Hello, and welcome to the July 2010 issue of DNA Tribes® Digest. This month’s feature article will explore genetic relationships between Romani (also known as European Gypsies) and other populations of Europe and Asia. This complements our previous analysis of general (non-Romani) populations of the Thracian sub-region of Europe\(^1\), which identified an unexplained genetic link to South Asia in populations living west of the Black Sea.

Best regards and I hope to speak with you soon,
Lucas Martin
DNA Tribes

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Romani Links to Europe and South Asia

Historical Background

The Romani people, sometimes known as European Gypsies, are an ethnic group whose exact origins have been mysterious since the medieval period. Early accounts from Wallachia describe Romani as serfs held in thrall by boyars and local monasteries, possibly brought to Europe during the Mongol invasion. Byzantine accounts describe Romani as “heretics” (atsigani) sought out for their skills in divination. When they appeared in German lands, it was thought that migrating Romani had perhaps come from “Tartary” (the Turkic steppe world). In modern times, European Romani are thought to be descended from South Asian communities that left India after 1000 AD and migrated to Europe.

Romani have practiced a variety of skills, including metallurgy, animal handling, and musical performance. Some names of the Romani are based on these skills. For instance, the names Kalderash and Haddad signify a specialization in metallurgy. However, the name Roma simply means “people” in Romani languages, which are Indic languages related to Hindi and other Indo-European languages of South Asia. Although Romani have absorbed some non-Indic language elements and made use of coded speech alterations in their travels, linguists have noted that the European Romani language has specific Modern Indic features that emerged in India only in the 11th century AD. This linguistic evidence suggests a Romani presence in India at that time and a migration to Europe sometime later.

The modern flags adopted by modern Romani communities express these nomadic origins: the World Romani Congress flag consists of a blue and green field (symbolizing sky and earth) decorated with a wheel image. Another Romani flag is decorated with a horse head, similarly evoking the idea of free travel under an open sky. Both of these images are rooted in the ancient Kurgan traditions whose emphasis on the mobility of the horse transformed early societies of Asia and Europe.

However, Romani related communities are found not only in Europe, but also throughout the Middle East. In some cases, their names (such as Domari, Doma, and Roma) suggest contacts with European Romani; other communities might have independent origins in India. The map in Figure 1 illustrates some of these cultures. Among these are cultures thought to have re-migrated from Europe to Asia such as the Zargari (Roma) of Iran, suggesting a more complex pattern of migrations in some cases.

Figure 1 also includes other more ancient communities thought to have links to South Asia. For instance, ancient Greek writers described the Sindi who lived in the Taman Peninsula, whose name suggests a possible link to the Indus (Sindhu) River. A later Indian-like culture described by the Persian geographer Estakhri was the Kara-Khazars, who lived near the European steppe during the medieval

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2 Similar ethnonyms are found in several parts of Southeastern Europe, the Near East, and Mesopotamia. A list of these names is included in the Digest article “Kurgan Riddles: The Thracian Sub-Region of Europe” at http://www.dnatribes.com/dnatribes-digest-2010-05-31.

Romani also refer to themselves with names meaning “dark” or “black,” such as Kale (cf. Koli in Southwest Asia and India). Although not specifically linked to modern Romani, some scholars have suggested an Indo-European root *re-mo, possibly related to ancient mythic themes of a “Black Hero” (such as Rama in the Indic epic Ramayana) and to a series of toponyms in Southwest Asia. See The Indo-European and Ancient Near Eastern Sources of the Armenian Epic by Armen Y. Petrosyan, pp. 43-77.

3 More information about Middle Eastern Romani cultures is available at www.domresearchcenter.com.
period. Similarly, the Persian-Jewish scholar Rashid-al-Din Hamadani described Kara-Ulagh living in the Balkan Peninsula during the Mongol invasion of Europe.

One of the communities illustrated in Figure 1, the Jat ethnic group of Pakistan and India, has been found to share a glaucoma related mutation with European Romani populations. However, the Jats are thought to have Scythian origins related to the Kushan Empire. The Tocharian linked Kushan Empire is noted by historians for its blending of European (Hellenistic Greek), Persian (Zoroastrian), and Indian (Buddhist) cultures. For this reason, the Romani-Jat mutation indicates a connection between a South Asian culture in Europe (Romani) and European linked cultures in Asia (Indo-Scythians and Kushans).

Not listed in Figure 1 is another European ethnic group named Romani: Vlach descended general populations of Romania and related cultures of the Balkan Peninsula. Modern historians disagree on the antiquity of the Romanians in their present territories. Some writers suggest that Romania was depopulated during the withdrawal of the Roman Empire and Hunnish invasions and that later Romanian (Vlach) cultures entered from other parts of the Balkan Peninsula. Other historians instead emphasize evidence of local continuities of culture, despite these disruptions. Less understood are the more ancient relationships between Thracians and Dacians, Indo-European steppe cultures (such as Cimmerians), and later Daco-Romanian and Vlach populations.

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4 The names Kara-Khazars (“Black Khazars”) and Kara-Ulagh (“Black Vlachs”) have also been interpreted as a reference to various Turkic systems assigning a color to each cardinal direction. Although the color assigned to each direction varies (even within the Turkic world), similar symbolism can be found throughout Asia and resembles the indigenous “Four Directions” symbol of the Americas. However, directional symbolism would not explain Estakhri’s more specific description of the Kara-Khazars as Indian like. In any case, these references predate the post-11th century timeframe proposed by linguists for Romani migrations from India.

5 The North India genetic region, which includes lands of present day Afghanistan, Pakistan, and India, is generally characterized by limited European genetic contributions. See http://dnatribes.com/dnatribes-digest-2009-10-31.pdf.
Genetic Analysis of Romani (European Gypsies)

Genetic contributions to Romani populations were identified. Results are summarized in Table 1 and illustrated in Figure 2.

<table>
<thead>
<tr>
<th>Region</th>
<th>Genetic Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thracian</td>
<td>73.1%</td>
</tr>
<tr>
<td>South India</td>
<td>23.1%</td>
</tr>
<tr>
<td>Other</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Table 1: Genetic contributions to the Romani (European Gypsy) populations.

Discussion: Results identified genetic contributions from two sources: the Thracian sub-region of Europe (73.1%) and the South India world region (23.1%). The Thracian contribution (73.1%) suggests contacts with non-Romani populations living west of the Black Sea, possibly including general Romanian (Vlach) populations. This could reflect contacts that took place after the Romani entered Europe, but might also express older contacts in Asia with European related steppe populations.

The South India contribution (23.1%) indicates contacts with South Asian populations that are substantially larger than the 10.8% South Asian contribution to the general Thracian sub-region identified in a previous article. These results are consistent with Romani origins in the Indian Subcontinent, with subsequent gene flow from autochthonous populations of the eastern Balkan Peninsula.

7 See “Kurgan Riddles” at http://www.dnatribes.com/dnatribes-digest-2010-05-31. If general Thracian sub-region populations (including general Romanian populations) are assessed for Romani admixture, available data are most consistent with: 78.8% Other European; 15.0% Romani; additional 4.7% South India; and 1.5% other ancestry. This suggests the possibility of either bidirectional gene flow between Romani and non-Romani populations since the medieval period, or else more ancient gene flow from other Romani-like populations linked to South Asia (perhaps mediated by steppe cultures such as Cimmerians).
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