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Second Edition

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INDO-IRANIAN

Leonid Kulikov

INDO-IRANIANS AND THEIR ORIGINS

Indo-Iranian languages (another, outdated and quite misleading term is “Aryan”), which form a major branch of the Indo-European language family, are spoken by more than a billion of speakers occupying an immense territory from the Caucasus and southeastern Anatolia in the West to Northeast India and Bengal in the East and the Maldive Islands in the South. This grouping includes the Indo-Aryan, Iranian, Nūristānī (in earlier scholarship also called Kāfir), and Dardic branches. The latter is considered by many scholars as part of the Indo-Aryan branch (e.g., Morgenstierne 1961, 1973, Strand 1973, Southworth 2005: 127, 149). Convincing argumentation for treating the Dardic languages as a separate genetic group, a fourth sub-branch of Indo-Iranian, alongside Indo-Aryan, Iranian, and Nūristānī, can be found in Kogan 2005.

All Indo-Iranian languages derive from a common ancestor, the reconstructed Proto-Indo-Iranian language that was spoken around the end of the 3rd millennium BCE. The speakers of this proto-language, Proto-Indo-Iranians, are commonly identified with the Sintashta archaeological culture and its successor, the (early) Andronovo culture, located in the vast area between the Southern Ural and the Tian Shan mountains and dated to the end of the 3rd millennium BCE to the 1st half of the 2nd millennium BCE.

The oldest preserved linguistic evidence comes from the Mitanni kingdom, which existed between ca. 1500 BCE and 1300 BCE on the territory that is now northern Syria and southeastern Anatolia (and thus almost precisely matching with the easternmost end of the territory populated by the speakers of the modern Indo-Iranian languages). The main language of the kingdom was Hurrian (belonging to the Hurro-Urartian language family, probably related to the Northeast Caucasian, or Nakh-Daghestanian, family). However, the names of the ruling elite (such as Artaššumara [~ Ilr. *Arta-smara* ‘who thinks of Arta/Ṛta’] or Biridashva (biridašṣa, biriašṣa) [~ *Prītāšva* ‘whose horse is dear’]), and, particularly, the names of the gods (Mitra, Varuṇa, Indra), as well as a number of technical terms preserved in a Hittite treatise on horse training (such as *aika* ‘one’ [cf. Ved. Skr. *éka*], *panza* (~ *pāñca*) ‘five’, *vartana* ‘round’), preserve traces of an Indo-Iranian language (or perhaps, more precisely, Indo-Aryan, as a few features may point to an Indo-Aryan, rather than common Indo-Iranian, character for this hypothetical idiom; see Mayrhofer 1974).

The actual text documentation starts from the 2nd half of the 2nd millennium BCE (ca. 1200–1000 BCE) for Indo-Aryan, with the hymns of the Ṛgveda (RV), the main sacred text of the Hinduism, while the text documentation of Iranian begins in the 1st half of the 1st millennium BCE (Avesta).

Due to the essentially uncontroversial character of the Proto-Indo-Iranian reconstruction, Indo-Iranian remains probably the best-established larger subgrouping within the Indo-European family and the only one that is adopted by all Indo-Europeanists (even another very likely subgrouping of approximately the same level, Balto-Slavic, is doubted by a number of scholars).

INDO-IRANIAN PHONOLOGY

The most important features characterizing Proto-Indo-Iranian as opposed to all or most other branches of Indo-European include:

- (i) The merger of the two PIE vowels, *e* and *o*, in *a*, with the preservation of the quantity distinctions, i.e., PIE **e*, **o* > PIr. **a*; PIE **ē*, **ō* > PIr. **ā*; cf. Ved. *dā́sa*, Av. *dasā* ‘ten’ (~ Gr. δέκα, Lat. *decem*) < PIE **dek̑m*; Ved. *vák*, Av. *vāxš* ‘speech’ (~ Lat. *uox* ‘voice’) < PIE **wōk̑s*. The same holds for the vocalic part of the PIE diphthongs, which invariably changes to *a*, i.e., PIE **ey*, **oy* > PIr. **ai*; etc. The only phonological context where the original opposition between two PIE timbres leaves traces in the form of a new opposition (in length) is the open non-final syllable, where the original short **o* was lengthened (**o* | _CV > **ā*), while **e* was not (Brugmann’s Law); cf. the acc. sg. form Ved. *dātāram* ‘giver’, Av. *dātāram* ‘creator’ (~ Gr. δώτορα) < PIE **-tor-ŋ* as opposed to acc. sg. Ved. *pitāram*, Av. *pitarām* ‘father’ (~ Gr. πατέρα) < PIE **-ter-ŋ*.
- (ii) Another source of PIr. **a* is the vocalic allophone of the two nasal sonants, i.e., PIE **ŋ*, **m̥* > PIr. **a*; cf. Ved. *matí-* ‘thought’ (~ Lat. *mēns*, gen. sg. *mentis* ‘mind’) < PIE **mn-ti-* [**m̥n-ti-*] and the words for ‘ten’ mentioned above.
- (iii) The phonological status of **l* was weakened in Indo-Iranian. *l* changed to *r* in Iranian, and in many, but not all, cases in Indo-Aryan. In particular, *l* always changed to *r* when surfacing as a vocalic allophone; in the language of the RV, words containing *l* are very rare, but from the end of the early Vedic period, more forms with *l* start to appear (perhaps originating in one or several hypothetical *l*-dialects, where the original opposition was preserved); cf. RV *reh-* as opposed to the younger Atharvavedic (Paippalāda) root variant *leh-* ‘lick’ < PIE **leyǵh-*.
- (iv) Proto-Indo-Iranian is very conservative as far as the system of stop consonants is concerned, preserving the PIE system virtually intact: the opposition of three series – voiceless T, voiced non-aspirate D, and voiced aspirate D^h (or glottalized ’D and simple voiced D, if we accept the glottalic theory for the PIE reconstruction) – remains without changes. Voiceless aspirates (and, within the glottalic theory, voiced aspirates, too) must represent Indo-Aryan innovation.
- (v) Palatalizations: Indo-Iranian belongs to the *satəm* languages; that is, the simple velar (**k* **g* **g^h*) and labiovelar (**k^w* **g^w* **g^{wh}*) PIE series of consonants merged together, while the palatovelars were palatalized: **k* **ǵ* **ǵ^h* > **č* **j* **j^h*; cf. Ved. *dā́sa*, Av. *dasā* ‘ten’ < PIr. **daća* < PIE **dek̑m* (~ Gr. δέκα etc.). Another series of palatal consonants, PIr. **č* **j* **j^h*, reflects PIE simple velars and labiovelars before /*ē*/ and /*i*/; cf. Ved. *ca*, Av. *-ča* ‘and’ < PIE **k^we* (~ Lat. *que* etc.).
- (vi) The only PIE sibilant, **s*, is retroflexivized in PIr. after *i*, *u*, *r*, and *K* (= all velars); cf. Ved. *tṣ̥ṇā-*, Av. *taršna-* ‘thirst’ < PIE **t̑s-n-* (~ Eng. *thirsty*); Ved. *viśá-*, Av. *vīša-* ‘poison’ < PIE **wis-ó-* (~ Lat. *vīrus*). This phonetic law, known also as the RUKI rule, is an isogloss (partly) shared with the Balto-Slavic, Armenian, and Albanian branches.
- (vii) Indo-Iranian differs from all other branches in the timbre of the vocalization of the PIE laryngeals (in the interconsonantal position): **Ḥ* > **i* (unconditionally in the final syllable and occasionally also in other positions); cf. PIE **ph₂-ter-* ‘father’ > PIr. **p(i)tar-* > Ved. *pitár-*, Av. dat. sg. *piθrē*, *fəðrōi*, OPers. *pitar-*.
- (viii) Indo-Iranian is the most conservative branch of Indo-European as far as the accentuation system is concerned: Vedic is the main source of our knowledge about PIE accentuation, preserving it, presumably, virtually intact.

THE INDO-IRANIAN MORPHOLOGICAL SYSTEM

From the morphological point of view, Indo-Iranian is also one of the most archaic branches of Indo-European, probably preserving the original system of inflectional and derivational categories as reconstructable for the proto-language better than any other branch.

