

## Indo-European

(from the website of Jay Jasanoff)

Indo-European linguistics is the branch of historical linguistics that studies the early history of the IE languages, particularly in relation to their reconstructed common parent, Proto-Indo-European (PIE). This page gives some information about the makeup of the IE family, the current “look” of PIE phonology, morphology, and syntax, and the problem of locating the “real” Indo-Europeans in space and time. A few reading suggestions are given at the end.

### *The family*

The IE family has ten or eleven major branches, two of which are extinct. The living branches, in clockwise order from east to west, are

- *Indo-Iranian*, including *Indic* or *Indo-Aryan* (Sanskrit and the modern Indo-Aryan languages (Hindi, Bengali, Marathi, etc.) and *Iranian* (Avestan, Old Persian, and the modern Iranian languages (Persian (Farsi), Pashto, Kurdish, etc.))
- *Armenian*, in both classical and modern forms
- *Greek*, with numerous ancient and modern dialects
- *Albanian*, in two main dialect groups
- *Italic*, including Latin and its ancient relatives (Oscan, Umbrian, etc.), along with the Romance descendants of Latin (French, Italian, Spanish, etc.)
- *Celtic*, including the medieval and modern Goidelic (Old and Modern Irish, Scots Gaelic, etc.) and Brittonic languages (Welsh, Breton, etc.)
- *Germanic*, including Gothic (extinct) and the medieval and modern forms of English, German, Dutch, and the Scandinavian languages
- *Baltic*, including Lithuanian, Latvian, and the extinct Old Prussian
- *Slavic*, including the early medieval language Old Church Slavonic and the modern Slavic languages (Russian, Polish, Czech, etc.)

The last two are often regarded as subbranches of a single branch, *Balto-Slavic*.

The two extinct branches are

- *Anatolian*, including Hittite, Luvian, Lydian, and other languages of ancient Asia Minor

- *Tocharian*, consisting of two languages (Tocharian A and B) known from archaeological sites on the Silk Road, in the Chinese province of Xinjiang

Also Indo-European, but not assignable to any of the above branches, are Phrygian (Asia Minor), Messapic (SE Italy), and a number of other poorly attested languages of antiquity, some of which are known from only a few words.

### ***PIE phonology***

Using the comparative method, late nineteenth and early twentieth century scholars — the “Neogrammarians” — produced a remarkably detailed picture of the IE parent language. The Neogrammarian model posited a large PIE consonant system, with four classes of stops (voiceless (e.g., *\*t*), voiced (*\*d*), voiceless aspirated (*\*th*), voiced aspirated (*\*dh*)) distributed over five articulatory positions (labial (e.g., *\*p*), dental (*\*t*), palatal (*\*k̑*), velar (*\*k*), labiovelar (*\*kʷ*)). There was also a rich morphology, largely dependent on suffixation and ablaut (= morpheme-internal vowel alternation). Little attention was paid to a competing reconstruction of PIE, due primarily to Ferdinand de Saussure, which eliminated the voiceless aspirated stops and simplified the description of ablaut by positing three additional consonants, later known as “laryngeals.”

The Neogrammarian consensus was shattered by the decipherment of Hittite and the demonstration that it was an IE language (1915-17). The classical picture of PIE had relied heavily on (Homeric) Greek and (Vedic) Sanskrit, the earliest IE languages known in the nineteenth century. Hittite was older still, with texts going back to before 1500 BCE; yet it failed in significant ways to conform to the profile of an archaic IE language. In the area of phonology, the most striking peculiarity of Hittite was the phoneme *h*, which was shown in 1927 to correspond to one (or more) of Saussure’s “laryngeals.” The subsequent elaboration of the “laryngeal theory” led to major insights into the structure of PIE and the history of the daughter languages, but it also produced intense controversy. Disagreements centered on the size of the PIE laryngeal inventory and the legitimacy of positing additional laryngeals on purely structural grounds. Only toward the end of the twentieth century did a new consensus begin to emerge. The phonological system assumed by most Indo-Europeanists today is similar to Saussure’s system of a hundred years ago:

