The Aryan group of IE languages consists of Sanskrit and the other IE dialects of India, Iranian and the Kafir languages of North-west India. The original homeland of the Indians, or rather of the IE tribes who had penetrated into India, can be traced to a region outside India, north-west of India itself. From here, probably around the middle of the second millennium BC, the forebears of the Indians moved into India, conquering the non-IE native peoples. These peoples had a flourishing civilization, the so-called ‘Indus Valley civilization’, whose most important archaeological remains have been recovered by the excavation of Mohenjo-daro and Harappa (Thumb and Hauschild 1958).

The Aryans are the only IE peoples of whom linguistic traces remain outside their historical homelands, in Asia Minor and Mesopotamia. The Hurrian kingdom of the Mitanni was dominated by an Aryan aristocracy which reached the greatest extent of its power in the first half of the second millennium BC. The rulers of the Mitanni had names with a clear Aryan stamp; moreover, in a treaty, written in Akkadian, between the Hittite king Suppiluliuma and the Mitanni king Mattiwa, the guarantors of the oath are named as Mitra, Varuna, Indra and Nāṣatya. The first three deities are part of the Indian pantheon; in the Vedic hymns, the name of the fourth is an epithet of the twin deities, the Āsūns. Finally, in a text about horse rearing written in Hittite by the Mitanni Kikkuli, a handful of numerals and horsemanship terms are of Indian derivation: aika ‘one’ (Skt eka-), panza ‘five’ (Skt pañca), and so on. These numerals appear in compounds with the noun wartanna (Skt vartana-) ‘circle, ring’ (Mayrhofer 1974).

Figure 4.1, taken from Les Langues du monde by A. Meillet and M. Cohen, shows the extent of the kingdom of the Mitanni.

The Aryan linguistic remains outside India resemble Sanskrit more than Iranian, compare aika ‘one’ beside Skt eka- but Iran. *aiwa- (Avest. aēwa-, OPers. aiva-). Nor are there traces of Iranian phonetic features: -s- is preserved as in Sanskrit, while in Iranian it becomes an aspirate; the cluster -sw- becomes -sv- as in Sanskrit, while in Iranian it becomes -sp-.

Sanskrit and Iranian share a large number of common features, both linguistic and cultural. On the basis of these features it is usual to speak of an ‘Indo-Iranian unity’. The vocabulary is largely shared (even the ethnic name Aryan); the nominal declension and verbal flexion are structured almost identically;
Map 4.1 Ancient Asia-Minor
Source: A. Meillet and M. Cohen, Les Langues du monde, 1959
as regards sound changes, *ē, *ō, *ā > *ā; *ṣ, *ṅ > s when preceded by i, r, u, k (in Sanskrit we have s, where the retroflexion is due to a subsequent development); *ō > i; the IE pure velars and labiovelars develop in one way before i and before a < *e and in a different way elsewhere (see p. 105); *l > r. Common to Sanskrit and Iranian is Bartholomae’s Law, according to which a voiced aspirate stop followed by a voiceless stop is replaced by a cluster consisting of a voiced stop followed by a voiced aspirate: *budh- ‘enlightened, awakened’ > buddhas, whence the name Buddha.

Nevertheless, there are important differences between Sanskrit and Iranian: in Iranian *(·)h- becomes (-)h- as in Greek and Armenian, while in Sanskrit it is preserved; in Sanskrit the voiced aspirates *bh, *dh, *gh remain as such, while in Iranian they lose their aspiration as in Slavic and several other IE languages; in Sanskrit – probably through the influence of a non-Aryan substratum – there appears a series of retroflex phonemes (t, th, d, dh, n, s) which do not exist in Iranian (see Chapter 5, pp. 125f.).

Some of these unitarian features are not in fact such, or are only partially so when their geographical distribution is taken into account: l > r is common to Iranian and the ancient dialects of western India (those from which Vedic developed) but is less pronounced in central India, and in eastern India precisely the opposite development (r > l) takes place.

An examination of the relative chronology of shared and divergent features shows that the former are older than the latter. In addition, as we have seen, some of the features specific to Iranian also occur in the languages of the central IE group, for example in the Slavic languages, and in Greek and Armenian.

This shows that the so-called Indo-Iranian unity is the result of a complex process of development which may be summarized as follows:

1 Sanskrit and Iranian derive from a substantially uniform IE tradition. There was a period of extensive contact between the two languages during which the common features developed, probably spreading out from an epicentre situated to the west of India. This is indicated, for example, by the geographical distribution of l > r.

2 There subsequently occurred a process of fragmentation, as a result of which Sanskrit split off and developed a set of features of its own, while Iranian began moving (or continued moving) towards central Indo-European areas and underwent a series of shared innovations with them.

The model is one of a linguistic and cultural community (rather than a complete unity as such) which at a certain point broke up.

One confirmation of this comes from the vocabulary: the Indian word for ‘god’ (deva-) corresponds to the Iranian word for ‘demon’ (daeva-); Indra is a god in the Indian world and a demon in the Iranian world; on the other hand,
the Iranian word for the deity (Avest. bayā-) is also shared by the Slavic languages (OCS bogū, Russ. bog).

The transposition of the names of deities into names of demons is typical of a change of religion. In the same way the pagan gods became demons in popular Christian tradition: the gods of the old religion came to be the demons of the new. It was no doubt the rise of Zoroastrianism in the Iranian world that occasioned the linguistic and cultural split between the Iranian and Indian areas (Lazzeroni 1968).

The Aryan dialects of India in the historical territories (i.e. leaving aside the Indian linguistic remains in Asia Minor) may be divided up as follows:

**Vedic**

This is the literary language of the Vedic tradition (the oldest document, the RigVeda 'Veda of the Chants', goes back to around 1000 BC) and may be divided into Early and Later Vedic. The difference is not so much diachronic as diatropic and diastratic. Early Vedic (essentially the language of the oldest parts of the RigVeda) was based on a western dialect; in Later Vedic (recorded in the less ancient parts of the RigVeda, in the Atharva Veda and the rest of Vedic literature) there were more features deriving from central dialects. These features were also present in Early Vedic, but occurred less frequently.

According to the popular interpretation, the ancient RigVeda is a collection of hymns composed in the western regions of India – and some outside India itself – before the Indians moved eastwards; the works regarded as Later Vedic, on the other hand, are believed to have been composed after the Indian expansion towards the centre of the peninsula. This theory fails to take account of the following information:

1. Some texts classed as 'Later Vedic', for example, some of the hymns in the Atharva Veda, are in fact very ancient, probably of IE ancestry.
2. Central dialect features are also present in the oldest parts of the RigVeda.
3. The same central features are, from the IE point of view, conservative features and some show popular characteristics.
4. As well as the linguistic difference between Early and Later Vedic there is a difference in content: the eulogistic hymns are ancient in character, while the exorcising, magic, speculative and philosophical hymns have a more recent stamp. The diatopic difference is thus reduced to a diastratic one: the eulogistic hymns belong to a 'high' variety of the language, permeated by (innovative) features originating in those western dialects where the genre developed; the other compositions – less tied to the eulogistic tradition – are more open to the non-western (conservative) elements of the spoken language (Renou 1957; Lazzeroni 1985).
Sanskrit

This is the language of the classical literature of India, heavily formalized and standardized (sanskṛta- 'perfected'). What we call Classical Sanskrit is the language codified by Pāṇini, the most famous of the Indian grammarians (fifth to fourth centuries BC). The basis of Sanskrit is a dialect of the central region of India (Madhyadesa) and Sanskrit thus shares many features with Later Vedic.

The differences between Vedic and Sanskrit are of two sorts:

1. on the one hand, Vedic preserves very ancient IE features which are absent in Sanskrit, for example, the injunctive and subjunctive, some of the verb endings, the infinitive expressed with a noun of action declined according to its syntactic function;

2. on the other hand, Vedic exhibits a series of innovations where Sanskrit has contrasting conservative forms:

   - the -a- stem nominative plural -āsas (Sanskrit has -ās < *-ōs);
   - the -a- stem instrumental plural -ebhis (Sanskrit has -ais < *-ōjs);
   - the first-person plural active ending -masi (Sanskrit has -mas < *-melos, cf. Dor. Gk -mes, Lat. -mus).

These innovations, also shared by Iranian, go back to a period of Indo-Iranian linguistic and cultural contact. The ‘Indo-Iranian unity’, then, increasingly appears to be the product of a Vedic and Iranian cultural community.

