**Introduction**

Hello, and welcome to the May 2010 issue of DNA Tribes® Digest. This month’s feature article focuses on the Thracian sub-region of Europe, which shares genetic characteristics not only with neighboring European regions, but also with more geographically distant South Asian populations.

In examining the complex history of the many nomads that invaded Europe during the period of the collapsing Roman Empire and Turkic expansions in the east, this article will focus on the sometimes forgotten eastern Indo-European steppe nomads (such as the Scythians) and neighboring Asian civilizations (such as the Sogdians).

For more in depth reading, The Prehistory of the Silk Road and the more encyclopedic The Origin of the Indo-Iranians by the distinguished scholar Elena E. Kuz’mina discuss the interactions between early Andronovo nomad cultures and indigenous civilizations in Asia. These materials complement the pioneering work of Marija Gimbutas (collected in The Kurgan Culture and the Indo-Europeanization of Europe), which highlighted the more westerly interactions between Kurgan nomads and agricultural societies in Europe.

Best regards and I hope to speak with you soon,

Lucas Martin

DNA Tribes
Kurgan Riddles: The Thracian Sub-Region of Europe

Historical Background

The Thracian sub-region characterizes European populations of the eastern Balkan Peninsula (see map in Figure 1), where the Danube River passes through the Pannonian Plain and between the Balkan and Carpathian Mountains to empty into the Black Sea. From early times, these lands have been a place of contact and conflict between cultures of Central Europe, the Near East, and the Eurasian Steppe. More mysteriously, links are found here with cultures of South Asia and the northern taiga lands that span Europe and Siberia.

Evidence of dynamic but sometimes stormy relationships with lands of the Near East and the Eurasian steppe begins in the archaeological record. Excavations in southeastern Europe have uncovered traces of an “Old European” agricultural civilization that emerged from the interactions of indigenous Central Europeans with farming cultures that expanded from the Near East1. These Neolithic “Old European” settlements flourished in the eastern Balkan Peninsula for millennia, leaving a rich record of artwork2 and symbolic proto-writing (such as the Vinča signs) that has been interpreted as evidence for a relatively matrifocal and egalitarian form of society.

However, this Old European civilization was later disrupted by incursions of new equestrian Kurgan cultures that invaded from lands of present day Ukraine. These Kurgan horsemen built monuments (kurgans) honoring prominent male leaders, interpreted as evidence of a more hierarchical

1 See “Old Europe” (Part Two) at http://dnatribes.com/dnatribes-digest-2009-08-29.pdf
2 See Gods and Goddesses of Old Europe by Marija Gimbutas for many examples of the Old European artistic tradition.
and patriarchal form of society. These armies were part of a larger group of Indo-European speaking cultures that rapidly expanded throughout the Eurasian steppes and conquered neighboring agricultural civilizations, establishing new Indo-European speaking cultures in lands of Iran, Greater Khorasan and India.

In the Balkan Peninsula, interactions between Old European and Kurgan cultures varied. The Old European Cucuteni culture (near the Dniester and Dnieper Rivers) remained relatively intact, but increased the use of fortifications around settlements. In contrast, the Karanovo civilization (along the Danube River) was almost completely abandoned, with refugees fleeing to caves of Transylvania and islands in the Danube River. Other Old European cultures were similarly disrupted and either relocated to safer locations or disappeared from the archaeological record.

In the wake of these invasions, new societies eventually emerged that combined elements of both Kurgan and Old European traditions. In time, Kurgan-like forms of culture spread to more distant parts of Europe, spreading kurganized military traditions that later became the medieval institutions of chivalry and knighthood. This pattern of steppe invasions repeated many times, including several waves of Kurgan cultures that remain largely nameless, known only through archaeological traces.

By the time of Classical Greece and Rome, the eastern Balkan Peninsula was home to the Thracians and (possibly related) Dacians, whose Thracian language has been classified with the satem (eastern) branch of Indo-European languages that also includes the Albanian, Armenian, Slavic, Iranian, and Indic languages. During this period, Thracian populations came in contact with the southerly Roman, Persian, and Greek civilizations.

