



# IRAN VII. NON-IRANIAN LANGUAGES (1) OVERVIEW

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## IRAN

### vii. Non-Iranian Languages of Iran

This entry will discuss the non-Iranian languages spoken in Iran in the course of its history as the result of various peoples settling in parts of Iran and interacting with Iranian-speaking peoples who began to migrate to Iranian territories at the beginning of second millennium B.C.E. (see [IRAN i. LANDS OF IRAN](#); [IRAN v. PEOPLES OF IRAN](#)). The entry includes linguistic sketches of languages or dialects, as follows:

vii(1). *Overview.*

vii(2). *In pre-Islamic Iran.*

vii(3). *Elamite.*

vii(4). *Urartian.*

vii(5). *Kassite*

vii(6). *In Islamic Iran.*

vii(7). *Turkic languages.*



vii(8). *Semitic languages.*

vii(9). *Arabic.*

vii(10). *Aramaic.*

vii(1). Overview

Iran has always been a multilingual country. Personal names (anthroponyms) are that part of the lexicon which most readily reveal the linguistic composition and the historical layers of Iranian culture. When Iranian parents name their children, they spell their offspring's incorporation into their own specific socio-linguistic setting. The three main subsets of names in Iran are represented by pairs such as *Behruz* and *Lāle*, *Abu 'Ali* and *Fetne*, *Aydin* and *Solmaz*. The first pair is Iranian, the second pair is Arabic, and the third pair is Turkic. The latter two pairs reflect the two most prominent non-Iranian language components of Iranian culture, and demonstrate their amalgamation with the Iranian linguistic ground: Arabic as the language of the dominant religion; Turkic as the language of the most populous non-Iranian linguistic constituent of the society. In turn, a given name such as *Sirus* is an indicator of the most recent layer in the lexicon: phonologically, the name reflects the modern French pronunciation of Latinized *Cyrus* < Greek *Kūros* < Old Persian *Kuruš*. Sociolinguistically, it is an extreme example of the modern non-Iranian layers in the lexicon that are acquired by long-distance contact with European learning. At the same time, that name reveals the conscious attempt at the retrieval of ancient memory and ethnic history. Conversely, the choice of the call-name *Robert* for *Hushang* in a Western environment exemplifies the patterns of replacement and blending.

In terms of linguistic dynamics, the Arabic and Turkic names are borrowings. As such they exhibit non-Iranian features. Typically, the criteria for loans are the following in comparison with the host language (cf., e.g., Lubotsky, 2001), in this case Iranian-Persian: (1) irregularities in their phonological and morphological characteristics, including unusual phonology and word formation; (2) the tendency to cluster in specific semantic categories; (3) the fact that their meaning cannot be explained on the basis of Iranian etymology (the study of the origin and history of words). These unusual characteristics are not always readily recognized, since over time the loan component will be assimilated to the host language, and often partially affects the system of the latter. Moreover, some sub-systems in the grammars of the two languages may



partially overlap. Such is the case with the Arabic and Turkic names cited above: (1) In /fetne/, the sequence /tn/ is non-Iranian, but integrated into the phonotactic system of Modern Standard Persian (while the choice of the name recalls a heroine from Classical Persian literature). In /aydın/, the short diphthong /ay/ is not Standard Persian, which has the short diphthong /ey/ (except in the sequence /ayy/); moreover, Persian does not have short high front /i/ but only short /e/, and certainly does not have the unrounded Turkic high back /ɯ/ (all features marking the Turkic “Other”). In terms of word formation, the compound /abu-’ali/ is structurally Persian, while /sol+ma-z/ with the privative /ma-/ “not” remains Turkic. (2) The name Abu ‘Ali belongs to the vast set of religious names borrowed from Arabic (and also recalls a champion of Muslim-Iranian learning, Abu ‘Ali Ebn-e Sinā [see [AVICENNA](#)]). (3) Neither Abu ‘Ali “father of ‘Ali” and Fetne “seduction” nor Aydin “bright light” and Solmaz “never wilts (i.e., flower)” can be explained on the basis of Iranian (or Indo-European) words.

On a different scale, the naming of locations and regions, including settlements, rivers, and mountains (toponymy) reflects the language of the peoples who named them through the centuries and millennia. Particularly place names may reflect the names of social groups, and vice versa. Naming places always involves replacement of an earlier name. It is the time-honored strategy of dominant groups to erase old memory and to construct new memory, or to retrieve ancient memory by the superimposition of erstwhile names, strategies that are occurring before our own eyes.