The Prākrits

These belong to the Middle Indian tradition (300 BC to AD 200); they do not derive from Sanskrit in the same way that the Romance languages derive from Latin, but rather from a parallel tradition going back to the Vedic period. Indeed, some innovative features are shared by Vedic and the Prākrits but not by Sanskrit, for example, the -a- stem nominative plural -āsas and dative plural -ebhis. However, the Prākrits do not go back directly to the dialect which formed the basis of Vedic, but rather to a parallel tradition (the so-called Vedic Prākrits): indeed, some features of the Prākrits are shared by other IE languages but not by Vedic, for example, Prākrit tāriṣa- ‘such a’, Gk telikos, Lat. tēlis. The most important of the ancient Prākrits is Pāli (‘rule, canon’), the language of the canon of the Buddhist faith.

The inscriptions of Aśoka (272–231 BC) are written in a language similar to Pāli. The Prākrits are literary languages, handed down through poetry and drama. The modern Aryan dialects of India go back to the spoken dialects on which the Prākrits were based (Pischel 1965; Grierson 1967).

Figure 4.2 shows the linguistic situation in India today (the white areas represent those parts occupied by non-IE (Dravidian or Munda languages).
Map 4.2 Indo-Aryan

Sanskrit Phonology

The principal change in the Sanskrit vowel system with respect to that of Indo-European is the reduction of the three IE vowels ē, ō, ā to the single quality ā:

Skt asti > *esti, Lat. est
Skt rājan- ‘king’ < *rēg-, Lat. rēx
Skt pati- ‘lord, master’ < *poti-, Lat. potis
Skt. vāk ‘word’ < *wōk‘s, Lat. vōx
Skt akṣa ‘axle’ < *akso-, Lat. axis
Skt bhrātṛ- ‘brother’ < *bhrātēr-, Lat. frater.

The qualities of the first elements of the diphthongs merged (*e̞j, *o̞j, *a̞j > *a̞j; *e̞w, *o̞w, *a̞w > *a̞w) and these then monophthongized (*a̞j > e; *a̞w > o):

Skt eti ‘goes’ < *ejti, Gk eisi
Skt veda ‘I know’ < *wojda, Gk (w)oïda
Skt edhas- ‘firewood’ < *ajd̪hos-, Gk aíthos, Lat. aedes
Skt bodhāti ‘he is awake’ < *bhyewd̪eti, Gk peýthomai
Skt loka- ‘free space’ < *lowko-, OLat. loukom (acc.)
Skt ojas- ‘strength’ < *awgōs-, Lat. augeo.

The long diphthongs shortened their first elements and became ai, au:

Skt vrkais (inst. pl. of vrkā- ‘wolf’) < *wlkwōjs, Gk lêkōs (dat. pl.)
Skt dyaus ‘heaven’ < *djews, Gk Zeūs
Skt naus ‘ship’ < *nāws, Gk naiṣ, Lat. nāvis.

Indo-European schwa (a) became i in all positions:

Skt pitar- ‘father’ < *pater-, Lat. pater
Skt sthiti ‘standing’ < *stātī-, Lat. statio.

For a discussion of the so-called ‘laryngeals’, see Chapter 2, pp. 40f.

The final outcome was that the IE vowel triangle

```
/i(ː)/   /u(ː)/
/e(ː)/   /o(ː)/
/a(ː)/
```

in which the long vowel and short vowel systems were symmetrical, split up into two asymmetrical triangles:
The long vowel system contained /e:/ and /o:/, but for these vowels length was not phonologically relevant, because they did not contrast with the corresponding short vowels. They can also be represented as morphophonological variants of the bi-phonemic clusters ai and au.

Sanskrit preserves the IE liquid sonant τ, with which I also merges:

- Skt mṛtyu- 'death' < *mṛt-, Lat. mors
- Skt pītrs (loc. pl. of pitar- 'father') < *pātrs, Gk patrāsī (dat. pl.)
- Skt pṛṣhu- 'broad' < *pṛṭsu-, Gk ῳατyās
- Skt vr̥ka- 'wolf' < wlk-o-, Goth. wulfs.

The IE nasal sonants ṇ and ṇ become a:

- Skt sapta 'seven' < *septm, Lat. septem
- Skt māti- 'thought' < *māti-, Lat. mens.

In the consonant system the most important changes involve the system of the velars. The reflexes of the IE pure velars and the labiovelars are identical. These are represented below.

**Table 4.1 Reflexes of Indo-European velars and labiovelars**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>*k, *kw</td>
<td>&gt; c</td>
<td>k</td>
</tr>
<tr>
<td>*g, *gw</td>
<td>&gt; j</td>
<td>g</td>
</tr>
<tr>
<td>*gʰ, *gʰw</td>
<td>&gt; h</td>
<td>gh</td>
</tr>
</tbody>
</table>

Column A in Table 4.1 represents the development before *i and before a < *e; column B the development in all other positions. The IE palatals ḳ, ĝ, gʰ become s, j, h respectively. Thus the non-conditioned reflexes of the voiced and voiced aspirated palatals fell together with the conditioned (A) reflexes of the corresponding labiovelars and the voiced and voiced aspirated pure velars (cf. the Iranian developments, Chapter 5, pp. 132f.).

- ḳ: Skt daśa < *dekṃ, Lat. decem
- ḳʰ: Skt cit < *kid, Lat. quid: Skt ca < *kʷe, Lat. -que, but Skt kas < *kʷos, Lat. quo-d
- ĝ: Skt jusṭa- 'pleasing' < *gust-, Lat. gustus
- ḡ/ḡʰ: Skt yuga- < *jug-, Lat. iugum, but jīva 'alive' < *gʰiwo-, Lat. vīvus
In a prehistoric stage of Sanskrit, the IE velars and labiovelars thus had two combinatory variants. For example, before *e became a, the alternation between k and c was governed by the phonetic environment. When *e became a, one of the conditions for the automatic selection of c was lost and so the two allophones became phonologized.

The discovery of the rule governing the development of the velars (the Law of Palatals) was of great importance in the history of comparative linguistics because it made it possible to take the vowel e back to a prehistoric stage of Sanskrit and therefore to the IE vowel system. Thus there was proof that the IE vowel system was better preserved in the western languages (e.g. Greek and Latin) than in Sanskrit. Until the discovery of the Law of Palatals the IE vowel system had been reconstructed on the basis of that of Sanskrit, with the postulation of an original vowel a which had 'split' into e, a, o in the western languages.

Also characteristic of the Sanskrit consonant system are the retroflex consonants t, th, d, dh, n, s. These are sometimes combinatory variants: for example, n > n if preceded, even at some distance, by r or s: nagarāṇi, nominative plural of nagara- ‘city’ (but phalāṇi, nom. pl. of phala- ‘fruit’). Thus r, which has the same effect as s, must also have had a retroflex articulation. Frequently, however, these retroflex consonants are not conditioned by the phonetic environment and have phonemic status. It is probable that they were, at least in part, due to borrowings from the Prakrits (where r can be lost, causing the retroflection of a following dental), or to the influence of the pre-IE substrata in India (Gonda 1971).

