Cultural history of the peoples of India

(Knowledge mining)

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Foreword

I ask to what extent do the 22 languages of the peoples of India, which are recognized by the Indian Constitution as the official languages of India, mean that these linguistic communities also have separate identities from each other, similar to the national identities of the peoples of Europe? Furthermore, despite these 22 linguistic differences, is it possible to speak of a uniform national identity throughout India?

Official Languages and Communities in India

India's Constitution (1950) recognizes 22 scheduled languages (Eighth Schedule) – drawn from a long list of vernaculars – but explicitly declares "no national language". These 22 languages cover about 96.7% of the population: for example, Hindi is the mother tongue of ~43.6% of Indians, Bengali ~8.0%, Marathi ~6.9%, Tamil ~5.7%, etc. States and union territories were largely organized on linguistic lines, making each language the dominant identity of its region. The map below illustrates India's linguistic landscape: each state's majority first language is highlighted. This regional alignment means that many language communities (Tamil in Tamil Nadu, Malayalam in Kerala, Kannada in Karnataka, etc.) have a cultural identity closely tied to the state and language .

Diverse Linguistic Identities in India

India's linguistic groups vary widely in history and identity. In the Dravidian South, for example, Tamil speakers in Tamil Nadu have a strong language-based identity (classical literature, film industry, Tamil pride) and a history of political resistance to Hindi imposition. Tamil nationalism (and Dravidian regionalism) emphasizes Tamil language and culture. Similarly, Telugu speakers (Andhra Pradesh/Telangana) recall the Telugu Desam Party's mobilization of Telugu pride, and Kannada and Malayalam communities each pride themselves on rich local literatures and their own statehood.

In the Indo-Aryan North, West and East, each language carries its own identity. Bengali has a deep literary tradition and was the basis for Bangladesh's nationhood (via the 1952 language movement); Bengali speakers in India (West Bengal, Assam, Tripura) share much of that heritage. Punjabi identity (in Punjab) overlaps with Sikh ethnoreligious identity; a militant Khalistan movement in the 1980s even sought a separate Sikh nation centered on Punjabi language and religion. Marathi speakers in Maharashtra recall the Maratha Empire and assert Marāṭhī asmita (Marathi pride): linguistic reorganization in 1960 created Maharashtra for

Marathi speakers, and parties like Shiv Sena explicitly campaigned for “preferential treatment” of Marathi people. Gujarati speakers (Gujarat state) and Punjabi speakers (Punjab) similarly celebrate their language via literature, media and festivals. In the East and Northeast, Assamese in Assam regard Assamese as a symbol of their Assamese nation, even as neighboring Bangladeshi Bengali speak the same language but form a different country. Tribal and hill regions have their own tongue-linked identities: for instance, Santali (a tribal language of Jharkhand, Odisha, West Bengal) and Bodo (Assam) communities won recognition and political concessions partly by highlighting linguistic identity.

In sum, many of India’s languages serve as strong identity markers for regional communities (often encompassing one state). This mirrors Europe in one sense: European nations like France or Germany explicitly align with the French or German language and culture. However, in India these linguistic communities are not separate nations, but self-governing states within a federal India. India’s 3-language education policy and federal structures attempt to balance these sub-national identities under one Indian framework.

