub-region of Europe, based on more detailed genetic divisions presently identified by DNA Tribes® Europa analysis¹.

Have a safe and happy Holiday Season,
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 Italian 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.

An Updated Analysis of the Italian Sub-Region

Historical Background

The Italian sub-region (illustrated in **Figure 1**) characterizes populations of the northern and central Italian Peninsula. In antiquity, these lands were a meeting point for the sophisticated urban civilizations of the Mediterranean and the “barbarian” frontier societies from north of the Alps.



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

According to the archaeologist Marija Gimbutas, ancient societies of Europe were the product of interactions between two contrasting ways of life: a sedentary, agrarian “Old Europe” rooted in early egalitarian townships of the Neolithic; and a more mobile, pastoralist “Kurgan” form of society introduced by charioteers from the European Steppe during the Bronze Age². Eventually, interactions between these two contrasting forms of society generated new cultures that continued the benefits of settled agricultural communities, but with a new emphasis on Bronze Age military specialists whose nomadic roots stimulated far ranging contacts between individual settlements.³

In Italy, agricultural “Old European” civilization was embodied in the ancient Cardium Pottery tradition, spread throughout the Mediterranean by maritime pioneer cultures originating in the Levant.⁴

² Genetic evidence support the possibility that early “Old European” Neolithic communities had connections with the more ancient agricultural civilizations of the Fertile Crescent. For a speculative analysis of genetic evidence for these early interactions, see “Old Europes” at <http://dnatribes.com/dnatribes-digest-2009-07-29.pdf> (Part One) and <http://dnatribes.com/dnatribes-digest-2009-08-29.pdf> (Part Two).

³ See *The Rise of Bronze Age Society* by K. Kristiansen and T. B. Larsson.

⁴ Radiocarbon dates for early Neolithic settlements in Italy, southern France, and the Iberian Peninsula suggest a seafaring colonization near 5400 BC (see <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC61188/>). These colonists might have spread from the Levant after the PPNB culture (Pre-Pottery Neolithic B, possibly related to cultures of

Starting in the Bronze Age, these Neolithic agricultural patterns of life changed under the influence of northerly “Kurganized” societies and placed a greater emphasis on fortification and defense. This has been associated with several waves of cultural influence, in many cases linked to Central European cultures beyond the Alps. For instance, the Italian Terramare (“black earth”) culture shared building conventions with communities living along the Danube River.

Just before the earliest recorded history, the Villanovan culture of Italy had links with the Urnfield tradition of Central Europe (sometimes associated with early Continental Celtic cultures). Over time, Villanovan settlements became increasingly stratified and complex, coming in contact with early Greek civilization and also trading along the Amber Road with early cultures near the Baltic Sea. During this period, Italy became a center of metalwork, exporting finely crafted goods to locations as distant as Denmark and the Baltic coast.⁵

In written history, lands of the Villanovans were home to the Etruscans (*Rasenna*⁶), whose civilization was in contact with early Greek city-states and overshadowed the early Latini (ancestors of the Romans). Despite a long history of contacts with Central European cultures, the Etruscans spoke a non-Indo-European language, possibly related to Rhaetic (spoken in the Eastern Alps) and Lemnian (spoken on the Aegean island of Lemnos).⁷ Eventually, the Etruscan civilization was absorbed by Italic (Indo-European) speaking settlements that became the Roman Republic. In this process, many Etruscan institutions and cultural ideas became integral to Roman society.

During the period of the Roman Republic and later Roman Empire, Italian relationships with both Mediterranean civilizations and the northerly “barbarian” frontier continued. Mediterranean links included contacts not only with Greek populations, but also with Levantine, Egyptian, and North African cultures. To the north, Celtic speaking populations had been resident in northern Italy (Cisalpine Gaul) since the Etruscan period⁸ and at one point invaded and captured most of the city of Rome itself under the leadership of Brennus. This eventually led to Julius Caesar’s campaigns to subdue the heartland of Gaul (in present day France).

northeast Anatolia near the Transcaucasus) collapsed during a period of climate cooling near 6200 BC (known as the “8.2 kiloyear event”).

⁵ These archaeological links are described in *Europe Before History* by Kristian Kristiansen, pp. 161-185. A name linked both to Italy and the Baltic Sea in the ancient world was “Venedi” or “Veneti.” In the Roman period, tribes of Veneti were described near the Adriatic Sea, near the Carpathian Mountains, and near the Baltic Sea (described by the geographer Ptolemy as the “Venedic Bay”). The Adriatic Veneti spoke a *centum* (western) Indo-European language known as Venetic and gave their name to present day Venice.