After the collapse of the Roman Empire, these lands were conquered by many waves of invaders, among them: Goths, Huns, Avars, Bulgars, Magyars, and Cumans. The cultural affiliations of these invading armies are uncertain, in part because this period saw a cultural transition in the Eurasian Steppe from Indo-European to Turkic dominance (also involving nearby Uralic and Mongolic cultures). In this transformative process, many cultures were displaced, lost, or assimilated into military confederations that in time established new Turkic societies. One zone of particular conflict was Greater Khorasan, the culturally rich lands between the Caspian Sea and Hindu Kush Mountains that became a frontier between the Turkic world to the north and the Indo-European world to the south.

For example, one group to enter the Balkan Peninsula during this chaotic period was the Avars, an Asian group associated with Huns that entered Europe and formed an alliance with the Byzantine Empire. However, their legitimacy was opposed by the Göktürks (the first clearly Turkic empire in history), who declared these European Avars were “fugitive Scythians” and “false Avars.” Although the origin of these Avars is obscure, their name and association with Scythians suggests a link with Indo-European cultures near Khwarezm (see Table 1 under “Hwar-“). One possibility is that these Avars were a partly Turkicized Iranian culture fleeing new Turkic conquests in Greater Khorasan, perhaps including military actions targeting populations associated with Indo-European cultures such as Scythians.
Another group that appeared in Europe during this turbulent period was the Bulgars, for whom the Balkan Mountains and Balkan Peninsula are named. The Bulgars, like the Avars, shared both Iranian and Turkic cultural characteristics. Like the Avars, the Bulgars’ name suggests a possible link with Greater Khorasan, where several similar place names are found (see Table 1 under “Balk-”). One of these is Balkh, an ancient Indo-Iranian cultural center known as the “Mother of Cities.” Balkh was the birthplace of Zoroastrianism and an early center of Buddhism, but was later was targeted for destruction by Mongol and Turkic military campaigns under Genghis Khan and Tamerlane. Although the exact reasons for the early Bulgar migration to Europe are not known, it coincided with Hunnish expansions in Central Asia. One possibility is that, like the Avars, the Bulgars were an Indo-European related group pushed westward by Turkic conquests near Greater Khorasan.

As these examples illustrate, several waves of military expansions near the Asian steppes spilled into Europe in the form of displaced and conquering populations, whose often complex or obscure origins are hinted at in their names. To help provide a better historical context for these contacts, a speculative discussion of geographical locations associated with several of these names is included in the next section of this article.

**Matching Names to Places**

The list of cultures associated with the eastern Balkan Peninsula includes names of multiple origins. To sort out these names and identify possible geographical references, it is first useful to separate plural suffixes (sometimes in multiple languages) from root names. Relevant plural endings that appear frequently in steppe ethnonyms include Uralic “-k” (as in magyarok and kunok), Persian “-an” (perhaps as in Cuman), and Turkic “-r” (perhaps as in Bulgar). Some ethnonyms appear to have multiple endings from different languages. For instance, the Cimmerians (Kimmerioi) appear to have both the familiar Greek plural “-oi” and a possible Turkic plural “-er,” which would leave a root name Kimm- apparently similar to the later Cumans (kunok) that conquered parts of the Balkan Peninsula.

To help provide geographical context for this complex history of invasions, Figure 2 and Table 1 provide a speculative list of ethnonyms that appear in the history of the eastern Balkan Peninsula along with possible roots, similar names, and geographical locations.

Figure 2: Map of names associated with the Thracian sub-region of Europe.
**Table 1:** List of names associated with the Thracian region, with possible roots, related names, and related locations.