stops:	<i>p</i>	<i>t</i>	<i>k̑</i>	<i>k</i>	<i>kʷ</i>	(voiceless)
	<i>b</i>	<i>d</i>	<i>ǵ</i>	<i>g</i>	<i>gʷ</i>	(voiced)
	<i>bh</i>	<i>dh</i>	<i>ǵh</i>	<i>gh</i>	<i>gʷh</i>	(breathy voiced)
fricative:	<i>s</i> , with non-contrastive voicing before voiced and breathy voiced stops					
sonorants:	<i>m, n, r, l, y, w</i> ; with syllabic allophones between non-syllabics					
laryngeals:	<i>h<sub>1</sub>, h<sub>2</sub>, h<sub>3</sub></i>					
vowels:	<i>a, e, o, i, u</i> (short); <i>ā, ē, ō, ī(?), ū(?)</i> (long)					

### ***PIE morphology***

The PIE of the Neogrammarians was a highly inflected language like Greek and Sanskrit. Nominal stems (nouns, adjectives, pronouns) had three numbers (singular, dual, plural) and eight cases (nominative, accusative, instrumental, dative, ablative, genitive, locative, vocative); there were masculine, feminine, and neuter genders. Verbs made imperfective (“present”), perfective (“aorist”), and resultative-stative (“perfect”) aspect stems; imperfective stems further distinguished between present and past (“imperfect”) tense forms. As in nouns, there was a dual number distinct from the singular and plural. There were two voices (active, middle/mediopassive) and at least four moods (indicative, imperative, subjunctive, optative), along with a full complement of verbal nouns and adjectives.

This picture, like the Neogrammarian sound system, was challenged by the discovery of Hittite. Hittite had many fewer grammatical distinctions than Greek or Sanskrit, both in nouns (where, e.g., the feminine gender was lacking) and in verbs (where, e.g., there was no aorist, subjunctive, or optative). First impressions notwithstanding, the morphological gaps in Hittite proved in most cases to be secondary, late losses rather than archaic survivals of an earlier, “simpler” stage of PIE. As in phonology, the great value of Hittite lay not in what it lacked, but what it *had* — unexpected case endings in the noun, unexpected personal endings in the verb, and types of stem formation in both nouns and verbs that had left only vague traces in the other early languages. Beginning in the 1960’s, the new data of Hittite and Anatolian helped to launch a revolution in IE morphology — a revolution in which the other “new” branch of the family, Tocharian, also played a major role. In the specifics of inflection and derivation, the current look of PIE morphology is at least as far-removed from the Neogrammarian picture as the modern view of PIE phonology.

### ***PIE syntax***

Early progress in the field of PIE syntax was less dramatic than in phonology and morphology. The syntactic interests of traditional Greek and Latin philologists, focusing on the use of individual cases, moods, and grammatical forms, were pursued at the PIE level in the Neogrammarian period. Through the work of scholars like Berthold Delbrück and Jakob Wackernagel, massive bodies of comparative data were compiled and analyzed; Wackernagel’s name is known to non-specialists today for the rule of clitic movement (“Wackernagel’s Law”) that he established for PIE and that has since been found to operate in many non-IE languages as well. Under the stimulus of new data from Anatolian and the other languages, traditional comparative techniques continued to shed light on IE surface syntax through the twentieth century.

With the advent of a descriptively usable form of generative grammar in the 1970’s, it became possible to investigate the syntactic history of the IE languages at a deeper level. Thus far, relatively little reconstructive work has been done on PIE itself, partly for practical reasons (the number of linguists with both the needed theoretical and language-specific control is small), and partly because, given the difficulty of the task, it has generally been found more productive to begin with the individual branches than to

confront the parent language directly. The branch that has received the most attention to date is Germanic, although Anatolian, Indo-Iranian, and others have been the object of important studies as well. Major breakthroughs in IE syntax can be expected in the years ahead.

