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See also **Canada; Dialectology; France; French Language; Indo-European 2: Germanic Languages; Indo-European 3: Indo-Iranian Languages; Indo-European 5: Slavic; Italian; Italy; Latin; Meillet, Antoine; Mexico; Phonology; Romanian; Saussure, Ferdinand de; Spain; Spanish and Iberoromance Languages**

Indo-European 5: Slavic

The Slavic languages, spoken by some 288 million people, constitute one of the branches of the Indo-European family. Until approximately 500 CE, before it disintegrated into the various Slavic languages spoken today, the language of the Slavs was relatively uniform. This language, referred to as Proto-Slavic or Common Slavic, was not written down; thus, it must be reconstructed by using the evidence of later written and oral sources. The phase of the unattested Slavic language up to 500 CE is usually referred to as Proto-Slavic, and from that point to approximately the tenth century, it is referred to as Common Slavic. Its closest relative is the Baltic family, made up of modern Latvian and Lithuanian, as well as extinct Old Prussian. The modern Slavic languages are divided into three branches: West (Czech, Slovak, Upper and Lower Sorbian, Polish, and Kashubian), East (Russian, Ukrainian, and Belarusian), and South (Slovene, Croatian, Serbian, Bosnian, Macedonian, and Bulgarian). Today, the Slavic languages are spoken over a large part of Europe and parts of northern and central Asia, as well as in diaspora communities in North and South America and Australia. Most are national standard languages: Polish (Poland), Czech (Czech Republic), Slovak (Slovakia), Russian (Russia, also as a second language in many former republics of the erstwhile Soviet Union), Belarusian (Belarus), Ukrainian (Ukraine), Slovene (Slovenia), Croatian (Croatia), Bosnian (Bosnia and Herzegovina), Serbian (Serbia and Montenegro), Macedonian (Macedonia), and Bulgarian (Bulgaria). Upper and Lower Sorbian are spoken in Germany by the ethnic Sorbian minority in and around the towns of Bautzen and Cottbus, respectively. Kashubian, a divergent dialect of Polish that has gained literary status, is spoken in northern Poland in and around the city of Gdansk. Significant minority populations of Slavs exist outside the borders of the matrix nations, e.g. Russian is spoken by significant percentages of the population of Belarus, Estonia, Latvia, and Ukraine; Slovak is spoken in Hungary and Ukraine; and Slovene is spoken in Italy, Austria, and Hungary.

Slavic writing began in the late ninth century CE in connection with the conversion of the pagan Slavs to Christianity and, specifically, the mission of the Byzantine monks, Constantine and Methodius, who developed the first alphabet for the Slavs, called Glagolitic, and translated the Scriptures into Slavic. The earliest surviving texts are from the late tenth century; this means that there are no extant texts produced during the lives of Constantine and Methodius. By the eleventh century, the Glagolitic alphabet was largely replaced by a modified version of the Greek alphabet, which has come to be known as Cyrillic. This alphabet is still used in modernized forms by the East Slavs, as well as the Serbs, Macedonians, and Bulgarians. The

bulk of the earliest texts that have survived are from the eleventh century, the language of which is now referred to as Old Church Slavic (or Old Church Slavonic, which is also the British term), because of their religious content and function. However, their writing was also used for secular purposes, as evidenced by the Novgorod Birchbark Letters, which contain business records and personal correspondence. The Letters are still being excavated in and around the town of Novgorod, Russia. Latin script writing developed among the Slavs who used the Roman rite, and it continues to be used in modified, modern forms by the Czechs, Slovaks, Poles, Kashubians, Slovenes, Croats, and Bosnians. The oldest use of the Latin alphabet for a Slavic language is attested by the Freising Folia—three brief texts in the Roman rite that reflect an early eleventh-century Slavic dialect that was a precursor to modern Slovene.