<table>
<thead>
<tr>
<th>Name</th>
<th>Possible Root</th>
<th>Possible Variations of Root</th>
<th>Related Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avars (Ouarkhonitai)</td>
<td>Hwar-</td>
<td>Huvarazmish, Khwarezm³, Khorasan, Khavar-zamin, Khiva, Ourva, Uar, Kilvar, Khwa, Khvalis, Hrvat (Croats)</td>
<td>Greater Khorasan</td>
</tr>
<tr>
<td>Bulgars (Bulgari)</td>
<td>Balk-</td>
<td>Vaksa (Amu Darya River), Balkhash, Baloch, Balkh, Bukhara, Bactra, Bactriana, Balhara</td>
<td>Greater Khorasan</td>
</tr>
<tr>
<td>Cumans (Kumani)</td>
<td>Kum-</td>
<td>Kunok, Kimmerioi (Cimmerians), Kumyq, Kimek, Komi, Kolmak, Kalmyqiqi (Kalmyqis)</td>
<td>Kama River</td>
</tr>
<tr>
<td>Dacians (Dakai)</td>
<td>Dah-</td>
<td>Daoi, Dagai, Dasas (described in the Rigveda), Dahas, Dasyu, Daxia, Dahaha, Dekhon (modern Tajik, “non-nomads, peasants”); also Ayghe, Dagestan, Dargintsay (Dargins)</td>
<td>Greater Khorasan; Caucasus Mnts.</td>
</tr>
<tr>
<td>Gets (Getae)</td>
<td>Get-</td>
<td>Goths, Gutar, Gutes, Gothiscandza, Gdansk</td>
<td>Gotland (Baltic Sea)</td>
</tr>
<tr>
<td>Huns (Chunni)</td>
<td>Dzung-</td>
<td>Xiongnu, Chionites, Xiaona, Xiou, Dzungar, Donghu, Tonggu</td>
<td>Manchuria, Dzungaria</td>
</tr>
<tr>
<td>Hungarians (Ugri)</td>
<td>Yuhr-</td>
<td>Ural, Yugra⁹, Iria, Uriangkhai, Aral. (Possibly conflated with &quot;Huns&quot;²; see entry for &quot;Dzung-&quot;)</td>
<td>Ural Mountains, Ob (Yag) River</td>
</tr>
<tr>
<td>Magyars (Magyarok)</td>
<td>Mart-</td>
<td>Mordva, Udmurt, Mari, Mator¹¹</td>
<td>Volga River</td>
</tr>
<tr>
<td>Moesians (Moisi)</td>
<td>Mois-</td>
<td>Mysia, Mysi (Mysians), Mus (city in Turkey)</td>
<td>Anatolia</td>
</tr>
<tr>
<td>Roma (Romani)</td>
<td>Rom-: Arm-</td>
<td>Romanii (Romanians and Roma), Arm (Aromani), Roma (Roman)²; Armeni (Armenians)¹², Aram (Biblical location)</td>
<td>Italy; Anatolia</td>
</tr>
<tr>
<td>Szekler (Szekely)</td>
<td>Sak-</td>
<td>Saka, Saece, Suihyes (Scythisans), Suguda (Sogdians), Sagartii, Sart, Suks- (Kocharian A, “village”), Sokh (river)</td>
<td>Eurasian Steppe, Greater Khorasan</td>
</tr>
<tr>
<td>Walha (Vlachs)</td>
<td>Vrak-</td>
<td>Thraakes (Thracians), Phrygiai (Phrygians), Bryges, Wallach</td>
<td>Anatolia. (See also &quot;Balk-&quot;)</td>
</tr>
</tbody>
</table>

---

³ The English word “algorithm” derives from the name of Muhammad ibn Müsä al-Khwârizmî, the influential Persian mathematician, whose name “al-Khwârizmî” suggests family or personal origins in Khwarezm. Another of his nicknames was “al-Majâli” (see footnote 11 under “Mart-” in Table 1).

⁴ Similar names are found throughout Siberia, often associated with Uralic taiga cultures. "Yuk" means "person" in the Yupik (Siberian Eskimo) language. See “Old Siberia” at http://dnatribes.com/dnatribes-digest-2009-11-30.pdf.

⁵ The name “Hungarian” is sometimes thought to derive from the Turkic Onogur. However, another early name for the Hungarians was Ugri, which suggests a link to Uralic speaking cultures of the European and Siberian taiga. See “Old Siberia” at http://dnatribes.com/dnatribes-digest-2009-11-30.pdf.