In particular, within the nominal system Indo-Iranian perfectly preserves the three numbers (singular, dual, and plural) and eight cases (nominative, accusative, instrumental, dative, ablative, genitive, locative, and vocative) as well as the three genders of PIE. Only some regularizations in the system of endings in nominal paradigms must represent Indo-Iranian innovations, though. These include, for instance, introducing *y* after *b^h* in the dative-ablative dual and plural endings **-b^hyā(m)* and **-b^hyas*, respectively (for **-b^hō* and **-b^hos* reconstructable on the basis of evidence from other branches), apparently from the instrumental plural **-b^hi-s*.

Another probable innovation in the Indo-Iranian pronominal system was adding (prefixing or suffixing) the particle of remoteness **u/*au* to certain forms derived from the pronominal stem **a-* (cf. Iranian **au-a-* and Indo-Aryan **ad-u* → **ad-áu* by analogy with **sáu*; **am-ú-*), in order to distinguish between proximal and distal demonstratives, presumably due to the fact that some originally distinct pronouns fell together after the merger of the two PIE vowels **e* and **o* in Indo-Iranian (Klein 1977).

The Indo-Iranian verbal system was also quite archaic. It had five moods: indicative, injunctive (very productive in the earliest periods, where it was used as an “extratemporal” tense category rather than a special mood” (M. Kümmel *forthcoming*/2017), mentioning an event or activity as a “known fact”), imperative, optative, and subjunctive; and it distinguished between the present tense and three past tenses (aorist, imperfect, and perfect) in the indicative. The function of the future was largely taken over by the subjunctive mood, which denoted the expected action (cf. Tichy 2006).

Indo-Iranian had two voices, active and middle; at least in the 3 sg. and 3 pl. forms, many verbs could distinguish between “(medio-)passive” and “non-passive”. The “(medio-)passive” paradigm was differentiated from the non-passive forms partly by means of special stem formative morphemes (such as the present passive suffix **-ja-*, the use of which in this function was an important Indo-Iranian innovation), partly by means of specific inflection (see Kümmel 1996, Kulikov 2006).

THE INDO-IRANIAN LEXICON

The inherited IE lexicon

A large part of the Common Indo-Iranian vocabulary is inherited from PIE, being, at the same time, an important source for its reconstruction. This inherited part of the lexicon covers all important domains of lexica (see numerous examples above and in the Indo-Aryan and Iranian chapters) and, like other parts of the linguistic system, testifies to a considerable conservatism of Indo-Iranian.

Loan-words in the Indo-Iranian lexicon and substrate/adstrate influence

Alongside with the well-established inherited part of the lexicon, there are a considerable number of words that cannot be traced to PIE but are safely reconstructable for Proto-Indo-Iranian on the basis of evidence from both Old Indo-Aryan and (Old) Iranian (evidence from Middle and New Iranian may be relevant, as the expected cognates may

be lacking from the Old Iranian corpus, which is somewhat more limited as compared to Old Indo-Aryan), thus representing loan-words into Proto-Indo-Iranian before its split. Such borrowings encompass a variety of cultural domains, such as agricultural and farming terms, animal names (cf. Ved. *úštra-*, Av. *uštra-*, OPers. *uša-* < PIIr. **úštra-* ‘camel’; Ved. *kaśyápa-*, Av. *kasiiapa-* < PIIr. **kačjāpa-* ‘tortoise’), household and building (cf. Ved. *iṣṭakā-*, *iṣṭikā-*, Av. *iṣṭiia-*, OPers. *išti-* < PIIr. **išta-*, **išti-* ‘brick’), irrigation terms, religious terms, and mythology (Ved. *amśú-*, Av. *qsu-* < PIIr. **anćú-* ‘Soma plant’; Ved. *átharvan-*, Av. *āθrauuān-* < PIIr. **áθaruan-* ‘(a particular type of) priest’ (? see Pinault 2006)).