The Slavic languages are most closely related to the Baltic languages, as evidenced by certain innovations that are common to the two families and absent in other Indo-European branches. For example, both Slavic and Baltic have abstract nouns formed with the component -*iba*: Old Russian *družьba* 'friendship', Latvian *draudzība* 'friendship' (the Indo-European root **dhreugh-* 'to keep together' was derived as *drug* 'friend' in Russian and other Slavic languages; it is also related to Old English *gedrēag* 'pack [of animals]'). There is some debate as to whether these common innovations arose as a consequence of a continuous common dialect emerging from Indo-European or a rapprochement resulting in intensive contact between Proto-Slavic and Proto-Baltic. Whether through common origin or contact, the close relationship of Slavic and Baltic continued up to about the fifth century BCE, a time depth at which it is very difficult to reconstruct the early forms of the language in adequate detail. Before the Balto-Slavic period, the precursor of Slavic seems to have emerged from Indo-European in conjunction with the precursors of Indo-Iranian, Armenian, Germanic, and Celtic. After the Balto-Slavic period, having migrated westward from the Indo-European homeland, Proto-Slavic crystallized as a separate ethno-linguistic entity in what is now Ukraine, in an area bounded by the rivers Bug in the west, the Dnepr in the east, and the Pripet' in the north (separating them from the Proto-Balts), although the exact location of the Proto-Slavic homeland cannot be determined.

Borrowings of words from non-Slavic languages that are attested throughout the Slavic world give evidence of the contacts that the Proto-Slavs had before their migrations. Among the earliest of these contacts were with Indo-Iranian-speaking peoples, the Alans, Scythians, and Sarmations, with whom the Proto-

Slavs apparently shared religious beliefs: *bogŭ* 'god', *rajĭ* 'heaven', *svętŭ* 'holy', *xvala* 'glory'. Germanic loanwords entered Slavic over a longer period, before, presumably during, and after the migrations. Early loans from Proto-Germanic and Gothic include *kupiti* 'to buy', *t'ud'ĭ* 'foreign', and *stĭklo* 'glass'. Later loans from Old High German, but still in the Common Slavic phase, include *kral'ĭ* 'king' (from *Karl*, referring to Charlemagne) and *penędzĭ* 'coin' (cf. German *Pfennig*). Borrowings from various Turkic languages appear throughout Slavic, although they are arguably from different sources, e.g. Russian *kolpak* 'hat' vs. Czech *klobouk*, Slovene *klobuk* (cf. Crimean Tatar *kalpak* 'cap'). Greek and Romance loanwords entered Slavic substantially through the mediation of the Church, more or less at the beginning of the historical period (i.e. from the tenth century), e.g., *dĭjavolŭ* 'devil', *psalmŭ* 'psalm', *krĭstŭ* 'cross' (Greek); *mĭša* 'Mass', *križĭ* 'cross', *židŭ* 'Jew' (Latin). Contact with varieties of Romance and other languages is responsible for many of the peculiarities of the Balkan languages. Contact with Baltic Finnic languages played a role in the formation of Russian, especially its northern dialects.

The Slavic languages present a variegated picture with respect to their sound structures. The West and East Slavic languages are characterized by complex distinctions in consonants. Russian, for example, distinguishes between plain and palatalized consonants, the latter of which are characterized by a raised tongue position, similar to that produced by English speakers when pronouncing the letter *y*, viz. *privedёš'* [prʲivʲi'dʲoʃ] 'you will bring'. However, it should be emphasized that Russians perceive this secondary articulation as a characteristic of the consonant itself, because they contrast such sounds with sequences of plain consonant plus *y*, e.g. *sel* ['sʲel] 'sat' and *s"el* ['sʲyel] 'ate'. Czech has intensified the development of palatalization so that what were formerly palatalized consonants have evolved into consonants articulated at the middle of the palate; thus, the first consonant in the word *tichý* 'quiet' is neither *t* nor *k*, but a sound in between the two; this sound contrasts with a plain *t*, as in *ty* 'you'. This intensification has resulted in the development of a trilled fricative, *ř* (*řeka* 'river', cf. Russian [rʲe'ka]), which is pronounced as the *s* in English *pleasure* and simultaneously rolled/trilled as in Spanish *burro*. In Polish, this sound existed historically, but it has merged with the nontrilled fricative, *rzeka* ['žeka] 'river'. Vocalic and accentual systems vary considerably from language to language. Czech and Slovak distinguish long and short vowels and have stress fixed on the first syllable of the word, e.g. Czech *dal* ['dal] 'he gave', *dál* ['da:l] 'further'. Slovene and Serbo-Croatian also preserve long and short vowels,

but in addition they distinguish between rising and falling intonation (pitch) in stressed syllables, e.g. Slovene *brati* [b'rá:t] 'to read' (long low or rising pitch), *brat* [b'rà:t] 'to go read' (long high or falling pitch), *bràt* [b'ràt] 'brother' (short high or falling pitch). In general, there seems to be a complementary relationship between consonantal and vocalic/accentual systems: the more complex the consonantal system, the simpler the vocalic and accentual systems, and vice versa.