⁶ The Etruscans called themselves *Rasenna*; early Greeks called them *Tyrsenoi*. Other ancient names: Teresh (among the “Sea Peoples” that invaded Egypt); Tarshish or Trsys (mentioned in the Hebrew Bible and possibly associated with early Greeks and/or Tartessians of the Iberian Peninsula); Tarsos, Tarsa, or Tarsisi (in southeastern Anatolia); and Rhaetia (in the eastern Alps). Some of these names are found near territories more anciently associated with Cardium Pottery and possible predecessor cultures in the northern Levant. These names also recall European names for the Levantine city of Tyre, which was known to early Greek as *Tyros* and to Romans as *Tyris*.

⁷ Although Etruscan origins are obscure, one possibility is that the Etruscan language developed from non-IE languages spoken by early “Old European” civilization builders from Southwest Asia. Similarities between the Etruscan language and other languages have suggested possible contacts with Indo-European languages of Anatolia or with indigenous languages of the Caucasus (see [http://www.nostratic.ru/books/\(329\)EGRWND.pdf](http://www.nostratic.ru/books/(329)EGRWND.pdf)). Legends linking early cultures of Italy with the Transcaucasus are briefly mentioned in “Georgia and the Caucasus Mountains” at <http://dnatribes.com/dnatribes-digest-2010-10-28.pdf>.

⁸ Within the Indo-European family of languages, Italic and Celtic languages share Italo-Celtic features, due to shared origins and/or longstanding proximity of Italic and Celtic speaking societies near the Italian Peninsula.

In addition to more ancient Celtic contacts, Germanic speaking cultures expanding into Central Europe from Scandinavia were brought into the Roman world as *foederati*, or allied tribes that supplied military assistance to Rome in exchange for food, money, or (eventually) land. When the Western Roman Empire collapsed, Germanic *foederati* (such as the Ostrogoths and Lombards) established new kingdoms in the Italian Peninsula that were in turn conquered by the more westerly Franks.

After the fall of Rome, the Italian Peninsula continued to serve as a nexus between northerly and southerly populations. For instance, several city-states of Renaissance Italy (such as the republics of Florence, Venice, and Genoa) traded with populations of North Africa, the Aegean Sea, Egypt, the Levant, Anatolia, and the Crimea⁹. These Italian sea contacts during the Renaissance period resembled the seagoing Teresh described by New Kingdom Egyptians, the Tyrrhenian mariners known to the Greeks, and the far reaching Roman Empire of classical antiquity. In this ongoing process of integrating influences from both north and south, societies of the Italian Peninsula have produced cultural forms that have influenced European and world culture in both ancient and modern times.

Genetic Analysis of the Italian Sub-Region

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

Discussion: Results indicate substantial genetic contributions from both southerly and northerly populations. Southerly contributions include Levantine (19.6%), Greek (15.8%), and Spanish (14.0%) contributions, for a combined southerly contribution of 49.4%. This suggests substantial maritime contacts via the Mediterranean Sea.

Region or Sub-Region	Genetic Contribution
Belgic	26.0%
Levantine	19.6%
Greek	15.8%
Spanish	14.0%
Balkan	12.5%
Celtic	9.7%
Other	2.4%

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

⁹ Because Renaissance Italy was governed by multiple small city-states, military affairs were largely conducted by *condottieri* (“contractors”), or private mercenary armies. Some of these *condottieri* came from distant parts of Europe: for instance, John Hawkwood (Giovanni Acuto) was an Englishman of humble origin who became a successful *condottiere* and was commemorated with a funerary monument in Florence.