The consonant system of Sanskrit is given in Table 4.2. The forms in square brackets have a limited distribution: n occurs as a phoneme only in final

### Table 4.2 The consonant system of Sanskrit

<table>
<thead>
<tr>
<th>Occlusive</th>
<th>Voiced</th>
<th>Nasal</th>
<th>Semi-vowel</th>
<th>Liquid/vibrant</th>
<th>Fricative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pharyngeal</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Velar</td>
<td>k</td>
<td>kh</td>
<td>g</td>
<td>gh</td>
<td>[n]</td>
</tr>
<tr>
<td>Palatal</td>
<td>c</td>
<td>ch</td>
<td>j</td>
<td>jh</td>
<td>[ŋ]</td>
</tr>
<tr>
<td><em>Retroflex</em></td>
<td>t</td>
<td>th</td>
<td>d</td>
<td>dh</td>
<td>n</td>
</tr>
<tr>
<td><em>Dental</em></td>
<td>t</td>
<td>th</td>
<td>d</td>
<td>dh</td>
<td>n</td>
</tr>
<tr>
<td><em>Labiodental</em></td>
<td>t</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Labial</em></td>
<td>p</td>
<td>ph</td>
<td>b</td>
<td>bh</td>
<td>m</td>
</tr>
</tbody>
</table>

*gh*: Skt leṃhi ‘I lick’ < *lejghmi, Gk leikhō
*ghn*: Skt hanti ‘he kills’ < *gwhenti, Gk theinō, but ghnanti ‘they kill’ < *gwhnonti, Gk é-pe-phn-o-n
position and is otherwise a combinatory variant of the nasal before velar pho

We have reliable information on accentuation only in the case of Vedic: in the Vedic texts the accent is represented by a special system of diacritics. At this period the accent was predominantly musical; it was not restricted to a particular position and essentially corresponded to that of the IE accent, as shown by comparison with Greek, and with Germanic in cases where Verner's Law operates: Ved. dhūmās, Gk thýmós; Ved. pādam (acc.), Gk póda (acc.); Ved. padās (gen.), Gk podós (gen.); Ved. pītā, Gk patér, Goth. fadar; Ved. ḫrātā, Gk phrúter, Goth. brōpar (cf. Chapter 13, pp. 394f.). The present-day pronunciation of Sanskrit specifies an expiratory accent governed by a sort of 'law of penultimates' as in Latin. It is probable that this type of accentuation goes back to the classical age (Wackernagel 1896).

A prominent characteristic of Sanskrit phonetics is *sandhi* ('composition'), that is, the set of rules governing the modification of word endings in relation to the following word. For example, *-as > -o* when the following word begins with a voiced consonant: Candaravo 'Candaravas by name' = Candaravas nāma; *-e, -o > -a* if the following word begins with a vowel other than *a*: nagara iha 'here, in the city' = nagare (loc.) iha, and so on (Allen 1962).

**Morphology**

The nominal morphology exhibits many archaic features. For example, the three numbers (singular, dual and plural) and eight cases (nominative, vocative, accusative, genitive, dative, ablative, locative, instrumental) are preserved. The system of three grammatical genders is the result of an innovation, the creation of the feminine, which had taken place in late Indo-European: previously the basic opposition had been between the animate gender (without a distinction between masculine and feminine) and the neuter gender (cf. the discussion in Chapter 7, p. 177). In the development of this innovation Sanskrit has gone further than other IE languages such as Greek and Latin. In Latin and Greek, nouns in *-o* and *-ā* may be either masculine or feminine; this represents a relic of the system which preceded the introduction of the feminine. In Sanskrit, however, the contrast between masculine and feminine has been fully generalized: all nouns in *-a- (< *-o-*) are masculine and all nouns in *-ā- (< *-ā-*) feminine. Because of the merger of the vowel qualities, the quantitative opposition has thus become a distinctive characteristic of the gender contrast. Consequently, the whole vowel-stem declension has been reorganized around this contrast. It is because of this that feminine nouns in *-i- have, alongside the inherited forms (which are the same as those of the masculine), forms taken from the feminines in *-ī*: feminine *matis* 'thought', genitive *mates* (like masculine *agnis* 'fire', genitive *agnes*) but also *matyās* (like *devyās*, genitive of feminine *devī* 'goddess').
Table 4.3 Nominal stems in -a-

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>devāḥ</td>
<td>devau</td>
<td>devāḥ</td>
</tr>
<tr>
<td>Voc.</td>
<td>deva</td>
<td>devau</td>
<td>devāḥ</td>
</tr>
<tr>
<td>Acc.</td>
<td>deva</td>
<td>devau</td>
<td>devāṃ</td>
</tr>
<tr>
<td>Gen.</td>
<td>devasya</td>
<td>devayoḥ</td>
<td>devānāṃ</td>
</tr>
<tr>
<td>Dat.</td>
<td>devāya</td>
<td>devābhyaṃ</td>
<td>devebhyaḥ</td>
</tr>
<tr>
<td>Abl.</td>
<td>devāya</td>
<td>devābhyaṃ</td>
<td>devebhyaḥ</td>
</tr>
<tr>
<td>Loc.</td>
<td>deve</td>
<td>devayoḥ</td>
<td>devesū</td>
</tr>
<tr>
<td>Instr.</td>
<td>devena</td>
<td>devabhyaṃ</td>
<td>devaiḥ</td>
</tr>
</tbody>
</table>

Indo-European nominal derivation is well preserved in Sanskrit: still productive are the agent nouns in -tar (Gk -tēr/-tōr), verbal abstracts in -es/-os- (Skt janas ‘race, descent’, Gk génos, Lat. genus), nouns of action in -ti- (Skt matis ‘thought’ < *mātis, Lat. mens), heteroclitic nouns in -r/-n-; adjectives in -ro- (> Skt -ra-), and so on. Table 4.3 shows the paradigm of a noun in -a- (< *-o-): devas ‘god’.

Note the following:

Singular
nom. devas < *dejwos (Gk hippos, Lat. lupus)
acc. devam < *dejwom (Gk hippon, Lat. lupum)
gen. devasya < *dejwosjo (Gk hippoio, OLat. Valesiosio)
dat. devāya < *dejwoj (Gk híppoi, Lat. lupō < lupōi; Skt -a is due to an unexplained Indo-Iranian innovation)
abl. devāya < *dejwōd (OLat. meritod)
loc. deve < *dejwoi (Gk. oikoi ‘at home’, Lat. domi < *domoi)

Plural
nom. devās < *dejwōs (Goth. wulfos ‘wolves’, Osc. Núvlanús ‘the Nolāni, inhabitants of Nola’ with ù = ū/ū)
acc. devāṃ < *dejwons (Gk híppous, Lat. lupos < -ons; the Skt long vowel is the result of an innovation)
gen. devānāṃ < *dejwōnōm (the IE reconstructed form is *dejwōm: OLat. Romanom, Gk. híppōn, Ved. devāṃ; -ānāṃ is an Indo-Iranian innovation)
dat./abl. devebhyaṃ < *dejwobhjos (the IE form can be reconstructed as *dejwobhjos: Skt -oi- is of pronominal origin; the *bḥjos form of the morpheme – for *bḥos (Lat. -bus) – is obscure)
loc. devesu < *dejwojis (Gk. hippoisi (dat.), with different final vowel)
instr. deveais < *dejwojs (Gk. hippois (dat.) Lat. lupis < -ōis)

Dual
nom./acc./voc. devau < *dejwōu (in Vedic we also have devā < *dejwō, Gk
Table 4.4 Nominal stems in -n-

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>rājā</td>
<td>rājānau</td>
<td>rājānah</td>
</tr>
<tr>
<td>Voc.</td>
<td>rājan</td>
<td>rājānau</td>
<td>rājānah</td>
</tr>
<tr>
<td>Acc.</td>
<td>rājānam</td>
<td>rājānau</td>
<td>rājānah</td>
</tr>
<tr>
<td>Gen.</td>
<td>rājāh</td>
<td>rājīnoh</td>
<td>rājīnam</td>
</tr>
<tr>
<td>Dat.</td>
<td>rājīc</td>
<td>rājabhyaṁ</td>
<td>rājabhyaḥ</td>
</tr>
<tr>
<td>Abl.</td>
<td>rājīna</td>
<td>rājabhyaṁ</td>
<td>rājabhyaḥ</td>
</tr>
<tr>
<td>Loc.</td>
<td>rājani, rājīn</td>
<td>rājīnoh</td>
<td>rājasu</td>
</tr>
<tr>
<td>Instr.</td>
<td>rājīṇā</td>
<td>rājabhyaṁ</td>
<td>rājabhīḥ</td>
</tr>
</tbody>
</table>

hippō; the polymorphism -öl-ōu probably originated in IE phonotactic variants

Table 4.4 shows the paradigm of a masculine -n- stem: rājan- ‘king’. The stem shows alternation between the full grade rājan- (< *rēgən-)/rājān- (< *rēgon-) and a reduced grade which, depending on phonotactic conditions, appears as rājīn- (< *rēgn-) or rāja- (< rēgn-). As regards the endings, we note the following:

Singular

gen. -as < *-es/os (Lat. rēgis < *rēg-es; Gk pod-os); dat. -e < *-ei (OLat. virtutei, Cypriot Gk Diwē-philos)

Plural

nom. -as < *es (Gk. pōdes); acc. -as < *-n (Lat. pedes < *pedens < *pedn̥s); instr. -bhīs < *bʰis (Hom., Myc. Gk -phi)

The adjectives follow the noun flection, as in Indo-European. Adjectives with two endings have an opposition between the animate and neuter genders; these are the vestiges of a period when the opposition between masculine and feminine was not expressed at the grammatical level. Adjectives with three endings distinguish masculine, feminine and neuter; when the masculine is in -a- (< *-o-) the feminine regularly shows -ā- (Lat. bonus/bona; Gk mikrōs/mikrā; Skt pāpas/pāpā ‘bad’ (m./f.). Otherwise the feminine is formed with the suffix -ī: uru-lurvī ‘broad’.