For the social and linguistic historian of ancient and pre-modern Iran, toponyms and anthroponyms sometimes provide the only traces of migrations through time. More often than not, names become linguistically obscure, and are further obscured by the vagaries of textual transmission. It is only by applying the criteria of discerning loanwords mentioned above, and careful philology (the study of written texts) that the linguistic affiliation of a name can be established, and that an unknown language can be recognized in a subset of names (as is the case with Kassite; see discussion below). Such scrutiny is crucial particularly for the ancient personal names and toponyms, which are mostly found in the non-Iranian sources, mainly Mesopotamian and Urartian documents, and Classical writers. For example, V. Minorsky (1957, pp. 78 f.) recognized that the name of the tiny village *Qal’a Paswē* near Solduz in Iranian Kurdistan still retains the memory of the immigrating Iranian Parsua people who had settled there in the eighth century B.C.E. among the original



non-Iranian speakers of the Zagros mountain ranges (cf. also Zadok, 2001-28). Minorsky also identified a subset of place names which preserves the memory of Mongol groups settling there in the thirteenth century.

Thus, the relationship between language, ethnicity, and material and spiritual culture is a complex one. They represent distinct, but overlapping, networks, and any particular culture is a dynamic composite, where one vernacular tends to become dominant. Migrating groups enter into complex relationships in contact with the cultural complexes they encounter. Linguistically, they may be absorbed, leaving few linguistic traces. In turn, a dominant incoming group may impose its main language as an elite language, gradually absorbing the local vernaculars as a distinct, but modified, linguistic subset, and partially absorbing some linguistic features from adjacent cultures. Such dynamics is linguistically reflected in the encounter of Iranian-speaking groups with non-Iranian speakers in the new territories they entered and with groups entering Iranian territories from their probable home in western Central Asia in the second millennium B.C.E. to the present.

#### THE ANCIENT CENTRAL ASIAN COMPONENT

Recent research correlates archeological evidence with later, linguistically identifiable groups sharing similar cultural traits (see [IRAN vi. IRANIAN LANGUAGES](#); Hintze, 1998; Lubotsky, 2001; Witzel, 2002-03; on the pitfalls of such approaches, see, e.g., Sims-Williams, 1998). It suggests that the Proto-Indo-Iranians originated in the eastern European steppes (Pit-Grave culture, 3500-2500 B.C.E.). Still in the third millennium B.C.E. they moved eastward to the region of the southern Ural steppes and the Volga (Potapovo culture, 2500-1900 B.C.E.), then further on to Central Asia (Andronovo culture, from 2200 B.C.E. onwards). At that stage they appear to have already formed two groups: the Proto-Iranians in the north, and the Proto-Indo-Aryans in the south. It was the latter who first came into contact with the urban population of Central Asia (Bactria-Margiana Archaeological Complex or BMAC, also known as Oxus Culture; see [Figure 1](#)). Both groups assimilated to that new culture, gained prominence, and transformed it, thereby attracting non-Indo-Iranian elements. It is significant for their success that these peoples had developed a new type of social structure, called the “khanate.” The social unit was ruled by a wealthy and powerful landlord (*kān*) residing in fortified farmsteads (*qal'as*), and it was this structure that was carried into the new territories to the south, and had a lasting impact of the socio-political structures of Iran and Afghanistan, and the subcontinent (Lamberg-Karlovsky,



1994; Hiebert, 1994, on the BMAC; Hiebert, 1995, p. 201, Widmer, 2005). After 2000 B.C.E., the Indo-Aryans moved southeast via Afghanistan into the Indian subcontinent (Panjāb), as well as southwest via the Iranian plateau into northern Mesopotamia (Mitanni kingdom), probably under pressure from the Iranians to their north.

The Iranians on their part may be correlated with the subsequent so-called Yaz I culture in the BMAC complex, which reflects major cultural changes towards a more rural society after 1500 B.C.E. They apparently remained in Central Asia, and only by the end of the second millennium B.C.E. began to spread over the Iranian plateau.