Candidates for the sources of these borrowings may be cultural languages that were spoken in and around the area populated by the Proto-Indo-Iranians, that is, from Mesopotamia to the South Ural, around the 3rd millennium BCE, as well as some isolated languages spoken in remote mountain areas, such as Burushaski (see Tikkanen 1988). Proto-Uralic could also borrow loan-words from some Indo-Iranian dialects; see, e.g., Katz 2003. However, the origin of most of these loan-words is unclear. Quite attractive is the theory about the borrowing of the bulk of these Common Indo-Iranian loan-words from the unidentified language spoken by the population of the Bactria-Margiana Archaeological Complex that was located immediately to the south of the Andronovo culture’s area and had a well-developed urban civilization (see Lubotsky 2001).

INDO-IRANIAN LANGUAGES IN A DIACHRONIC TYPOLOGICAL PERSPECTIVE

The relevant shared features of the languages belonging to the Indo-Iranian branch are not confined to the peculiarities inherited by Proto-Indo-Iranian from PIE and thus are shared, foremost, by the oldest representatives of this subgrouping, i.e., by Old Indo-Aryan (Vedic/Sanskrit) and Old Iranian (Avestan and Old Persian), but they are only partly (if at all) preserved in the modern members of the branch. Of no less importance are much more recent features of the group that emerged after the split of Proto-Indo-Iranian (or even of Proto-Indo-Aryan and Proto-Iranian) and must be due to the fact that many members of the Indo-Iranian branch belong to the same linguistic area (together with languages of non-Indo-European affiliation). Specifically, virtually all Indo-Aryan and Nūristānī languages as well as a few neighboring Iranian languages such as Pashto (together with the non-Indo-European Dravidian, Munda, and the isolate Burushaski) form the South Asian linguistic area (which is notorious as one of the handbook examples of a linguistic area; see Masica 1976). There are also some good reasons to extend this area further to the North and East, including such languages or families as Tocharian (Indo-European) and Turkic/Altaic into the large Central-South Asian linguistic area (see, e.g., Hock 2007).

The features briefly summarized below thus reveal the same basic type of evolution, representing shared innovations due to parallel developments and/or triggered by shared influences of neighboring (substrate or adstrate) languages. The list of linguistic features given in this section by no means claims to be exhaustive.

Diachronic trends within the system of transitivity oppositions: voice and valency-changing categories

Considering the system of transitivity oppositions in Indo-European in a diachronic typological perspective, one may posit two major evolutionary types attested for the

members of this linguistic family (briefly outlined in Comrie 2006; for details, see Kulikov 2009; 2012). One major type is located in the West of the Indo-European area and includes such branches as Germanic, Romance, Greek, and Slavic. These branches share a number of parallel tendencies in the system of encoding transitivity oppositions and valency-changing categories that can be qualified, by and large, as instantiating a “**syncretic**” type of evolution: (i) The old syncretic marker encoding a number of valency-reducing (intransitivizing) derivations (such as passive, anticausative, and reflexive), the middle voice (type of inflection), is either preserved (as in Greek) or replaced with a new middle, mostly going back to the PIE reflexive pronoun **s(w)e-*. (ii) The PIE morphological causatives with the suffix **-éye/o-*, reflexes of which are still relatively well attested in Old Germanic (e.g., in Gothic *jan*-verbs) and (early) Slavic (*i*-causatives), virtually disappear. (iii) Many languages of this “Western” area attest the emergence and expansion of labile verbs (i.e., verbs or verbal forms that can show changes in syntactic pattern, with no formal change in the verb) of the type *John opens the door* / *The door opens* (this trend is particularly well attested in the history of English; see, e.g., McWhorter 2002, Gelderen 2011).