Extremely archaic are the several instances of suffixal suppletion where the masculine in -van contrasts with the feminine in -varī: pīvan-/pīvarī ‘fat’, Gk pī(w)ōn/pī(w)eira.

The comparative is the synthetic type, formed with the suffix -iṣas- (Lat. -īos- in accusative singular mel-ior-em ‘better’, Gk nominative plural beltious ‘better’ < *belt-jos-es) added to the full grade root: ugras ‘mighty’, comp. ojīyas-; dūras ‘far’, comp. dāvīyas-. Another comparative suffix is -tara- (Gk...
-tero-) added to the adjectival stem: dūra-taras ‘further’. The corresponding superlative suffixes are -istha (Gk. -isto-) and -tama (< *tomo, Lat. optimus < *optomos).

In Indo-European the two types were functionally distinct, and in some cases this is still perceptible in Sanskrit and Greek: *-tero- and *-tomo-indicate a separative-spatial value, *-jos- and *-istos a qualitative-dimensional value (Benveniste 1948).

With respect to the noun system, the pronouns exhibit the following IE characteristics:

1. frequent suppletion of the stem (aham ‘I’, acc. mām, Gk egō(n), gen. emou; Lat. ego, gen. mei)
2. in some cases, a special set of endings, different from those of the nouns (n. nom. sing. ta-t ‘that’, Lat. istu-d, Gk tō < *to-d beside Skt yuga-m, Gk zygo-n, Lat. iugu-m)
3. infixed elements (Skt acc. ta-m ‘that’, abl. ta-sm-āt beside deva-m, deva-t)
4. scope for expansion by using particles (Gk hoūtos and houtos-i ‘this’); some of these are reanalysed as inseparable parts of the pronoun: Lat. id-em, gen. eius-dem, Skt id-am (n. nom.-acc. sg.)

The most common demonstrative pronouns are: m. ayam, f. iyam, n. idam ‘this’; m. asau, f. asau, n. adam ‘that’; sa, sā, tat, corresponding to the Greek article (and pronoun) ho, hē, tō, is the anaphoric pronoun, also used as a personal pronoun, usually in the third person, but also in the second person:

sā no mṛla mahān asi
you to-us propitious great are
‘you are propitious to us, you are great’

(RigVeda, I, 36, 12)

As a noun determiner in the noun phrase, the anaphoric pronoun also came to develop the meaning of an article (Renou 1961).

It is not possible here to take account of all the pronominal forms. We mention only some of the forms of sa, sā, tat: nominative = Gk ho, hē, tō; masculine accusative tam, feminine accusative tām, Gk tōn, tēn; masculine genitive tasya, Gk toio; plural: masculine nominative te, Hom. Dor. Gk toi; masculine instrumental tais, Gk (dat.) tois; feminine genitive tāsām, Gk tōn < tāōn: masculine locative teṣu, Hom. Ion. Gk tōi si (dat.). In the masculine singular dative, ablative and locative there appears an infix -sm- which recurs in various other languages, for example, Gothic dative pamma, and so on.

The interrogative pronoun is formed from the IE interrogative-indefinite stem *kʷo-/kʷe-., *kʷi-: masculine kas, feminine kā, neuter kim (and kat). The flection is as for sa. The form ka- continues the strong grade of the stem,
*k"o-. According to p. 105, *k"e- and *k"i- ought to give ca- and ci-. These forms have been lost from the paradigm but survive in the particles cana- and cit. These, when added to the interrogative, form the indefinite: kas 'who', but kas cit 'someone'. The form cit corresponds etymologically to Lat. quid and Gk tí < *k"id and is thus the old nominative case of the neuter singular of the interrogative pronoun. The Sanskrit indefinite pronoun is formed, then, by repeating the stem of the interrogative. This is an IE principle of formation: the Latin indefinite quisquis 'whoever, anyone' is formed by means of repetition of the interrogative quis 'who'.

The relative pronoun is yas (f. yā, n. yat), cf. Gk hós, hē, hó (< *yos, *yā, *yod).

The cardinal numerals from one to four are declined for all three genders: masculine trayas, feminine tīras neuter trīni 'three'. Those from five to ten are also declinable, but without distinction of gender: pañca 'five', instrumental pañca-bhīṣ, and so on. Whereas the inflexion of the first four cardinal numerals is Indo-European, that of the other six is an innovative feature: Vedic still had the indeclinable forms. The numerals from eleven to nineteen take the form of copulative compounds: ekadaśa 'eleven' (lit. 'one-ten'); caturdaśa 'fourteen' (lit. 'four-ten'), etc.

Most of the ordinal numerals are formed with the suffix -ma (saptama, daśama, Lat. septimus, decimus) or with the suffix -tama (pañcaśattamas 'fiftieth'). Both of these suffixes are also superlative morphemes (on -ma < *-mo cf. Lat. summus < *sub-mo s). The use of the same suffix to form the ordinals and the superlative goes back to Indo-European and derives from the spatial meaning of the suffix: the ordinal points to the final term in a series indicating the completion of a whole (Benveniste 1948).

The first- and second-person personal pronouns are declinable, do not distinguish grammatical gender, exhibit instances of suppletion and form their plurals using a different stem from that of the singular: ahām 'I' (acc. mom. instr. mayā, etc.); tvam 'you (sg.)' (acc. tvām. instr. tvayā, etc.)/vayam 'we' (acc. asmān. instr. asmabhīṣ, etc.; nom. acc. dual avām); yuyam 'you (pl.)' (acc. yuṣmān. instr. yuṣmabhīṣ; nom. acc. dual yuvām).

It is not possible to take account here of all of the forms. We note the main ones: ahām < *eḡ(h)om, Lat. ego, Gk egō(n); tvam < *tw-om (ending by analogy with the first person), Dor. Gk tŷ, Lat. tū; vayam has the same stem as Goth. weis, Ger. wir and yuyam has the same stem as Goth. jüs 'you (pl.)'; in their first syllables, asmān and yuṣmān have *ns and *us respectively (y- in yuṣmān is by analogy with nom. yuyam); these represent the reduced grade of the stem attested in Lat. nos, vos.

For the third person pronoun, sa is used; see p. 110.

**Verb Conjugation**

The Sanskrit verb system is organized around a fundamental distinction between processes and states arising from processes. Within each of these
notions there is a present/past tense distinction.

In the representation of actions, the present is expressed using the present flection, and the past is expressed using the imperfect flection (formed from the present stem) and the aorist flection (formed from an independent stem). In the representation of states, the present is expressed by the perfect flection (cf. Skt veda 'I know' as the result of 'having seen, having discovered') and the past by the pluperfect flection.

This formal organization of the grammatical signifiés reflects both features of common Indo-European and others which have developed in a more restricted area than that covered by Indo-European. They form part of a number of features linking the Sanskrit verbal system to those of Iranian and Greek (cf. Chapter 5, pp. 144f.; Chapter 9, pp. 249–56).

At the functional level, it should be noted that the Sanskrit imperfect and the aorist do not have the same value as the corresponding 'tenses' in Greek. In Greek these mainly express aspectual distinctions; in Sanskrit, although the notion of aspect is not absent, the distinction is predominantly one of tense: the imperfect indicates the distant past, the aorist the recent and immediate past (Gonda 1962). Moreover, the future tense is expressed grammatically in Sanskrit, which also occurs, though rarely, in Vedic (see p. 115).

The moods are the indicative, subjunctive, optative, injunctive and imperative. The basic distinction is between the representation of an action as unmarked for mood (indicative) and as visualized (i.e. imagined, not perceived as real). Within the representation of visualized actions, the subjunctive is contrasted with the optative by the feature 'likelihood of realization': the subjunctive expresses an action whose realization is considered certain, the optative an action whose realization is regarded as possible (Gonda 1956).