Linguistically, these cultural contacts with the non-Indo-European languages of the urban civilization in lower Central Asia left distinct shared layers of loanwords in the lexicon of Indo-Aryan and Iranian. Indo-Iranian loanword studies, pioneered by F. B. J. Kuiper (since 1948; cf. Kuiper, 1997), strongly continue, prominently by M. Witzel (2000a; 2000b; 2002-03; 2003-04). A. Lubotsky (2001) analyzed some 120 terms, a good number of which point to Central Asia, and highlighted the semantic categories that are reflected in the loaned vocabulary of the Indo-Iranian newcomers: it contains no new terms for landscape and plants, which therefore must have been similar to those of the earlier homeland. However, new terms for animals such as donkey and camel, as well as terms for irrigation technology, such as canals and dug wells, implies that the Indo-Iranians came from further north. New terms for architecture, such as brick, walls, and gravel, and for clothing, such as cloak and needle, and even for hair-do, reflect the superior urban civilization. At the same time, the absence of new military terminology suggests the military superiority of the newcomers. The lack of terms for agriculture indicates that they did not much engage in it, and only used the farming products, such as bread. Surprising are new terms for body parts, including not only terms for hair, but also for belly, tail, etc. Lubotsky also highlights a distinct set of new religious terms. These include terms for priests and sacrifice, and most significantly for the Soma-plant, Iranian Haoma (q.v.). They suggest that the complex, quintessential Vedic and Avestan-Zoroastrian rituals originated and evolved in the culturally sophisticated context of the BMAC, which had ancient connections to northwest India, Elam, and northern Mesopotamia, before being carried south during the second millennium B.C.E. (cf. also Thompson, 2001).

The following select non-Indo-European loans exemplify the various



categories: \**uštr-* “camel” (Skt. *úṣṭra-*, YAv. *uštra-*, OP *uša-*, Pers. *šotor*); \**khara-* “donkey” (Skt. *khara-*, YAv. *xara-*, Pers. *xar*); \**yawīyā-* “canal, irrigation channel” (Skt. *yavīyā-*, OP *yauwiyā-*, Pers. *ju[y]*); \**išt(y)a-* “brick” (Skt. *iṣṭakā-*, YAv. *ištiya-*, OP *išti-*, Pers. *xešt*); \**mayūkha-* “wooden peg” (Skt. *mayū’kha-*, OP *mayūxa-* “doorknob,” Pers. *mix* “peg, nail”); \**kšīra-* “milk” (Skt. *kṣīrā-*, Pers. *šīr*); \**nagna-* “yeast, bread” (Skt. *nagnāhu-*, PrIr. \**nagna-*, Pers. *nān*); \**kaića-/gaića-* “head hair” (Skt. *kéśa-*, YAv. *gaēsu* “curly hair,” *gaēsu-* “curly-haired,” Pers. *gis*, *gisu* “tress(es), lock, woman’s hair”); \**anću-* “Soma plant” (Skt. *aṃśú-*, Av. *qsu-*); \**magha-* “gift, offering, sacrifice” (Skt. *maghá-*, OAv. *maga-*); \**atharwan-* “priest” (Skt. *átharvan-*, Av. *āθrawan-/āθarun-*). A number of the newly acquired terms for domesticated fauna and flora were probably introduced from the Fertile Crescent and Africa, such as \**gantum-* “wheat” (Skt. *godhūma-*, YAv. *gantuma-*, Pers. *gandom*; q.v.). Local pre-Iranian names found in the Avesta and the Old Persian inscriptions include *Xnənta* < \**khnanta* (Vd. 1.9), with non-Indo-Iranian initial /xn/, *Sug(u)da*, *Karmāna*, *Maka* (modern Makrān; Mayrhofer, I, p. 237; I, p. 447; II, p. 405; I, p. 201; II, p. 317; I, p. 433; II, p. 6; I, p. 401; I, p. 36; II, p. 289; I, p. 60; I, p. 498). A good number of shared Indo-Iranian verbal roots likewise appear to be without Indo-European etymology. These include words such as \**kram-* “to stride” (cf. Pers. *xarāmidan*), \**bhiš-* “to heal” (Av. *bišazyā-*; MiPers. *bēšāz-*, cf. Skt. *bhiṣāj-*, Pers. *pezešk* “physician”). These studies disprove the earlier assumption, at least for Avestan, of a pure, or purified, Indo-European lexicon (Mayrhofer, I, p. 409; II, p. 264; Witzel, 2002-03, n. 11).