¹¹ One possibility is that the Magyars (Hungarians) were named for a kurganized Uralic elite involved in a Turkic-led military confederation. In this case, the “-ar” might suggest a Turkic plural form of a name similar to “Mart-” or “Marg-,” to which a second Uralic “-ok” plural ending was added.

¹² More speculatively, several similar names are found in the Iranian speaking world (associated with the early spread of Kurgan cultures in Asia), including: Mada (Medes), Magî, Margu (Margiana), and Amurgioi Skuthai (Ammyurgian Scythisans). Another similar name worth mentioning is Magiarulal (Caucasian Avars).

¹³ The original root of the name “Rome” is unknown. However, Roman legend associates the Aeneads with Troy in Anatolia. More recently, “Rum” has been used in the Islamic world as a generic term for lands of the former Byzantine Empire.

¹⁴ For a discussion of the Armenian “Black Hero” Aram and associated names, see The Indo-European and Ancient Near Eastern Sources of the Armenian Epic by Armen Y. Petrosyan, pp. 43-77.
A full examination of these possible linguistic links is beyond the scope of this article. However, Table 1 suggests several connections worth noting. Several names similar to “Hun” (perhaps from a root name similar to “Dzung-”) appear in the history of the steppes. These names might refer to military confederacies led by Mongol-like warrior classes. Given the mixed genetic origins of Turkic populations, the similarity between Turkic languages and more easterly Mongolic, Tungusic, and possibly Japanese and Korean languages might reflect the dominance of Mongolic or Tungusic-like cultures from the east, assimilating formerly Indo-European speaking steppe populations into new Turkic speaking societies.

Table 1 also notes several associations between names that appear in Europe and cultures of Greater Khorasan, the frontier land at the boundary between the Indian Subcontinent and the Asian steppes. Although little discussed in western history, Greater Khorasan was an important location in the development of Indo-Iranian cultures and perhaps a necessary key to deciphering early connections between Indo-European populations of Europe and Asia.

The associations between names and places listed above are speculative and in some cases substantially differ from the usual etymologies proposed for these ethnonyms. However, archaeological, linguistic, and genetic data (as will be discussed in the next section) support substantial connections between these geographically distant populations of Europe and Asia. Similar names do not necessarily imply shared identity of these populations (which is unlikely for geographically distant populations), but can hint at some degree of cultural contact. Nevertheless, these speculative name associations can provide linguistic clues to the help unravel the complex interactions attested in the historical record, many of which remain mysterious to the present day.

Genetic Analysis

Genetic contributions to the Thracian sub-region of Europe were identified. Results are illustrated in Figure 3 and summarized in Table 2.

![Figure 3: Genetic contributions to the Thracian sub-region of Europe.](image)

European Sub-Region or World Macro-Division | Genetic Contribution
---|---
Balkan | 51.0%
Greek | 35.0%
South Asian | 10.8%
Paleo-Siberian (American Indian like) | 2.7%
Other | 0.4%

Table 2: Genetic contributions to the Thracian sub-region of Europe.

Discussion: Results in Table 2 indicate the largest contributions from the Balkan (51.0%) and Greek (35.0%) sub-regions. Because both of these sub-regions directly border the Thracian sub-region, this suggests primarily autochthonous origins based on local gene flow among neighboring populations in this part of Europe.

The westerly Balkan contribution (51.0%) might reflect gene flow from indigenous populations living near Central Europe since the Mesolithic era\(^\text{15}\), continuing in contacts with Slavic and Germanic speaking populations in historical times. The southerly Greek contribution (35.0%) might reflect gene flow from southerly agricultural populations that established Old European civilizations in the Balkan Peninsula\(^\text{16}\), continuing in later contacts with Roman, Persian, Greek, and Ottoman cultures.