The injunctive as a mood stands outside the rest of the system. It has the value of an indicative signifying both the 'general' present (i.e. the non-time-specific present of timeless assertions such as 'the gods live in heaven') and the preterite, and a set of modal values which from time to time are superimposed on those of the subjunctive, optative and imperative (see p. 116).

There are three numbers, singular, dual and plural, each inflected for all three persons. There are also three voices, active, middle and passive. While the first two are of IE origin, the formal expression of the passive is the result of an innovation. An IE passive cannot be reconstructed. Each language has come to express the passive – if it does so at all – in its own way (see p. 115).

The present stem (from which the imperfect is also formed) is characterized by a high degree of polymorphism. The Indian grammarians distinguished ten stem classes:

1. full grade with accent on the root: bhārati 'he bears', Gk pherō
2. radical: asti 'he is', Gk estί
3 reduplicated: bi-bhar-ti ‘he bears’, Gk múmno ‘I wait’, Lat. sisto
4 with suffix -ya: pacyate ‘he cooks’, Gk péssò ‘id’ < *pekʷjò
6 reduced grade with unaccented root: tudáti ‘he strikes’, Gk gráphō ‘I write’ < *grbʰò
10 with suffix -aya (properly -ay-a): tarśayati ‘he burns’ < *tors-ej-e-ti, Lat. torreo < *torsejò.

Classes (5), (7), (8) and (9) comprise various types of stem with the addition of a nasal: yunakti ‘he joins’ < ju-n-eg-ti, Lat. iungo; tanoti ‘he pulls’ < *tn-n-ew-ti, and so on.

Virtually any verbal root can form more than one present stem: bharati (Class (1)), bharti (Class (2)), bibharti (Class (3)). Similarly, in Greek we have leipò and limpánò ‘I leave’, ménò and múmno ‘I wait’, ékhō (< *segʰò) and ískhō (< *si-sgh-ʰ-ò) ‘I have’. Only rarely is any functional distinction between the stems perceptible: for example, -aya usually (but not exclusively) forms causatives (bhārayati ‘he causes to bring’, Gk phoréō); the infix -n- seems sometimes to have transitive value (Joachim 1978). But on the whole, unequivocal functional distinctions cannot be recognized; and above all there is no certainty, even when they do exist, that they go back to Indo-European. In short, we have the impression that the present-stem polymorphism is the residue of a collapsing system which has almost completely ceased to be functional.

The flection can be thematic or athematic. Classes (1), (4), (6) and (10) follow the thematic flection, the others the athematic flection.

In the thematic flection the thematic vowel alā (< *elo) is introduced between the stem and the ending: bhar-a-ti, bhar-à-mas ‘he bears, we bear’, Gk. phér-o-men, phér-e-te ‘we bear, you (pl.) bear’. In the athematic flection the endings are added directly to the stem: bharti ‘he bears’. Lat. fert < *bʰer-ti; asti ‘is’, Lat. est, Gk estti (< *es-ti).

The athematic flection is also characterized by ablaut alternation in the stem: in the singular active indicative the full grade appears (a < *e; e < *ej; o < *ew, etc.) and in the other forms the reduced grade (0, i, u) appears: asti < *es-ti, but smas < *s-melos; eti ‘he goes’ < *ej-ti, but imas ‘we go’ < i-mel os; tanoti ‘he pulls’ < *tn-n-ew-ti, but tanumas ‘we pull’ < *tn-n-u-melos.

With respect to the present, the forms of the past are characterized by the augment and by a special set of endings. The augment, which also appears in Iranian, Greek and Armenian, is a particle a- (< *e-) prefixed to the verbal stem: Skt abharam ( < *e-bʰer-o-m (1 sg. impf.)), Gk é-pher-o-n.

The endings are traditionally classified into two series, the ‘primary’ and the ‘secondary’ endings.

The primary endings are characteristic of the present indicative, the secondary endings of the past indicative and of the other moods. Like the other moods, the IE subjunctive had the secondary endings. The Sanskrit subjunctive, as the result of an innovation shared also by Iranian and Greek,
Table 4.5 Primary and secondary verbal endings

<table>
<thead>
<tr>
<th>Singular</th>
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<tbody>
<tr>
<td>Active</td>
<td>Middle</td>
<td>Active</td>
<td>Middle</td>
<td>Active</td>
<td>Middle</td>
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<tr>
<td>Present indicative (primary) endings</td>
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<tr>
<td>1</td>
<td>-mi</td>
<td>-e</td>
<td>-vaḥ</td>
<td>-vahe</td>
<td>-maḥ</td>
</tr>
<tr>
<td>2</td>
<td>-si</td>
<td>-se</td>
<td>-thah</td>
<td>-the</td>
<td>-tha</td>
</tr>
<tr>
<td>3</td>
<td>-ti</td>
<td>-t</td>
<td>-ta</td>
<td>-te</td>
<td>-nti</td>
</tr>
<tr>
<td>Imperfect (secondary) endings</td>
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<td></td>
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<tr>
<td>1</td>
<td>-m</td>
<td>-i</td>
<td>-va</td>
<td>-vahi</td>
<td>-ma</td>
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<tr>
<td>2</td>
<td>-s</td>
<td>-thah</td>
<td>-tam</td>
<td>-thäm</td>
<td>-ta</td>
</tr>
<tr>
<td>3</td>
<td>-t</td>
<td>-ta</td>
<td>-täm</td>
<td>-täm</td>
<td>-n</td>
</tr>
</tbody>
</table>

has the primary endings. The imperative has, in part, its own special endings. The two series of endings are shown in Table 4.5.

It is not possible here to comment on the endings individually. It will suffice to note that one group of primary endings is distinguished from the corresponding secondary endings by the presence of -/:

Active: -mi, -si, -ti, -nti/-m, -s, -nt (> n)
Middle: -te

This system must be of IE origin since it appears in an almost identical form in Greek and many other languages.

The imperfect is formed from the present stem. The aorist is formed either directly from the root (root aorist) or by adding a formant -s- to the root (sigmatic aorist). There is also a thematic aorist formed by adding the thematic vowel to the root, usually in the reduced grade. All of these formations are of IE origin: in Greek the root aorist is represented, for example, by eben ‘I went’ (pres. bainō), the thematic aorist by elipon ‘I left’ (pres. leipō) and the sigmatic aorist by ēlysas ‘I loosed’ (< *e-lu-sm, pres. luō). The root aorist is formally identical to an imperfect of Class (2) and the thematic aorist to an imperfect of Class (6). The non-sigmatic imperfect and aorist are thus distinguished only by their relation to the present: adadhām ‘I put’ is recognized as the imperfect and adhām ‘I have put’ as the aorist of adadhāti ‘I put’ because the former is formed from the same reduplicated stem adadhā- as the present adadhāti, while the latter is formed from the non-reduplicated root dhā- which does not appear in the present. But apāt ‘he protected’, although a root formation like adhāt, is recognized as imperfect because the present is also formed from that root: pāti.

The same occurs in Greek: eben ‘I went’ and édrakon ‘I saw’ are symmetrical with ēphēn ‘I said’ and égraphon ‘I wrote’ respectively. But the first two are recognized as aorist in relation to the present bainō and dēρkomai, the others as imperfect in relation to the present phēmī and grāphō.
The perfect, characterized by reduplication and a special set of endings, continues IE features. The root is in the full grade (Skt alā, o, e < *a, *ow, *oj) in the singular active indicative; otherwise it is in the reduced grade.

The same features appear in Greek (perf. lēloipal/pres. leipō) and in the Germanic strong preterite (Goth. band ‘I tied’ < *bhond°a; 1 pl. bundum < *bʰṇdʰ-) . The reduplication vowel is a ( < *e) and so if the verbal base begins with a velar consonant the reduplication consonant is the corresponding palatal (see p. 105 above): kṛ- ‘do’, perf. cakāra; if the base contains i or u the reduplication vowel is i or u.

The perfect middle is the result of an innovation, produced through symmetry with the present. Originally the perfect, in its stative meaning, had an intrinsic middle value and thus no need for specific middle forms. In fact, it frequently happens that a perfect active belongs to an otherwise middle paradigm (Renou 1925). The same occurs in Greek: pres. gignomai/perf. gegona; pres. dérkomai/perf. dédorka (see Chapter 3, p. 81).

The endings of the perfect are as in Table 4.6.