Indian Language/Region	Distinct Identity/Movements	European Analogy (Language:nation)
Hindi (North India)	Widespread link language; official Union language; drives for Hindi unity but rejected in South (Tamil Nadu’s anti-Hindi agitations).	German (Germany): Spoken across one large nation, used as national lingua franca; analogous to Hindi’s broad base.
Tamil (Tamil Nadu)	Strong Tamil identity (classical heritage, Dravidian politics); anti-Hindi stance in mid-20th c.	Catalan (Spain): Regional language with ancient culture and autonomy movement, analogous to Tamil’s role.
Bengali (+ Bangladesh)	Rich literary culture; Pakistani/Bangladeshi partition/independence by language; Bengali language movement (1952) in East Pakistan.	Polish (Poland): Language of a nation rebuilt after occupation; strong cultural-nation bond.
Punjabi (Punjab)	Tied to Sikh community; Khalistan separatism sought a Punjabi Sikh state; large diaspora keeps identity abroad.	Irish Gaelic/English (Ireland): Catholic, historically colonized; nationalist struggle (IRA) parallels Sikh nationalism.
Marathi (Maharashtra)	Maratha heritage; Maharashtra state (1960) for Marāṭhī; Shiv Sena’s nativist campaigns (prioritize Marathis).	Hungarian (Hungary): Strong national language and history (post-Austro-Hungarian Empire), culturally proud.
Kannada (Karnataka)	Kannada literature/cinema; statehood (1956); Kannadiga pride (e.g. Rajyotsava celebrations).	Finnish (Finland): State language of a distinct linguistic nation with its own culture.
Assamese (Assam)	Assamese nationalism vs immigrant languages (e.g. Bengali in Assam); own film and literature.	Basque (Spain/France): Regional minority asserting identity through language, similar grassroots pride.

Indian Language/Region	Distinct Identity/Movements	European Analogy (Language:nation)
Santali (Jharkhand etc.)	Indigenous tribal language; recognized late (added 2003); ethnic identity of Santal tribes.	Sámi (Scandinavia): Indigenous language/identity in Europe with cultural protections.
Sanskrit (pan-Indian)	Classical liturgical language; symbolic unifier (ancient texts, rituals); revived in schools.	Latin (Vatican, academia): Ancient language of a cultural/historical nation, now ceremonial.

Each row above shows that Indian linguistic communities often parallel European language–nation links. Like European languages, many Indian languages underpin a rich regional culture and sometimes political movement. However, unlike Europe where language usually equals a sovereign state, Indians of different languages coexist within one Indian nation. For example, Switzerland has four official languages (German, French, Italian, Romansh) yet one Swiss identity – just as India is multilingual but has an overarching polity. As Renan observed: *"Switzerland, which has three languages… is a nation"*. Modern scholars like Bernard Yack note that numerous *"multilingual nations… bring into doubt the association of nations with linguistic communities."* In other words, a shared political identity can exist alongside many languages.

National Integration and Language Policy in India

The Indian state deliberately accommodates linguistic diversity. There is no single "national language"; instead, Hindi (Devanagari) and English are official union languages, and states choose their own official languages. The framers feared linguistic fractures: as noted, India's multiple languages were seen as a potential threat to unity, prompting policies to mediate tensions. For example, the Three-Language Formula (introduced 1968) required each child to learn (1) regional/state language, (2) Hindi or another Indian language, and (3) English. This was partly to placate non-Hindi regions; in fact, education expert Ayesha Kidwai argues that it was designed "to address speakers who refused to accept Hindi imposition". In practice, states often adjust it (e.g. Tamil Nadu typically teaches only Tamil and English, omitting Hindi). The new 2020 National Education Policy endorses multilingual instruction but makes Hindi optional outside Hindi-majority areas.

Despite these policies, inequalities persist. The Eighth Schedule grants official support to 22 languages – funding, use in administration, eligibility in exams – but *hundreds* of regional tongues remain unrecognized. As one study notes, many widely spoken languages (Bhojpuri, Tulu, Rajasthani, etc.) are excluded, while scheduled languages get institutional backing. This linguistic federalism means states can use local languages in governance, but Hindi/English dominate national-level education and jobs. Non-Hindi communities often feel disadvantaged in central services and examinations. In sum, India's policy is integrative yet multilingual: it affirms diversity (state languages, education in mother tongues) while promoting a broad civic Indian identity. The motto "Unity in Diversity" and national symbols (flag, anthem, constitution) underscore a shared nationhood beyond language.