## IRAN PROPER

Little is known about the non-Iranian speakers whom the Iranian speakers encountered on their way into Iran (see Ghirshman, 1977; Hiebert and Dyson, 2002, frontier between Central Asia and Iran; Lambert-Karlovsky, 2002, includes problems of attributing linguistic affiliation). In the east, in Baluchestan and further east in the Gandhāra/Kabul region and Arachosia/Kandahār, the Iranians were most likely still in contact with speakers of Indo-Aryan as well as speakers of Dravidian during the second half of the second millennium B.C.E. This assumption is based on (a) the close resemblance of Indic names and customs particularly in Book 8 of the Rigveda with those in Old Iranian texts, which points to the Kandahār region and Baluchestan and is dated to the middle rigvedic period (1500-1350 B.C.E.), and (b) the observation that this period evidences the first appearance of Dravidian loans in Vedic (cf. Witzel, 2000a, p. 552).



The languages along the western Caspian littoral probably included speakers of South Caucasian languages, and those along the eastern littoral may have belonged to a Central Asian linguistic continuum (see below). On the Central plateau and probably Kerman, at least some languages may have been related to Elamite.

For western Iran, there are ample Mesopotamian and, less so, Urartian sources from the first half of the first millennium B.C.E. which document the presence of numerous non-Iranian groups, and amidst them the presence of distinct Iranian groups: Medes, Parsua, and Scythians in northwestern and western Iran, and the Parsumash in Fars, beginning in the ninth century B.C.E. (Young, 1967, Zagros; Waters, 1999, on southwest Iran). The Parsua and Parsumash are probably distinct groups of immigrants from eastern Iran. (Cf. Windfuhr, 1975, pp. 466-67; Potts, 1999, p. 288; Rollinger, 1999; Zadok, 2001-28; Widmer, 2005; for a map showing the supposed Persian migration from northwestern Iran, see Koch, 1992, p. 8.) The main identifiable non-Indo-European languages in western Iran which the Iranians encountered during this period are located along the Zagros mountains: (1) Hurro-Urartian, which is a linguistic isolate, but may be remotely related to the Northeast Caucasian languages (Diakonov and Starostin, 1986; Kossian, 1997; Ivanov, 1999), in Azarbaijan and Iranian Kurdistan; (2) the linguistic isolate Kassite in the Central Zagros; and (3) Elamite further south, possibly remotely related to Dravidian (McAlpin, 1975; McAlpin et al., 1981). In terms of political and tribal entities, these correspond to the kingdoms/regions of Mannea, Parsua, Ellipi, Elam, and Anshan (for a map of the peoples and the regions mostly in western Iran during the Neo-Assyrian period, see [ASSYRIA](#), map of Assyria and its neighbors, fig. 54, p. 806; and the atlas by Parpola and Potter, 2001).

The most exhaustive philological and comparative linguistic analysis so far of the anthroponymy and toponymy documented in Neo-Assyrian sources and of pertinent Urartian sources during the Neo-Assyrian period, between ca. 1000 and ca. 600 B.C.E., is that by R. Zadok (2002). Supported by numerous statistical analyses, he attempts to reconstruct the process of the gradual Iranization, dividing the material into three historical periods (beginning 1000, 744, 704 B.C.E., respectively). The part of Iran covered is delimited by the Araxes (Aras) river and the Qara-su river in the north; the Alburz (q.v.) range and the Dašt-i Kavir (see [DESERT](#)) in the east; Luristan up to the border of Elam in the south; the area east of Lake Urmia; the Hakkāri mountains and most of Iraqi Kurdistan and the piedmont of the Zagros. Naturally, documentation is best



along the Zagros: Iranian names were overall the largest group (some 45 percent), followed by Kassite names (in the range 8-5 percent) and Hurro-Urartian names (7-1 percent). Regionally, the Iranian names were dominant in the seven Median regions, where Kassite names were the second largest group in inner and western Media (18-15 percent and 12-6 percent), and in northwest Media and Parsua (7-3.5 percent). Hurro-Urartian names were the largest group in most of Kurdistan (22-7.5 percent). These reflexes of Iranian and non-Iranian languages are thus quite heterogeneous and vary from region to region; moreover, many items of the data remain difficult to assign linguistically, and many of those are likely to belong to unknown languages and dialects (see also Parpola, 1970, Neo-Assyrian; Zadok, 1985, Neo- and Late Babylonian; Yousifov, 1986, Urmia region; Zadok, 1990-72, Kassite; Vallat and Röllig, 1993, Suso-Elamite; Zadok, 2001-30, Media).