The future is formed by adding the suffix -sya (or isya) to the root, usually in the full grade. The conjugation is identical to that of the thematic presents: dā- ‘give’/dāsyati ‘will give’; kṛ- ‘do’/kāryati ‘will do’. The morpheme -sya ( < *sjole) probably continues an old desiderative suffix. This formation occurs in Lithuanian as well as in Sanskrit and Iranian and can also be assumed for a prehistoric phase of the Slavic languages. It is thus an inherited formation, albeit limited to one dialect region of the IE area. No future formation can be attributed to common Indo-European.

The passive is formed with the suffix -ya- (stressed -yā- in Vedic) which is added to the verbal base in the reduced grade. The endings are those of the middle: bandh- ‘tie’/badhyate (< *bʰṇdh-) ‘is tied’. The flection is as for a present of the fourth class.

Common Indo-European had no passive. Sanskrit has developed one apparently by modifying Class (4) presents with intransitive value: jāyate (< *g̣həj-e-toj) ‘comes forth’ > ‘is born’. Outside the present system, the passive is expressed by the middle. An aorist passive in -i, limited to the third-person singular (kṛ- ‘do’/akāri ‘has been done’), is obscure.

Table 4.6 Perfect endings

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<thead>
<tr>
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<th>Active</th>
<th>Middle</th>
<th>Active</th>
<th>Middle</th>
<th>Active</th>
<th>Middle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-a</td>
<td>-e</td>
<td>-va</td>
<td>-vahe</td>
<td>-ma</td>
<td>-mahe</td>
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<tr>
<td>2</td>
<td>-tha</td>
<td>-se</td>
<td>-athuh</td>
<td>-āthe</td>
<td>-a</td>
<td>-dhve</td>
</tr>
<tr>
<td>3</td>
<td>-a</td>
<td>-e</td>
<td>-atuh</td>
<td>-āte</td>
<td>-uḥ</td>
<td>-ire</td>
</tr>
</tbody>
</table>

Note: 1 sg. -a < *-a (Skt dadārśa, Gk dédorka ‘I have seen’); 2 sg. -tha < *-tha (Skt vettha ‘you know’, Gk oistha); 3 sg. -a < *-e (Skt veda, Gk oide).
The subjunctive continues an IE formation. In the athematic verbs this is formed by adding the thematic vowel to the full-grade root (asti ‘is’/subj. asati(i); Lat. est/subj. (> fut.) erit (< *es-e-t)) and in the thematic verbs by lengthening the thematic vowel (bharati ‘he bears’/subj. bharāt(i); Gk phéréi ‘he bears’/subj. phéréi).

In the first-person singular the ending is -āni (also -ā < *-ō in some Vedic remains, see Chapter 5, pp. 144f.).

The optative also continues an IE formation. In the athematic flection it is formed by adding the morpheme -yāl-i (< *-jēl-i) to the reduced-grade verbal stem: as- ‘to be’: opt. 3 sg. syāt, 3 pl. syuh, cf. the Latin subjunctive (< opt.) 3 sg. (OLat.) siet, 3 pl. sīnt.

The thematic optative is formed by adding the suffix -e- (< *-oj-, to be analysed as thematic vowel o + optative suffix i) to the stem: bharati ‘he bears’/opt. bharet < *bherojt, Gk phério.

The imperative continues forms which are in part those of the subjunctive, in part those of the injunctive (see paragraph below) and in part specific. In the second person of the thematic flection the pure stem appears: bhara ‘bear!’, Gk phερετ, Lat. lege; in the athematic flection the morpheme -dhi is used: śrudhi ‘listen!’, Gk klýthi.

Formally, the injunctive looks like an imperfect or an aorist (less frequently, like a pluperfect) without the augment. This is a vestige of a (palaeo-) IE system in which the grammatical expression of tense did not exist. A form such as *bheret, from which the Sanskrit injunctive bharat derives, expressed the relation of the verbal lexeme to person, mood and voice, but not to tense. Tense was indicated by lexical elements (e.g. adverbs) or by deictic particles. Indeed, in late Indo-European, the grammatical expression of tense arose as a result of the grammaticalization of deictic particles. The present was indicated by adding *-i (originally a sign of the hic et nunc) to the endings *-m, *-s, *-t, *-nt; the past was formed by prefixing *e- (the so-called ‘augment’, Skt a-, Gk e-, Arm. e-, originally a sign of the illic et nunc) to the verbal stem. The injunctive *bheret > Skt bharat ‘he bears’ (as a non-time-specific action) is the basis of *bhereti > Skt bharati ‘he is bearing’ (as a current, present action) and of *ebheret > Skt abharat ‘he bore’. The injunctive was, then, originally a non-time-specific present, and the endings usually termed ‘secondary’ are in fact the original endings (see Chapter 3, pp. 81f.).

The functional values of the Sanskrit injunctive are specified by the formation of the new indicative bharati with the value of an immediate present. In contrast with bharati, bharat took on the values ‘non-immediate’, ‘non-present’ and non-indicative’, thus becoming the mark for the general (non-immediate) present, the past (non-present) and a number of the non-indicative moods.

Within this new system, tense was expressed only in the indicative mood, as in bharati; indeed, the other moods show no sign of the grammatical
expression of tense: those of the past (e.g. the aorist moods) do not take
the augment, and those of the present do not modify the original endings
with -i (using the traditional formulation, these moods have the ‘secondary’
endings).

The Vedic injunctive is a residual form. In Classical Sanskrit it disappears,
surviving only in the expression of the negative imperative (Hoffmann 1967;

The nominal forms of the verb: the active participle is formed with the
suffix -nt- and preserves the alternating IE flection as mentioned on pp. 107f.: nom. sg. bharan 'bearing', acc. bharantam, nom. pl. bharantas, acc. bharatas
(< *bhernt-).

The middle participle ends in -mäna in the thematic verbs (bharamänas)
and in -āna in the athematic verbs (dviišanas/dvesṭi ‘hate’). The form -mäna
is certainly related to the suffix -meno of the Greek middle participle
(pherömenos) and to the suffix -mno in Latin formations such as alumnus
(from alere). The etymology of -āna (which also appears in the perfect
middle participle) is unclear.

The perfect active participle is formed with the suffix -vasl-/usl-/vat
(alternating as on pp. 107f.: -us appears before vocalic endings). This is an IE
formation: Gk eidoś ‘knowing’ (< *wejd-wōs), f. eidyia (< *wejd-us-ja), gen.
eidōtos (< *wejd-wot-os), n. nom./acc. eidoś (< *wejd-wos).

The perfect passive participle is formed by means of the addition of the
suffixes -ta or -na (< *-to, *-no) to the reduced-grade root: kṛ- ‘do’/kṛtas; kṣi-
‘destroy’/kṣitas, kṣiṇas.

These formations are also inherited. In Greek we have teinō ‘pull’/tatōs
‘pulled’ (< *tō-tos), hāzomai ‘worship’ (< *jagjomai)/hagnōs; in Latin,
(re)pleo ‘fill’/repletus, plenus.

The suffix which forms the participle of necessity (gerundive) is -ya. Its
value follows a special Sanskrit use of the derived adjectival suffix *-jo (cf.
Gk hāzomai ‘I worship, venerate’/hágiōs ‘holy’ (= ‘venerable’). In late Vedic
tradition and in Classical Sanskrit there also appear other suffixes which it is
not possible to mention here.

The infinitive morphemes in the various IE languages are fossilized case
forms of verbal nouns. This leads us to suppose that the IE infinitive was a
regularly declined verbal noun, whose case was determined by its syntactic
function (dative of purpose, accusative of object or of movement, etc.). Vedic
preserves this primitive situation virtually intact: a series of verbal nouns (in
-ti-, -tu-, -as-, etc.), declined for all cases, function as infinitives. In Classical
Sanskrit (and already in the late Vedic tradition) the accusative -tum of the
verbal nouns in -tu- became fossilized in the function of an infinitive: kartum
(< kṛ- ‘to do’).

This suffix corresponds to the Latin supine suffix (factum, dictum, etc.). It
should be noted that in Latin a trace of the directional value which caused the
accusative to be chosen is preserved in the fact that the declension of the
supine pertains to verbs of motion: *venerunt legati pacem postulatum* ‘the envoys came to sue for peace’.

Finally, there exist various absolutive formations which are more or less equivalent in meaning to the English present participle. The most common suffixes are *-tvā*— and *-va*- . The former is the instrumental of a noun of action in *-tu-: kṛtvā ‘doing, having done’ (lit. ‘with the doing’). The etymology of *-ya*- is obscure.