The media of integration include education and institutions: for example, Indian students often study English (a legatee of colonial rule) as a neutral link language alongside Hindi or regional tongues. Competitive exams allow any scheduled language as the medium of answer. National

celebrations (Republic Day, national anthem *Jana Gana Mana* – itself a Bengali lyric by Tagore) and secular laws reinforce an all-India identity. However, sociologists argue that many Indians primarily think in terms of caste, religion or language first. One review observes that *“various sub-categories of caste, class, ethnic and linguistic groups dominate the identity of Indians”*. In short, a unified Indian national identity coexists with strong sub-national identities; nationhood in India is often defined politically and constitutionally rather than purely linguistically.

Europe’s Model: Nationhood and Multilingualism

Europe’s approach offers a useful contrast. Historically, many European nations (France, Germany, Spain) were built around a single language and culture. Each language typically corresponds to one state (France–French, Spain–Spanish), reinforcing a “one language–one nation” model. The European Union, however, explicitly celebrates multilingualism: the EU motto is “United in diversity”, and Union law mandates respect for linguistic diversity as a fundamental value. All EU institutions operate in 24 official languages, and each citizen may use any in dealings with the EU. Crucially, the EU Charter prohibits language discrimination and cooperates with the Council of Europe’s *European Charter for Regional or Minority Languages* to protect minority tongues.

Even within nation-states, Europe accommodates linguistic plurality. Switzerland, famously multilingual (German, French, Italian, Romansh), has a strong unified Swiss identity – exemplifying that multiple languages need not preclude nationhood. Belgium, Spain and the UK grapple with regional languages (Flemish, Catalan, Welsh), with varying degrees of autonomy or tension. Unlike India, where federalism was built on languages, most European states only reluctantly recognize internal diversity. For example, Spain only granted Catalan, Basque and Galician co-official status decades after Franco’s centralizing regime. But in all cases, modern Europe acknowledges that civic nationhood does not demand linguistic uniformity. As Renan and Yack argued, objective markers (language, ethnicity) do not strictly define a nation. The EU even encourages citizens to learn multiple languages (target of at least two foreign languages by 2025), underlining multilingualism as an asset.

Table: Selected Comparisons of Indian and European Linguistic Identities

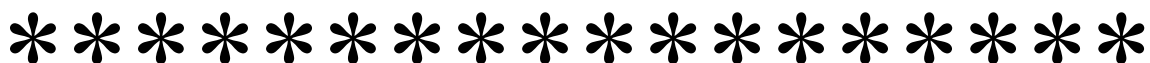
Indian Community (Language, State)	Cultural/Political Identity	European Analog (Language:Country)
Hindi speakers (N. India)	Official link language; contested by south; wide base	*German:Germany* (national language uniting people)
Tamil (Tamil Nadu)	Dravidian pride; strong literature; anti-Hindi agitations	*Catalan:Catalonia (Spain)* (regional language+autonomy movement)
Bengali (W. Bengal & Bangladesh)	Rich literary nation; language movement⇒Bangladesh	*Polish:Poland* (shared language-nation history)
Punjabi (Punjab; Sikh)	Sikh religious-nation identity (Khalistan)	*Irish (Gaelic/English):Ireland* (national struggle, diaspora)
Marathi (Maharashtra)	Maratha heritage; linguistic state; Shiv Sena’s “Marāṭhī asmita”	*Hungarian:Hungary* (strong regional identity post-Empire)
Kannada (Karnataka)	Kannada literature; state identity; Rajyotsava pride	*Finnish:Finland* (language=state nation)

Indian Community (Language, State)	Cultural/Political Identity	European Analog (Language:Country)
Assamese (Assam)	Assamese nationalism vs immigrants	*Basque:Basque Country (ES/FR)* (regional language+identity)
Santali (Tribal, Jharkhand)	Indigenous tribal identity	*Sámi ()* (indigenous minority language)