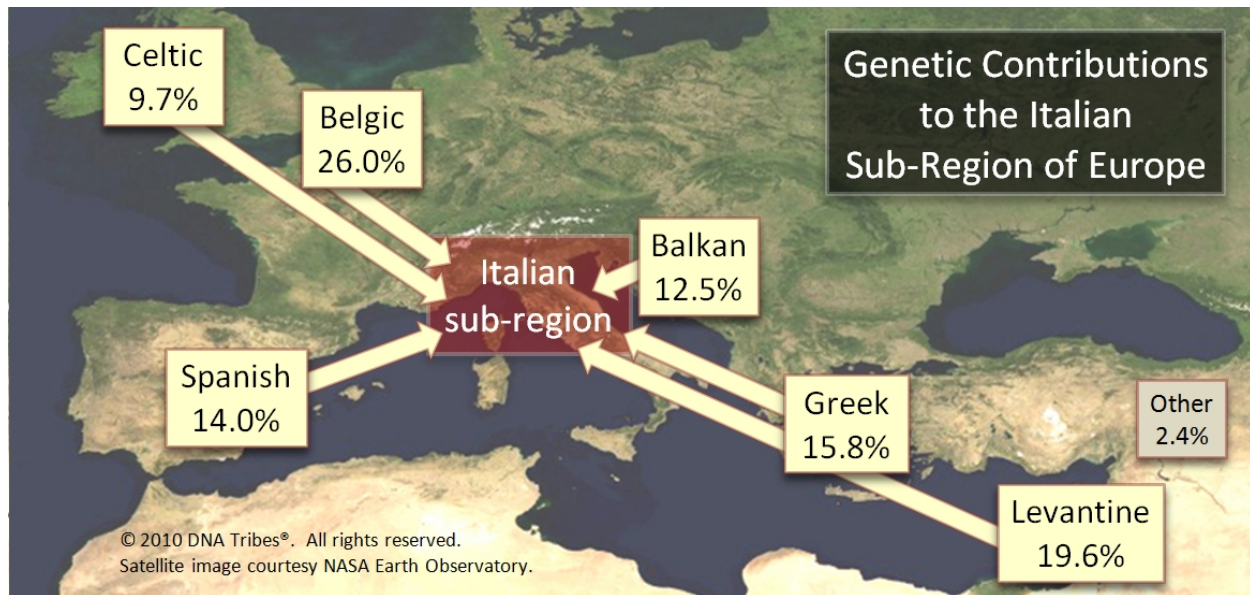


Figure 2: Genetic contributions to the Italian sub-region of Europe.

More specifically, the Levantine contribution (19.6%) might express early contacts related to the spread of “Old European” Cardium Pottery traditions from the Levant. The Greek contribution (15.8%) might express contacts with neighboring Greeks (including Greek speaking cultures of *Magna Graecia* in Southern Italy and Sicily). The Spanish contribution (14.0%) might express links with westerly Mediterranean contacts, perhaps including contacts within the “Old European” Cardium Pottery zone as well as later contacts with Ligurians, Iberians, and other neighboring peoples that continued into the classical period of Rome.

Northerly contributions include Belgic (26.0%), Balkan (12.5%), and Celtic (9.7%) contributions, for a combined northerly contribution of 48.2%. The Belgic¹⁰ (26.0%) and Celtic (9.7%) contributions might express links with early Celtic speaking cultures dating at least to the Etruscan period, and suggest a primarily western inroad (via the Alps) between Central Europe and Italy. The smaller but still substantial Balkan contribution (12.5%) might express contacts with the Amber Road to the Baltic Sea (perhaps related to the ancient Veneti), as well as later contacts with easterly populations (perhaps including early Slavic cultures), such as within the post-Roman Ostrogothic and Lombard kingdoms.

In summary, results indicate contributions from both southerly populations (totaling 49.4%) and northerly populations (totaling 48.2%), reflecting Italy’s geographical location between Central Europe and the Mediterranean Sea and a long history of contacts with both southerly and northerly cultures.

¹⁰ These updated results clarify the more general “Norse” (Belgic and Norse) contribution previously identified in <http://dnatribes.com/dnatribes-digest-2009-03-28.pdf>, prior to the distinction between the Belgic (Low Countries) and more specific Norse (Scandinavian) sub-regions in DNA Tribes® Europa analysis.



Getting the Most from Your Testing

Once your testing is complete, we offer several options to keep your report current and to customize your genetic analysis for the information you want. (*Prices are listed as of November 30, 2010 and are subject to change.*)

Updating Your Analysis:

DNA Tribes® analysis is updated on a periodic basis to include new reference data as well as refinements to our match algorithms and world regions analysis. (A map illustrating current populations and genetic regions is available at <http://dnatribes.com/populations.html>.)

After your testing is complete, your analysis can be updated at any times of your choice for \$24.99 through our secure online checkout at http://dnatribes.com/order_addons.html.

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East Asian Panel: A listing of your DNA match scores for East Asian populations in our database, including all individual Chinese, Japanese, Korean, and Southeast Asian populations.

Middle Eastern Panel: A listing of your DNA match scores for Middle Eastern populations in our database, including all individual Arab, Berber, Caucasus, Jewish, Persian, and Turkish populations.

Native American Panel: A listing of your DNA match scores for all individual Native American populations in our database.

South Asian Panel: A listing of your DNA match scores for South Asian populations in our database, including all individual populations of Bangladesh, India, Nepal, Pakistan, and Sri Lanka.

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DNA Tribes® Europa: A Detailed Comparison to European Sub-Regions:

DNA Tribes® Europa provides the most detailed and complete analysis of European autosomal genetic structure available. DNA Tribes® Europa provides your DNA match scores for 17 genetic sub-regions of Europe, which is substantially more robust than the individual population matches in Parts B – C of reports and more detailed than the European world regions referenced in Part D of core results.

More information about DNA Tribes® Europa is available at:
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