By the middle of the first millennium B.C.E., the time of the Achaemenids, Urartian was probably still spoken in the northwest, but had been replaced by Armenian in the southern Caucasus. Dialects of Kassite probably survived in the middle Zagros, as did the non-Iranian languages along the Caspian littoral, as well as Dravidian in the southeast. Elamite as one of the official languages of the Achaemenid court was still widely spoken in the southwest.

Two further non-Iranian languages had become prominent: Akkadian, both Neo-Assyrian and Babylonian, as well as Aramaic, which had in fact replaced Akkadian as the spoken language of Mesopotamia by the end of the first half of the second millennium B.C.E. (cf. Parpola, 1999). The fall of the Neo-Assyria empire in 612 B.C.E. had probably brought Assyrians into northwestern Iran and the Urmia region. After the fall of the Achaemenid empire, groups of Greeks and Macedonians began to settle in various locations, and founded kingdoms along the Irano-Indian frontier, and finally from the mid-fourth century C.E. came the “Hunnish” Chionites and Hephtalites (qq.v.) from Central Asia, partially of Altaic stock (see above, Frye, [IRAN ii. PEOPLES OF IRAN 1](#); for overviews focusing on the distribution of Iranian languages, see Rossi, 1981, linguistic variety of Iranian in Achaemenid Iran; Rossi, 1984, Iranian glottonymy and ethnonymy in Achaemenid Iran; Schmitt, 1993, linguistic situation of Iranian languages in the Achaemenid empire; Schmitt, 1994, documentation of Old and Middle Iranian languages in Afghanistan).

The synopsis in [Table 1](#) correlates the diachrony of Iranian languages with those of Indo-Aryan (I-A) and the major non-Iranian Near Eastern languages with which they intersected at various stages; omitted from the tabulation are



Armenian, Greek, and Altaic-Turkic, as well as Dravidian, because of the uncertain information (Old Indo-Aryan, Lubotsky, 2001; Witzel, 2000a, 2000b, 2002-03; Old Iranian, de Vaan, 2003, pp. 15, 620-29; Skjærvø, 2003-04; Elamite, Stolper, in Woodward, 2004, pp. 60-94; Aramaic, Creason, *ibid.*, pp. 391-426; Akkadian, Babylonian, and Assyrian, Huehnergard and Woods, *ibid.*, pp. 218-87; Hurrian and Urartian, Wilhelm, *ibid.*, pp. 95-118, 119-37).

The Achaemenid court and administrative apparatus was multilingual. Royal texts were (1) dictated in Old Persian by the king; (2) they were then translated into Elamite; and (3) retranslated and reformulated in (a) Old Persian, and/or (b) Akkadian (Schmitt, 1991, p. 19). Similarly, the administration and bureaucracy was at least trilingual, and cumbersome: The order is (1) given in Old Persian by the king or chief deputy; (2) it is then rendered into Aramaic; and (3) finally registered in both (a) Elamite and (b) Aramaic (Vallat, 1994, p. 274, n. 74). For communication throughout the empire, Aramaic was the principal language (Imperial or Achaemenid Aramaic), but idioms are likewise used (as also noted in the Book of Esther). Considering the many hundred years of symbiosis between Elamite and Old Persian, it remains surprising that only two Elamite words appear to have entered the (official) lexicon of Old Persian: OP *dipi-* “tablet, inscription,” Achaemenid Elam. *tippi-* (ultimately from Sumerian via Akkadian), and probably OP *gāθu-* “throne,” Elam. *kat* [gat] (de Blois, 1994; cf. Pers. *dabir* “writer, secretary,” Mid. Pers. *dibīr* < Achaemenid Elam. *tup-pi-ra*, and (*taxt-*)*gāh* “(place of) throne”).

Over time, however, Iranian languages replaced the non-Iranian languages in all functions: (1) official written language(s); (2) official spoken language; (3) the language of religious texts; and (4) the local vernaculars. R. N. Frye (1974, pp. 63-64; cf. also Rossi, 1991, p. 191 n. 229) suggested the functional distinctions shown in [Table 2](#) and the process of Iranization at select geographical locations, which ultimately led to the emergence of Iran out of the expanse of the Achaemenid empire between Babylon in the west and Samarqand in the east.