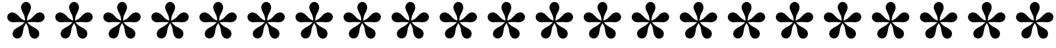
Conclusion

India's 22 constitutionally recognized languages each anchor a distinct community and culture, akin to how languages define European nations. At the same time, India's national identity is built on civic and constitutional bonds that transcend any one language. Shared symbols (flag, constitution, anthem) and policies (official multilingualism, secular democracy) promote a pan-Indian identity. As in Europe, where countries like Switzerland or the EU hold multiple languages under one polity, India too accommodates diversity within unity. In short, India illustrates that a unified national identity can coexist with vigorous linguistic plurality: multiple languages and cultures thrive as sub-national "identities," yet all Indians (like all Europeans) can see themselves as part of a larger nation. The challenge – common to India and Europe – is managing multilingualism so it enriches rather than divides society.

Sources: Indian constitutional provisions and census data; scholarly analyses of language politics; language and education policy commentary; and European multilingualism policies and theory, among others.



Hindi people



The historical course of the development of the Hindi language from the beginning to the early 1900s

Deep roots: Old Indo-Aryan (Vedic & Classical Sanskrit) → Middle Indo-Aryan (Prakrits)

- Old Indo-Aryan (OIA) is represented by Vedic and Classical Sanskrit. Its writing systems ultimately descend from Brāhmī, the ancestor of most South Asian scripts. The famous Aśokan edicts (3rd c. BCE) capture an early vernacular—Prakrit—etched in Brāhmī; they are the earliest mass attestations of Indo-Aryan speech outside Sanskrit's learned register.
- Middle Indo-Aryan (MIA) (c. 3rd c. BCE–6th/8th c. CE) is the umbrella for the literary Prakrits and later Apabhraṃśa. As speech moved away from Sanskrit's heavy inflection, case endings eroded and were replaced by postpositions; verbal systems were restructured. These typological shifts set the stage for the newer North Indian vernaculars.

Script note. Over the first millennium CE, Nagari/Devanagari crystallized out of Brahmic varieties (via Gupta/Siddhamatr̥kā). Devanagari matured into a major vehicle for Sanskrit and northern vernaculars by the late first millennium.

2) The last MIA phase: Apabhraṃśa (c. 6th–13th centuries)

Apabhraṃśa literature, robust especially in Jain traditions, shows many features that foreshadow New Indo-Aryan idioms (periphrastic constructions, analytic case marking). It is the bridge between Prakrits and the early "Hindi" zone of dialects.

3) Early New Indo-Aryan (ENIA), c. 13th–16th centuries: Hindavī/Hindustānī and the regional literary dialects

- In the Delhi-Doab and surrounding belt, the speech later called Khari Boli (the base of standard Hindi) coexisted with and was overshadowed by Braj Bhāṣā and Awadhi as literary languages. From the Delhi Sultanate/Mughal period onward, everyday north-Indian koine Hindavī/Hindustānī grew by contact among Sanskritic vernaculars and Persian/Arabo-Turkic administrative and cultural spheres.
- Braj Bhāṣā became the prestige classical medium for Kṛṣṇa-bhakti poetry (e.g., Sūrdās), while Awadhi hosted large-scale narrative epics such as Jāyasī's *Padmāvat* and later Tulsīdās's *Rāmcharitmānas*. These two literary dialects dominated "Hindi" letters for centuries.

4) 16th–18th centuries: a shared Hindustani arena

Across North India (and the Deccan), Hindustani operated as a flexible, mixed register—often called *rekhta* in poetry—using Perso-Arabic vocabulary for courtly genres, while vernacular traditions continued in Braj/Awadhi. Linguistically, ENIA features deepened: postpositions calcified; and the split-ergative pattern of the perfective (*ne* with transitive agents) emerged from late MIA analytics.