The system outlined here was alive in Vedic (where there were also other formations, such as the preceptive, which it is not possible to discuss here), but already in the late Vedic literature, and above all in Classical Sanskrit, it underwent important modifications. The injunctive and the subjunctive disappeared (both surviving only in some imperative forms); the aorist became increasingly rare and was replaced by the imperfect or the perfect; the root aorist came to be limited to the vocalic stems only; a periphrastic perfect and future made headway. The former was formed by the addition of *-am* (probably the accusative of a verbal noun) to the verbal root, and the perfect of *kṛ*- ‘do’ or *as*- or *bhā*- ‘be’: *und- ‘bathe’, perf. undam cakara ‘I have bathed’ (lit. ‘I have done the bathing’?). The periphrastic future was formed with the nominative *-tā* of an agent noun in *-tar* derived from the verbal base, and the present of *as*- ‘be’: *dātāsmi ‘I shall give’ (= dātā asmī ‘I am the giver’). But the most important change was the extensive development of the passive participial phrase at the expense of finite forms:

*adarsanam gatas* into-the-invisibility gone (sc. ‘he was’) ‘he disappeared’

Tables 4.7 to 4.10 show some verbal paradigms.

### Word Classes

The invariable word classes are the conjunctions, adverbs and prepositions.

In Sanskrit, subordinating syntax is not highly developed. The following list contains the main coordinating conjunctions, both in sentences and noun phrases:

- **copulative:** *ca* (< *kʷe*, Gk. te. Lat. *-que*), *api*, *tathas*, *atha*
- **disjunctive:** *va* (Lat. *-ve*)
- **adversative:** *tu*
- **causal:** *hi*, *tat*, *tasmāt*, *athas*

Note that some of these conjunctions (tatas, tasmāt, tat) are case forms and adverbial forms of the anaphoric pronoun (p. 110). The subordinating conjunctions, on the other hand, are case forms and adverbial forms of the relative pronoun: *yad* (declarative, causal and final); *yena* (causal and final);
### Table 4.7  Thematic conjugation: *bhṛ* ‘bear’, Class 1

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>Dual</th>
<th>Plural</th>
<th>MIDDLE</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Indicative</td>
<td>bharāmi</td>
<td>bharāvah</td>
<td>bharāmaḥ</td>
<td>bharāmi</td>
<td>bharāvah</td>
<td>bharāmaḥ</td>
</tr>
<tr>
<td></td>
<td>bharasi</td>
<td>bharathah</td>
<td>bharatha</td>
<td>bharasi</td>
<td>bharathe</td>
<td>bharadhve</td>
</tr>
<tr>
<td></td>
<td>bharati</td>
<td>bharataḥ</td>
<td>bharanti</td>
<td>bharate</td>
<td>bharate</td>
<td>bharante</td>
</tr>
<tr>
<td>Present Optative</td>
<td>bhareyam</td>
<td>bhareva</td>
<td>bharema</td>
<td>bhareya</td>
<td>bharevah</td>
<td>bharemahi</td>
</tr>
<tr>
<td></td>
<td>bhareḥ</td>
<td>bharatam</td>
<td>bhareta</td>
<td>bharethāḥ</td>
<td>bhareyathām</td>
<td>bharedhvam</td>
</tr>
<tr>
<td></td>
<td>bharet</td>
<td>bharetām</td>
<td>bhareyuḥ</td>
<td>bhareta</td>
<td>bharayātām</td>
<td>bharān</td>
</tr>
<tr>
<td>Present Imperative</td>
<td>bharāni</td>
<td>bharāva</td>
<td>bharāma</td>
<td>bharai</td>
<td>bharavahai</td>
<td>bharāmahi</td>
</tr>
<tr>
<td></td>
<td>bharā</td>
<td>bharatam</td>
<td>bharata</td>
<td>bharasva</td>
<td>bharatām</td>
<td>bharadhvam</td>
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<td>bharatua</td>
<td>bharatām</td>
<td>bharantu</td>
<td>bharatām</td>
<td>bharantām</td>
<td>bharantām</td>
</tr>
</tbody>
</table>

### Table 4.8  Athematic conjugation: *dvīṣ- ‘hate’, Class 2

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>Dual</th>
<th>Plural</th>
<th>MIDDLE</th>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Indicative</td>
<td>dvēṣmi</td>
<td>dvīṣvah</td>
<td>dvīṣmah</td>
<td>dvēṣmi</td>
<td>dvīṣvahe</td>
<td>dvīṣmahe</td>
</tr>
<tr>
<td></td>
<td>dvēksi</td>
<td>dvīṣthah</td>
<td>dvīṣtha</td>
<td>dvēkse</td>
<td>dvīṣāthe</td>
<td>dvīḍhve</td>
</tr>
<tr>
<td></td>
<td>dvēṣṭi</td>
<td>dvīṣṭah</td>
<td>dvīṣānti</td>
<td>dvēṣte</td>
<td>dvīṣāte</td>
<td>dvīṣate</td>
</tr>
<tr>
<td>Present Optative</td>
<td>dvīṣyām</td>
<td>dvīṣyāva</td>
<td>dvīṣyāma</td>
<td>dvīṣyā</td>
<td>dvīṣvah</td>
<td>dvīṣimahi</td>
</tr>
<tr>
<td></td>
<td>dvīṣyāḥ</td>
<td>dvīṣyāṭam</td>
<td>dvīṣyāṭa</td>
<td>dvīṣṭhāḥ</td>
<td>dvīṣyāṭām</td>
<td>dvīṣidhvam</td>
</tr>
<tr>
<td></td>
<td>dvīṣyāṭ</td>
<td>dvīṣyāṭām</td>
<td>dvīṣyāṭ</td>
<td>dvīṣṭā</td>
<td>dvīṣyāṭām</td>
<td>dvīṣiran</td>
</tr>
<tr>
<td>Present Imperative</td>
<td>dvēṣāni</td>
<td>dvēṣāva</td>
<td>dvēṣāma</td>
<td>dvēṣai</td>
<td>dvēṣvahai</td>
<td>dvēṣmahai</td>
</tr>
<tr>
<td></td>
<td>dvēṣḍhi</td>
<td>dvēṣṭam</td>
<td>dvēṣṭa</td>
<td>dvēkṣva</td>
<td>dvēṣṭām</td>
<td>dvēḍhvam</td>
</tr>
<tr>
<td></td>
<td>dvēṣṭu</td>
<td>dvēṣṭām</td>
<td>dvēṣṭāntu</td>
<td>dvēṣṭām</td>
<td>dvēṣṭām</td>
<td>dvēṣṭām</td>
</tr>
<tr>
<td>Imperfect Indicative</td>
<td>advesam</td>
<td>adviṣva</td>
<td>adviṣma</td>
<td>adviṣi</td>
<td>adviṣyahi</td>
<td>adviṣmahai</td>
</tr>
<tr>
<td></td>
<td>adveṭ</td>
<td>adviṣṭam</td>
<td>adviṣṭa</td>
<td>adviṣṭhāḥ</td>
<td>adviṣṭāthām</td>
<td>adviḍhvam</td>
</tr>
<tr>
<td></td>
<td>adveṭ</td>
<td>adviṣṭām</td>
<td>adviṣān</td>
<td>adviṣṭa</td>
<td>adviṣṭām</td>
<td>adviṣata</td>
</tr>
</tbody>
</table>
### Table 4.9 Aorist conjugation: dā- ‘give’, root aorist

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>adām</td>
<td>adāva</td>
<td>adāma</td>
</tr>
<tr>
<td>adāh</td>
<td>adātam</td>
<td>adāta</td>
</tr>
<tr>
<td>adāt</td>
<td>adātām</td>
<td>aduḥ</td>
</tr>
</tbody>
</table>

**ni- ‘lead’, sigmatic aorist**

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>anaisam</td>
<td>anaisva</td>
<td>anaisma</td>
</tr>
<tr>
<td>anaisīh</td>
<td>anaisṭam</td>
<td>anaisṭa</td>
</tr>
<tr>
<td>anaisīt</td>
<td>anaisṭām</td>
<td>anaisuḥ</td>
</tr>
</tbody>
</table>

**Notes:** Athematic conjugation. 3 pl. pres. ind. act. dvisanti, impf. advisan from *-elonti and *-elont respectively. This is the full grade of the ending *-nti, *-nt (> Skt -n) of the thematic forms. 3 pl. pres. ind. mid dvisate, impf. advisata < -ṇtai (< *-ṇtoj), -ṇta (< *-nto): dvisate *dviṣante, 1 sg. impf. act. advisam < *advisn (> advisa as in the Gk aor. elysa < *elusn) remodelled with -m from the thematic conjugation. The same is true of the aor. anaisam.