### ***The Indo-Europeans***

As a real language in time and space, PIE must have had real speakers. This is almost the only uncontroversial thing that can be said about the “Indo-Europeans,” a shadowy prehistoric people who have repeatedly been invented and re-invented to serve changing contemporary agendas. The discovery of the IE language family came at a time of rising nationalism in Europe, when many national groups found the idea of a heroic remote past, linked to the imagined triumphs of idealized ancestors, an empowering alternative to the disunity and political impotence of early nineteenth-century reality. It was from this milieu that came the myth of the “Aryan race,” the name “Aryan” being taken from an incorrect application of the Indo-Iranian self-designation *Arya-* to the IE family as a whole. Following the Nazi appropriation of the “Aryans” for their own purposes, the word and its associated racist ideology passed out of respectable scholarly use. Implicit Aryanist attitudes, however, pervade the older literature on IE archaeology and culture.

According to the view favored by most linguists, the “late” (i.e., just pre-breakup) Indo-Europeans inhabited the steppe region of southern Russia at the beginning of the fourth millennium BCE, where they were probably among the earliest domesticators of the horse (PIE *\*h<sub>1</sub>ekwo-*, apparently based on an archaic word for “speed”). The PIE reconstructable vocabulary shows that the Indo-Europeans practiced agriculture, kept domesticated animals, had or were on the verge of acquiring wheeled vehicles, and at least knew of metallic copper. The word for “god” (*\*deiwo-*) was a derivative of the word for “sky” (*\*dyew-*); indeed, the deified sky was a major IE divinity (cf. Vedic *Dyaus*, Gk. *Zeús*, Lat. *Iu-ppiter*). The IE kinship system was patrilineal. IE tribal groups were headed by leaders called *\*h<sub>3</sub>rēǵ-es* (nom. pl.), whence later terms for “king” in the attested languages (Lat. *rex*, etc.). Although PIE was not a written language (writing had not yet been invented), there was an active tradition of oral poetry, elements of which can be traced in the Rigveda, the Homeric poems, and other early texts in the individual IE traditions.

### ***Further reading***

The best all-purpose introduction to IE linguistics for English speakers, with extensive coverage of PIE and all the individual branches, is Benjamin W. Fortson, *Indo-European Language and Culture: An Introduction* (Blackwell, 2004). Other introductions, with different emphases, are James Clackson, *Indo-European Linguistics: An Introduction* (Cambridge University Press, 2007), stressing theoretical and methodological issues; R. S. P. Beekes, *Comparative Indo-European Linguistics: An Introduction* (Benjamins, 1995), oriented toward the “Leiden school”; Michael Meier-Brügger, *Indo-European Linguistics* (de Gruyter, 2003), offering very complete phonological coverage; and Eva

Tichy, *A Survey of Proto-Indo-European* (Hempfen, 2006), representing the views of the “Erlangen school.”

A unique introduction to the PIE lexicon, focusing on the IE component of English, is Calvert Watkins, ed., *The American Heritage Dictionary of Indo-European Roots* (Houghton Mifflin, 2000; included as an appendix in the fourth edition of *The American Heritage Dictionary of the English Language* (2006)). A less English-oriented approach is taken in C. D. Buck’s dated (prelaryngeal) but still fascinating *Dictionary of Selected Synonyms in the Principal Indo-European Languages* (University of Chicago Press, 1988 [1949]). J. H. Mallory’s *In Search of the Indo-Europeans* (Thames & Hudson, 1989) is the authoritative introduction to IE archaeology and the “homeland problem.” For IE poetics and non-material culture generally, Calvert Watkins, *How to Kill a Dragon: Aspects of Indo-European Poetics* (Oxford University Press, 1995) is unrivalled.

An indispensable internet resource, offering access to sample texts, grammatical sketches, online databases, and much else, is the multilingual TITUS website maintained at the University of Frankfurt (<http://titus.uni-frankfurt.de/indexe.htm>).