As regards word structure, the Slavic languages are characterized by inflection; that is, words change to reflect grammatical relationships. For example, the Russian word *sobaka* 'dog (as a subject)' has the following forms: *sobaki* 'of the dog', *sobake* 'to the dog', *sobaku* 'dog (as an object)', *sobakoj* 'as a dog', *na sobake* 'on the dog', *sobaki* 'dogs (subject)', *sobak* 'of the dogs' or 'dogs (as an object)', *sobakam* 'to the dogs', *sobakami* 'as dogs', and *na sobakax* 'on the dogs'. This characteristic allows word order to remain flexible, which in turn permits word order to take on functions other than indicating grammatical relations, such as, for example, emphasis: *Ja ljublju sobaku* 'I love the dog' (normal word order) vs. *Sobaku ljublju ja* 'It is I who loves the dog' (emphasizes the subject). In the Balkan Slavic languages, Bulgarian, and Macedonian, most of these inflectional changes in nouns have been eliminated. Slavic verb forms mark person (the subject of the verb) and number (singular, plural, and in some Slavic languages, dual); for this reason, many Slavic languages omit the subject pronoun in neutral speech, e.g. Czech *vidím* 'I see', *vidíš* 'you see', *vidí* 's/he sees', *vidíme* 'we see', *vidíte* 'you see' (polite or plural), *vidí* 'they see'. Three genders are distinguished—masculine, feminine, and neuter—although unlike many Western European languages, these are not expressed by definite articles ('the', such as German *die, der, das* or French *la, le*), there being no articles in Slavic languages. Rather, noun endings indicate gender, e.g. Russian *žena* 'wife', *kniga* 'book' (both feminine); *čelovek* 'person', *stol* 'table' (no ending—both masculine); and *okno* 'window' (neuter), *more* 'sea'. Gender serves to coordinate sentence elements through agreement; for example, an adjective modifying a noun must agree in gender (as well as other grammatical categories) with the noun: Russian *krasivaja žena* 'beautiful wife' (feminine), *krasivoe more* 'beautiful sea' (neuter). It may also agree with the past tense of a verb, e.g. *žena stojala tam* 'the wife was standing there', *čelovek stojal tam* 'a person was standing there'. Moreover, the formation of gendered noun pairs is effected by adding a suffix to produce the feminine member of the relationship, e.g. Russian *kurd* 'Kurdish man', *kurdjanka* 'Kurdish woman'. A typical characteristic of Slavic inflection and word formation is the rich array of alternations in the shape of words; these alternations have led to a well-developed investigation into the nexus of sound systems and word structure known as morphophonemics. An example of a morphophonemic alternation is found in Russian *vižu* 'I see' vs. *vidiš* 'you see', where the basic form of the root *vid-* 'see' changes to *viž-* in the context of the first-person singular nonpast.