The South Asian contribution (10.8%) deserves special attention due to the geographical distance between South Asia and the Thracian sub-region of Europe\(^\text{17}\). Although this might to some extent reflect relatively recent contacts via Persian and Ottoman cultures (perhaps including contacts with Roma or “Gypsy” populations, whose own origins remain obscure), the possibility of more ancient contacts with South Asia is suggested in the archaeological, historical and linguistic records. These include contacts dating to the periods of Kurgan expansion through the Eurasian steppes, as well as historical contacts via Indo-European steppe cultures such as the Scythians.

A later process mentioned earlier in this article is the transition of the Asian steppes from Indo-European to Turkic rule and the entry of refugee Indo-European associated populations (such as the European Avars or “Pseudo-Avars”) in Europe. Although historical details are incomplete, perhaps some of the populations that entered Europe had roots in Greater Khorsan, an ancient center of Indo-European cultures and zone of contact between the Eurasian Steppe, the Near East, and the Indian Subcontinent\(^\text{18}\).

Finally, a small but substantial genetic contribution from American Indian like populations (perhaps Yeniseian or Paleo-Siberian speaking populations) (2.7%) is observed. This might reflect contacts mediated by nomadic steppe cultures, including Indo-European, Uralic, and Turkic cultures that had been in contact with northerly taiga (forest zone) cultures of Siberia\(^\text{19}\).

\(^\text{17}\) A smaller South Asian contribution was previously identified (see [http://dnatribes.com/dnatribes-digest-2009-08-29.pdf](http://dnatribes.com/dnatribes-digest-2009-08-29.pdf)). However, new data support a somewhat larger South Asian genetic contribution to this part of Europe.

Announcements

New 27-Marker Test

DNA Tribes is proud to introduce our new expanded 27-Marker test. This includes all 21-Marker STRs as well as 6 new markers for a closer comparison of your DNA to world populations and regions: D10S1248, D12S391, D1S1656, D22S1045, D2S441, and SE33. A comparison chart with more information about our 15-Marker, 21-Marker, and 27-Marker Kit tests is available at http://www.dnatribes.com/kit_comparison.html.

For customers who have previously completed a 15-Marker or 21-Marker test, upgrade testing is available for order through our secure checkout system at http://www.dnatribes.com/order_upgrades.html.

New Populations added April 30, 2010

We are also pleased to announce the addition of several new populations to our global database:

New East Asian Populations:
- Aleut (Northeastern Siberia) (34)
- Chaoxian (Korean) (China) (91)
- Even (Northeastern Siberia) (59)
- Han (Henan, China) (231)
- Han (Shanghai, China) (212)
- Korea (500)
- Koryak (Northeastern Siberia) (22)
- Mixed Aleut (Northeastern Siberia) (33)
- Yao (Guangxi, China) (92)

New European Populations:
- Abov-Gemer, Eastern Slovakia (522)
- Brac, Croatia (196)
- Hvar, Croatia (204)
- Italy (209)
- Korcula, Croatia (184)
- Krk, Croatia (276)
- Mainland Croatia (204)
- Northern Portugal (200)
- Russian (Northeastern Siberia) (32)
- Saris, Eastern Slovakia (424)
- Spis, Eastern Slovakia (148)

New Near Eastern Populations:
- Central Anatolia (Turks, Kurds, and Cerkhez) (130)
- Moroccan (Belgium) (239)

New South Asian Populations:
- Balmiki (Punjab, India) (62)
- Brahmin (Chhattisgarh, India) (51)
- Gond (Madhya Pradesh, India) (75)
- Iyengar (Tamil Nadu, India) (67)
- Kanyakubja Brahmin (Madhya Pradesh, India) (78)
- Konkanastha Brahmin (Maharashtra, India) (71)
- Kuruman (Tamil Nadu, India) (67)
- Mahadev Koli (Maharashtra, India) (65)
- Munda (Jharkhand, India) (68)
- Oraon (Chhattisgarh, India) (42)
- Riang (Tripura, India) (67)
- Sakaldwipi Brahmin (Jharkhand, India) (65)
- Tripuri (Tripura, India) (65)
- Vaish (Chhattisgarh, India) (50)