By contrast, several other daughter languages, mostly those belonging to some **Eastern** branches of Indo-European, such as, first of all, Indo-Iranian, radically abandon the syncretic strategy in the system of encoding transitivity oppositions and valency-changing categories, developing, by and large, in the opposite, “**antisyncretic**”, direction. The most important diachronic typological features shared by the representatives of the Eastern type include the following: (i) The middle voice declines, which amounts to the loss of most original (intransitivizing) functions of the PIE middle and the lexicalization of many middle forms; subsequently, the active/middle opposition, albeit physically preserved in the paradigm, loses a large part of its functional content, thus being degrammaticalized. (ii) Instead, most languages of this area develop special markers for several intransitivizing voices and valency-changing categories. These include, in particular, Indo-Iranian and Armenian markers of a morphological passive going back to the PIE suffix **-ye/o-* and Indo-Iranian reflexive and reciprocal pronouns (cf. Ved. *tanū́-*, Av. *tanū-* ‘self’ ← ‘body’; Ved. *anyó . . . anyá-* (*anyo-’nya-*, *anyonya-*), Av. *aniiō. ainīm* ‘one another, each other’; see Kulikov 2014b). Morphological causatives (in particular, the reflexes of the PIE **-éye/o-* causative – cf. Vedic and Avestan morphological causatives with the suffixes *-áya-* and *-aiia-*, respectively – but also other morphological causatives, especially with nasal affixes) demonstrate a considerable increase in productivity. This increase in the productivity of morphological causatives can be observed during the entire history of Indo-Iranian languages and eventually gives rise to the complex systems with two or even more causatives (including double causatives with a reiterated causative morpheme, as in Marathi and Tajik; see examples in Masica 1976: Ch. 3) in some members of this branch, which distinguishes them from other Indo-European groups. (iii) Labile verbs, still common in (early) Old Indo-Aryan and Avestan, become rarer; in particular, in Vedic this tendency is clearly observable as early as in the post-Ṛgvedic language; see Kulikov 2014a.

Typologically, the antisyncretic (Eastern) type, as attested in Indo-Iranian, shares more features with the languages of some non-Indo-European families, such as Turkic (or, more generally, Altaic) or Dravidian, than with the languages of several Western Indo-European branches. This is demonstrated in Table 4.1, which compares a few related features characterizing the main trends in the development of the systems of transitivity oppositions for a variety of both Indo-European and non-Indo-European language groups.

TABLE 4.1 ENCODING TRANSITIVITY OPPOSITIONS: DIACHRONIC TYPOLOGICAL FEATURES OF SOME LANGUAGE FAMILIES

	middle voice	morphological valency-changing categories	labile syntax
East Caucasian	0	+/ ↗	+
Kartvelian	+	+	0
Egyptian/Coptic	+	+/ ↗	(+)
Indo-European			
Germanic	↗ (new)	↘	↗
Romance	↗ (new)	↘	+/ ↗
Slavic	↗ (new)	↘	0/(+)
Greek	+	0/(+)	++
Indo-Iranian	↘	↗	↘
Turkic	0/ ↘	+/ ↗	0/ ↘
0	lacking		
(+)	present but rare or non-productive		
+	present		
↗	increasing (in productivity, frequency, etc.)		
↘	decreasing/disappearing		

Diachronic changes within the case system

As mentioned above, the Proto-Indo-Iranian morphological system was very conservative, perfectly preserving the eight PIE cases, which further remained intact in both main branches, Indo-Aryan and Iranian, for more than 1000 years after the split of Proto-Indo-Iranian, as documented in Old Indo-Aryan (Vedic) and Old Iranian (Avestan). After the end of the Old Indo-Aryan and Old Iranian periods, we observe a dramatic decline of the case systems in both subgroups, which thus represents another shared innovation. By the end of the Middle Indo-Aryan/Iranian period, the Indo-Iranian languages had lost the majority of the conservative Old Indo-Aryan/Iranian case system. Generally, only two cases survive, direct (resulting from the merger of nominative and accusative) and oblique (mostly going back to the Old Indo-Aryan/Iranian genitive); in some languages traces of some other oblique cases, such as the instrumental, locative, or ablative, can still be found, such as the Sinhala instrumental case in *-en/-in* and the Assamese ergative *-e*, both probably reflecting the OIA instrumental singular ending of the *-a*-declension, *-ena*. The functions of the lost cases are largely taken over by postpositions of different origin.