### Table 4.10 Perfect conjugation: kr- ‘do’

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>Dual</th>
<th>Plural</th>
<th>MIDDLE</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td></td>
<td></td>
<td>Singular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cakār</td>
<td>cakṛva</td>
<td>cakṛma</td>
<td>cakre</td>
<td>cakṛvahe</td>
<td>cakṛmahe</td>
</tr>
<tr>
<td>cakartha</td>
<td>cakṛthuh</td>
<td>cakra</td>
<td>cakṛse</td>
<td>cakṛāthe</td>
<td>cakṛdhve</td>
</tr>
<tr>
<td>cakātra</td>
<td>cakṛtuḥ</td>
<td>cakruḥ</td>
<td>cakre</td>
<td>cakṛāte</td>
<td>cakriye</td>
</tr>
</tbody>
</table>
| yatas (causal); yathā (comparative); yadi (conditional and concessive); yāvat (temporal).

In the IE languages the adverbs are often fossilized case forms: for example, Greek aiēn ‘always’ continues an old form of the locative of aiōn ‘time’ (properly ‘in the time’); Latin saepe ‘often’ may be the nominative case of an old neuter noun. The same can be perceived in Sanskrit, but with the qualification that since the IE paradigm is essentially preserved in all its cases, it is sometimes difficult to distinguish the adverbial forms from those of the nominal declension: dūrena (instr.) ‘far’; balāt (abl.) ‘strongly’; cīram (acc.) ‘for (since) a long time’, etc.

There is also a series of adverbial suffixes: -vat (modal: rṣi-vat ‘like a seer (rṣi-)’); putravat ‘like a son (putra-)’; -tas (separative, ‘originating in’: Gk -tos in ektós ‘outside’, Lat. intus, radicitus); dūravat ‘from afar’; sarvavat ‘from all parts’; -tra (local): sarvatra ‘wherever’, etc.

A series of particles – mainly of IE origin – has adverbial value when used
absolutely, prepositional value when linked with a noun, and preverbal value when linked with a verb: antar ‘between’; pari ‘around’; upa ‘near’; prati ‘against’, etc. Thus we have pari tvā ‘around you (tvā)’; pari dhā- ‘put around, surround’ (dhā- ‘put’), etc. Semantically, these particles are broadly autonomous: as preverbs they are (for the most part) separable from the verb, and as prepositions they can follow the noun, effectively functioning as postpositions: madhyāmdināṁ pari ‘around midday’.

Word Formation

Derivation occupies an important place. It is manifested in an extremely extensive series of suffixes which it is not possible to list here. For example, -tar- (Gk -tēr/-tōr-, Lat. -tor) forms agent nouns (dātar- ‘one who gives, giver’); -ti- (Gk -si-, Lat. -ti- in na-tio) forms verbal abstracts (dṛṣ- ‘see’/dṛṣṭi- ‘vision’); -tra (< *tro) forms instrument nouns (vas- ‘to dress’/vastra- ‘clothing’, śru- ‘listen’/śrotra- ‘ear’, etc.

As is clear even from the few examples cited, Sanskrit words have a high degree of (semantic) transparency, their constituents usually being easily recognizable in a clear diagrammatic relationship. This has been recognized as a characteristic inherited from Indo-European (Belardi 1985).

Another process of derivation extensively employed is the so-called ‘vrddhi grade derivation’. This consists of the lengthened grade of the derived word, according to the following relationship (cf. Chapter 2, pp. 52f.):

<table>
<thead>
<tr>
<th>Base form</th>
<th>Derived form</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>ā</td>
</tr>
<tr>
<td>i, e</td>
<td>ai</td>
</tr>
<tr>
<td>u, o</td>
<td>au</td>
</tr>
<tr>
<td>r</td>
<td>ār</td>
</tr>
</tbody>
</table>

deva- ‘god’: daiva- ‘godly, divine’; Varuṇa: Vāruṇa- ‘belonging to Vāruṇa’, etc. This type of derivation is of IE origin, cf. Gk énos ‘year’: ēnis ‘of one year’; ois ‘ram’: òia ‘sheepskin’, etc. However, in no IE language is the type as widespread as in Sanskrit, where its development may have been aided by the merger of vowel qualities (p. 104) which rendered impracticable derivation based on quantitative ablaut (Lat. tego: toga, etc.).

Nominal compounding is an IE feature. Present to a moderate degree in Vedic, it underwent an unusual development in the passage to Classical Sanskrit, where compounds of up to ten members can appear.

In the compound – which in its oldest form consisted of two elements – only the last element is declined. The others correspond to the pure stem. The three basic types (within which there are various subclasses which cannot be listed here) are:
1 Copulative (or *dvandva* ‘pair’): a relationship of correlation exists between the elements: *hastyasvās* (nom. pl.) ‘elephants (*hasti-*) and horses (*aśva-*)’; *suklakṛṣṇa- ‘light’ (*sukla-*) and dark (*kṛṣṇa-*)’; cf. Gk *dōdeka*, Lat. *duodecim* ‘12’ (lit. ‘2 and 10’), Gk *nykhthēmeron* ‘night and day’, etc.

2 Determinative (or *tatpurusa- ‘his servant’*): the first element (a noun or adjective) determines the second: *mahādeva- ‘the great (*maha-*) god (*deva-*)’; *devadatta- ‘given (*datta-*) by god (*deva-*)’; cf. Gk *akrōpolis* ‘high city’, *theoeikelos* ‘godlike’, Lat. *agricola* ‘farmer’ (= ‘he who cultivates the fields’)

3 Possessive (or *bahuvihi* ‘having much rice’): these are the so-called exocentric compounds, those with adjectival value, which refer to an entity external to the compound itself: *dvipad- ‘biped’ (= ‘having two feet’); *divyarūpa- ‘having divine form’ (*rūpa- ‘form’), etc.; cf. Gk *rhododaktylos* ‘rosy-fingered’, in Vedic, where the accent is free, the possessive compound is distinguished from the determinative by the position of the accent: *rājaputrā- ‘son (*putra-*) of the king’/rājaputra- ‘having kings as sons’.

**Syntax**

Here we cannot give an account of even the main features of Sanskrit syntax. Moreover, many elements still require a more detailed analysis after the fundamental work by Delbrück (1888). Some syntactic features (the development of nominal and participial phrases, compounding, coordination and subordination) have already been discussed in the section on morphology. Here word order alone will be discussed. In Sanskrit, the syntactic function of a word is indicated in its case-bearing morphemes: the order of constituents within the sentence does not have grammatical function and is thus largely free.

This is clearest in the Vedic poetry: rhythmical, metrical, phono-symbolic and stylistic requirements take precedence over those of word order (Gonda 1952). In prose, however, the basic order is the sequence SOV. This corresponds to the IE order:

\[
\text{vīsah kṣatriyāya balim haranti}
\]

farmers to-the-master tax they-pay

‘The farmers pay the tax to the master.’

If, as in the example cited, the sentence contains an indirect object, this precedes the direct object:

\[
\text{chandāṁsi yuktāni devebhyo ajñam vahanti}
\]

verses ornate to-the-gods sascrifice they-bear

‘The ornate verses bring the sacrifice to the gods.’
The determiner precedes the object determined and thus the adjective and genitive precede their governing noun:

Mano rājā
of-Manu the-wife
'Manu’s wife'

but the noun in apposition and the participle follow it: chandaṃsi yuktāni. The infinitive precedes the predicate; the absolutive follows the subject, but precedes the direct and indirect objects of the predicate. The position of the enclitics is significant. The sentence enclitics occupy second position in the order of constituents. The same is true of a set of auxiliary words (particles, pronouns, etc.) which, although stressed, behave like the enclitics. This phenomenon goes by the name of ‘Wackernagel’s Law’ and goes back to Indo-European (see Chapter 2, p. 70 and Chapter 7, pp. 187f.).

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