*Classical sources.* The following is an extraction of the evidence for non-Iranian languages in the Classical sources which have been discussed in the preceding section (Brunner, [IRAN v. PEOPLES OF IRAN 2](#); see also Vogelsang, 1992, on eastern Iran, and the ongoing series Radner, Parpola, and Whiting, 1998, on personal names in Mesopotamian, Urartian, Classical, and other sources). As can be expected, most of those languages were recorded in the mountainous ranges and littorals that circle the plateau, but only few in the



less accessible areas on the inner plateau: (1) Caspian littoral, half-circle from NW to SE: Caspians; Cadusioi, later replaced by Geloï and Deylamites; Dribykes; Amardoï; Tapyroi; Hyrcanoi. The Caspians and Cadusioi and later Geloï most likely spoke South Caucasian, while the Tapyroi and Hyrcanoi may have belonged to the sometimes postulated North Caucasian-Central Asian continuum of languages, which was erased by the Iranians. The earlier name of Gorgan was *Khnan̄ta*, whose initial /khn/ is phonotactically non-Indo-European. (2) NE to SE: Matiani in W Azarbaijan, probably Urartian, or Caucasian; Ellipi in the southern Zagros, probably a distinct language; Cosseans and Cissians in upland Khuzestan, possibly related to Kassites (see discussion below); Uxians next to the Perside Mardi in Fars, probably a distinct language; Susians, speaking Late Elamite, later replaced by Aramaic. (3) Center to E: Paraetaceni in northern Fars, possibly a distinct language; “Camel-drivers” in Desert Kerman; Thamanei in Sistan, possibly Dravidian; (5) Gulf coast: “Turtle-eaters” of Kerman; “Fish-eaters” of Makrān (see [BALUCHISTAN](#), etc.).

The charts in [Table 3](#) schematically show the relative locations of the major regions where non-Iranians were recorded in the sources discussed by the times of the Achaemenids, and by the second century C.E. (see also the detailed reconstructed maps of Ptolemy, *Geography*, Book 6, in Humbach and Ziegler, 1998 and 2002).

#### GENES AND LANGUAGE AFFILIATION

In his monumental study of tracing the origin and migrations of modern human groups to their present habitat (minimum residence 500 years), L. L. Cavalli-Sforza and his collaborators include a section on the genetic distance of 18 populations in West Asia (for which sufficient data were available). Their genetic alignments are summarized in a chart (1994, p. 242; see [Figure 2](#)), where the horizontal scale indicates the genetic distance, while vertically the populations are listed in the general order of their relationship, forming close pairings, and successively higher groupings. The alignments are discussed in considerable detail, in particular the recognition, probably as could be expected, that there appeared a striking discrepancy between (a) ethnic groups as defined by shared language and country/region/religion, and (b) their respective genetic definition. More recently, this chart was discussed in detail by J. J. Elias (2000), with particular focus on the Assyrians (Nestorian Christians), but also on the Jewish population groups (the latter not included in Cavalli-Sforza), in the overall Iranian-speaking context. Regarding Iran and



adjacent regions, there have been a good number of similar genetic-comparative studies which are regionally more restricted (e.g., Kirk et al., 1977, Caspian littoral; Nasidze et al., 2006, South Caspian and language replacement).

It must be emphasized at the outset of the following discussion that tabulations like the one reproduced here are genetic tables, not linguistic ones. The mixed ethnic/linguistic terms used are shorthand for regions and social groups which happen to share selected subsets of genetic markers. Given the requirement of minimal residence of at least 500 years, they simply indicate the latest linguistic/ethnic overlay, which may have been preceded by various others. All historical-linguistic inferences can therefore only be speculative (cf. the comprehensive critique and discussion of the fallacies in correlating genetics with linguistics by P. Sims-Williams, 1998). In spite of these limitations, as well as the problems of available data and data selection, genetic studies may serve to strengthen assumptions of archaic patterns of relationships and of migrations when based on independent, comparative-historical linguistic argument.