In several New Indo-Aryan and New Iranian languages we observe the grammaticalization of such new postpositions, which are normally added to the oblique case form. Very often this grammaticalization results in the amalgamation of a postposition with the oblique and, ultimately, in the rise of a new case. Such is, for instance, the origin of the two new case endings in Sinhala, viz. dat. *-ta* (< Skt. *artha* ‘goal, purpose’, used as the final member of a nominal compound) and gen. *-ge* (< Skr. *gr̥he* ‘in the house’ = loc. sg. of *gr̥ha-* ‘house’), and several case morphemes in Ossetic, such as dat. *-æn* (< **ana*, cf. Av. *ana* ‘upon, over, across’, or **anu*, cf. OPers. *anuv*, Av. *anu* ‘along, after, according to’) and adessive *-bæl* (Digoron) (< **upari* ‘above, upon, on’); for details and discussion, see Kulikov 2011.

Other shared syntactic innovations

There are a number of other syntactic innovations shared by many or most Indo-Iranian languages of both major subgroups:

- (i) The emergence of the ergative construction, first of all, on the basis of the syntactic reanalysis of constructions with resultative verbal adjectives (traditionally

also called “perfect passive participles”) with the suffix *-ta-/na-*, is a syntactic innovation shared by several Indo-Aryan and Iranian (foremost Western Iranian) languages. This development started during the Middle Indo-Aryan/Iranian period, when the agentive noun (the passive agent) of constructions with *-ta-/na-* adjectives acquired some subject properties (such as the referential control of converbs). In fact, however, the origins of the ergative alignment can presumably be dated as early as Old Indo-Aryan/Iranian or perhaps Proto-Indo-Iranian. In particular, there are some reasons to take Vedic constructions with *-ta-/na-* adjectives and the genitive marking of the agent separately from canonical passives with the instrumental. According to P. K. Andersen (1986), the genitive noun displays a number of subject properties (usually animate; definite and/or refers to old information) in such constructions, and therefore they should be qualified as ergative rather than passive, properly speaking.

- (ii) Constructions with oblique (non-canonical) subjects, quite common in many Indo-European branches (in particular, in the Western part of the Indo-European area; see, e.g., Barðdal et al. 2012), had become relatively rare in the easternmost branches (in particular, in Indo-Iranian), being replaced by the canonical (nominative) subject pattern. This innovation appears to be shared with some other Eastern (antisyncretic) branches of Indo-European, such as Tocharian; see Viti (forthcoming). Nevertheless, many New Indo-Aryan languages have ultimately developed new oblique (non-canonical) subject constructions (see Masica 1991: 346ff.).
- (iii) A remarkable feature of the syntax of many modern Indo-Iranian languages is the existence of long chains of converbs in narrative texts (see, e.g., Masica 1976). This feature is shared with a number of non-Indo-European languages of South, East, and Central Asia (cf. Bickel’s (1998) “Asian type”).

The origin of the cluster of (diachronic) typological features described above, such as, above all, the antisyncretic evolutionary type of encoding transitivity oppositions, the rise of new agglutinating case systems, and the decline of constructions with non-canonical (oblique) subjects in Old Indo-Aryan, is a difficult problem on its own. It may be partly due to the influence of substrate (or adstrate) languages of the Altaic or Dravidian type. Further study of these areal features in typological context is required for a better understanding of the mechanisms of these changes in the historical period.

FURTHER READING

There is no comprehensive monographic description of Proto-Indo-Iranian and its historical grammar. However, the relevant chapters of de Gruyter’s forthcoming *Handbook of Comparative and Historical Indo-European Linguistics*, Lubotsky forthcoming/2017, Kümmel forthcoming/2017, and Schmitt forthcoming/2017, give excellent brief surveys of the corresponding parts (phonology, morphology, and the lexicon, respectively) of the Proto-Indo-Iranian linguistic system. In addition, Gotō 2013 offers a comprehensive overview of the Indo-Aryan morphological system in a diachronic perspective, tracing most of its aspects back to the Indo-Iranian. The reconstructable Indo-Iranian vocabulary is fairly well represented in the Indo-Aryan etymological dictionary Mayrhofer 1992–1996.

There are several works on the South Asian linguistic area that discuss the features shared by its members, i.e., virtually all Indo-Aryan, Nūristānī, and some Iranian languages, starting with such seminal works as Masica 1976 (see also Masica 1991); see also, more recently, Southworth 2005 and Hock 2007.

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