Verbs in Slavic languages are distinctive among European languages in that they overtly mark aspectual contrasts. That is, they distinguish completed and uncompleted actions/events, as well as express other varieties of temporal and spatial manners of organization. For example, Slovene *skočim* 'I jump (once)' (completed—perfective aspect), *skačem* 'I am jumping' or 'I jump habitually' (e.g. as a professional ski-jumper) (uncompleted—imperfective aspect). Further aspectual distinctions may be derived through suffixation and prefixation, e.g. Russian *ona brosila mjač* 'she threw the ball' (perfective), *ona brosala mjač* 'she was throwing the ball' (imperfective); *ona podbrosila mjač* 'she tossed the ball up' (perfective), and *ona podbrasyvala mjač* 'she was tossing the ball up' The arrangement of tense (time) in Slavic verbs has been considerably reorganized from the Indo-European starting point. Russian is an example of one of the more innovative tense systems. For example, the future is formed by using a perfective verb with the same formal properties as the imperfective present: *ja pojdu* 'I shall go' (the corresponding imperfective *ja idu* means 'I am going' or 'I go'). The future with the imperfective aspect is formed by adding an auxiliary verb *budu* (which goes back to an Indo-European root **bheuH-* meaning 'to grow') to the infinitive: *ja budu iti* 'I will be going.' Past tense is formed by a participle derived with the formant *-l* that agrees in gender and number with its subject, e.g. *ja pošël* 'I left.' This rather simple schema supplanted a much more complex system of past tenses that was still in place in medieval varieties of Slavic, e.g. Old Russian (twelfth to thirteenth centuries), *i vŭlny byša vyše korablä* 'and the waves were higher than the ship' (aorist, a simple past narrated event); *i reče sĭ unoša roda velika jestĭ bylŭ* 'and this youth said that he was of a great family' (perfect tense, meaning that the narrated past event is of relevance to the moment of narration). This complex system was preserved and developed further in Macedonian and Bulgarian, which have otherwise lost much of the complexity of noun and adjective inflection found elsewhere in Slavic. Parallel to the complementariness between consonants and vowels/accent, pointed out previously, such a relationship seems to hold in Slavic languages between the complexity of nominal and verbal inflection.

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See also **Balkans; Baltic Languages; Polish and West Slavic Languages; Russian and East Slavic Languages; Serbo-Croatian and South Slavic Languages; Soviet Union; Soviet Union: Successor States**

Indo-Pakistani Sign Language

Indo-Pakistani Sign Language (IPSL) is a visual-gestural language that uses movements of the hands, facial expressions, and head/body positions to convey linguistic messages. Dialects of IPSL are used in deaf communities in urban centers of the Indian Subcontinent. Figure 1 shows the extent of the geographic area as documented to date. It is likely that dialects of IPSL are also used in other parts of India and/or Pakistan, maybe even in neighboring countries (Sri Lanka, Nepal, Bangladesh), but this has not been fully documented.

In the deaf community, the sign language is simply called 'sign/signing/sign language', sometimes in combination with the sign for the country (as in *INDIA SIGN*). Various names are used by hearing people. In the Hindi/Urdu-speaking area, the sign language is known as *ishaaron kii zubaan* ("language of signs"). Official usage also refers to "Pakistan Sign Language (PSL)" and "Indian Sign Language (ISL)", respectively, although this usage runs contrary to the linguistic facts.

The large area covered by one and the same sign language is particularly noticeable in view of the great linguistic diversity of spoken languages in the region. IPSL is used in both the Indo-European language area (e.g. Hindi-, Nepali-, and Marathi-speaking areas) and the Dravidian language area (e.g. Telugu-speaking areas in Andhra Pradesh). All IPSL dialects have the same grammar, but lexical variation may be considerable. On average, IPSL dialects have about 75% of shared vocabulary, with about 25% of the vocabulary different across dialects.

Despite dialectal differences, IPSL users can communicate freely across a large geographic area. Many are multidialectal or become multidialectal very quickly as soon as they travel to other areas. Moreover, since IPSL is a minority language in constant contact with spoken languages, all IPSL users are to some extent bilingual in the signed and the spoken medium, the latter mostly in its written form. However, competence in spoken languages, be it English, Hindi, or one of the regional languages, is often very low among deaf people. The use of so-called 'mouthing' is also a contact phenomenon resulting from the bilingual situation. Mouthing means that sign language users accompany signs with mouth movements that correspond to words of a spoken language. For example, one may imitate the mouth movements of the Hindi word *kaam* 'work' while signing *WORK*.

The size of the language community has not been documented reliably, but IPSL users definitely number in the hundreds of thousands, possibly even over a million, thus representing one of the largest sign language communities in the world. IPSL is not known to be genetically related to any other sign language. A minor influence from British Sign Language can be seen, for example, in the use of a two-handed manual alphabet (fingerspelling) for representing English words. No manual alphabet for indigenous Indian languages is widely in use.

Word Classes and Sentence Structure

IPSL has three main word classes: verbs, multifunctional words, and particles. There are no word classes of nouns, adjectives, and adverbs. The most important