Regarding the Iranian-speaking groups, the most striking result is the separation of Iranian-speakers into three genetically distinct clusters: (1) Kurdish and Caspian in the west; (2) Iranian (all others in Iran) in the Center; (3) Hazāra Tajik (Persian-speakers) and Pashtun (Pashto-speakers) in the east. The alignment of the western and eastern Iranian clusters with South Caucasian (Svani and Georgian) and North Caucasian, respectively, reveals the language areas which those western and eastern Iranian languages overlaid, but not necessarily which language groups, or even which language family: [Chart 1](#).

In the west, Caspian is aligned with South Caucasian. This suggests that speakers of the latter once extended well into Azarbaijan. This alignment would thus strengthen the assumptions discussed above of ancient Caucasianate populations in NW Iran: (a) the Caspii, Cadusii, and their successors, the Gelae, with Caucasian, which can now be specified as South Caucasian; and (b) the Matiani in Azarbaijan, and possibly the Manneans in Kurdistan. Kurdish, however, is genetically most similar to other West Asian groups, rather than to Caucasian, and is most distant from Central Asian groups (see Nasidze et al., 2005; Hennerbichler, 2004).

In the east, the Hazāra and Pashtun are genetically aligned with North



Caucasian. On first sight, the vast geographic distance between Afghanistan and southern Russia makes any linguistic alignment questionable. However, the alignment may well reflect an archaic linguistic continuum of non-Indo-European-speakers which has been proposed on linguistic grounds. This is assumed to have once stretched from the Hindu Kush, the Pamirs (including the modern language isolate Burushaski), and Afghanistan to lower Central Asia (Bactria, Margiana) and further west to the Northern Caucasus and Southern Russia (and even further, to include the linguistic isolate Basque, as proposed by Bengtson, 2001). While such a vast Neolithic linguistic continuum is doubtful, it is probable that the pre-Iranian population in Khorasan and on the eastern Caspian littoral, that is, the Tapurii and pre-Hyrcanii (Iranian Wṛkāna, pre-Iranian Khnanta) represent a southern extension of an earlier Caucasus-Central Asian continuum. In that case, they would have met the western (South Caucasian) Caspians somewhere between Mazandaran and Gilan.

The recognition that, according to Cavalli-Sforza's genetic chart, Armenian is not aligned with South Caucasian (and Kurdish-Caspian-Iraqi), but instead with North Caucasian, suggests that the Hurrian-Urartian populations whom the Indo-European Armenians overlaid must once have immigrated into the southern Caucasus from the north. This implication would strengthen the not widely accepted arguments by M. Diakonov and S. Starostin (1986) of a remote linguistic link between Hurro-Urartian and Northeast Caucasian, discussed above.

Finally, by implication, the close genetic alignment of "Iranian" in the Center (Iranian plateau, southwestern and southeastern Iran) with Turkish (Turkey) may suggest that the genetic stock of the population of much of Iran represents the eastern extension of an archaic continuum that links it with the genetic stock of much of Anatolia and the Levant.

In conclusion, whatever the genetic ground, ethnogenesis is not a matter of genes, but of social and political construction, under a leader and affiliates. Ethnicity implies shared interest and shared beliefs and behavior, geographic, social, economic, cultural, religious, and/or linguistic. Membership is not by language, but by birth, affinal relations, and, crucially, approved clientship. For the latter, the most ancient Iranian reference is found in the *Gāthās*, *Y.* 46.1, which tells of the rejected Zarathushtra: *kām namai zām, kuθrā namai ayāni* 'Where on earth for pasture? Where else shall I go to supplicate? (apparent pun with IE *\*nem-* "to allot, drive to [allotted] pasture," as in Greek



*nomē* “pasture,” and IE \**nem-* “to bend, supplicate”; cf. Windfuhr, 1999, p. 314).

Groups may split off, and form kernels of new traditions, as did the two groups of *Parsua* in the early half of the first millennium B.C.E., one near Lake Urmia, the other in Fars. In his succinct yet far-reaching discussion of the semantic and social connotation of this hotly debated designation, P. Widmer (2005) points out two kernels which are clearly distinguished by Darius and Xerxes (DNa 13ff., DSe 12 ff. and XPh 12f.): *Pārsa pārsahyā puça ariya ariya(-)ciça* “Persian, son of a Persian; Iranian, of Iranian stock.” Here, according to Widmer, the self-designation *Pārsa* points to membership in the political entity, which certainly included non-Iranian speakers, while the self-designations *Ariya* points out the biological descent (as well as language).

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