5) Late 18th–early 19th centuries: colonial codification and the Khari Boli turn

- In Calcutta (1800) the East India Company founded Fort William College, a hub for teaching Indian languages to Company officers. Here, John Borthwick Gilchrist systematized "Hindustani" through early grammars and dictionaries (1780s–1790s+). These textbooks stabilized a common grammar/vocabulary usable in both Devanagari and Perso-Arabic scripts.
- At the same time, college munshīs and pandits produced model prose in north-Indian registers. Lallū Lāl's *Prem Sāgar* (composed c. 1803–1810; printed soon after) is widely cited as the first sustained modern prose in Devanagari-written Khari Boli, pivoting Hindi literature away from Braj towards the Delhi-Doab idiom.
- Scholarly treatments agree that "Hindi" and "Urdu" were not yet separate languages; they were two styles/registers of one Hindustani continuum, differing mainly in script and learned vocabulary.

Policy backdrop (1830s). In 1837, Company regulations in the North-Western Provinces replaced Persian in the lower courts and recognized Hindustani (typically in the Perso-Arabic script) for legal/administrative use—an important milestone that would later fuel the script/language politics of the region.

6) The literary and public sphere in the 1800s: from Bharatendu to print culture

- The Bharatendu era (*Bharatendu-yug*, late 1860s–1880s) pressed for a modern, public-facing Hindi in Devanagari. Bharatendu Harishchandra (1850–1885) is remembered as the "father of modern Hindi," fostering journalism, theatre, and prose styles that anchored a new literary public.
- Printing exploded in North India. Devanagari presses, primers, grammars (e.g., Kellogg's and later Platts' works), and mass-market readers advanced a

khari-boli-based written standard. Fort William–inspired pedagogic print sustained this codification.

Scripts in use. Through the 19th century, real-world Hindi writing was plurigraphic: alongside Devanagari, scribal/mercantile scripts such as Kaithi remained widespread (especially in Bihar/Eastern U.P.), even enjoying official support in some domains before fading from public administration in the 20th century.

7) The "Hindi–Urdu" (or Hindi–Nagari) controversy, 1860s–1900

From the 1860s, associations, petitions, newspapers, and literary mobilization pushed to replace Urdu's exclusive institutional status with Hindi in Devanagari. The Nāgarī Prachāriṇī Sabhā was founded in Benares/Varanasi in 1893 to standardize and promote Devanagari and Hindi, producing libraries, editions, and scholarship.

A pivotal outcome was the April 1900 resolution of the Government of the North-Western Provinces & Oudh (later United Provinces), which granted Devanagari script (Hindi) equal official status alongside the Perso-Arabic script (Urdu). The order followed lengthy inquiries and memorials, and it symbolized an institutional recognition of "Hindi" in the modern sense—though Perso-Arabic continued to dominate many offices for years.

8) Fin-de-siècle standardization and the early 1900s

- In the 1890s–1900s, prose style and vocabulary were being regularized: school readers, newspapers, and journals elevated khari-boli as the default written medium. The monthly *Sarasvatī* (founded 1900, Indian Press, Allahabad) quickly became the flagship Hindi journal; under Mahavīr Prasād Dvivedī's editorship (from 1903) it championed plain, disciplined prose and curated a national literary agenda—often called the Dvivedī-yug.
- The Linguistic Survey of India (1903–1928), directed by G. A. Grierson, surveyed and classified the North-Indian "Hindi zone" (e.g., Western vs. Eastern Hindi groups), supplying a state-of-the-art, pan-regional description of dialects and their relations just as a standardized Hindi was consolidating.
- Lexicographic nation-building also accelerated. The Nāgarī Prachāriṇī Sabhā launched large reference projects (e.g., the multi-volume *Hindī Śabd-Sāgar*, whose volumes began appearing in the early 20th c.), institutionalizing vocabulary and orthography for the modern language.

Structural snapshot (what had changed since Sanskrit). By 1900, the language we call Modern Standard Hindi (MSH) displayed the characteristic New Indo-Aryan profile:
— analytic case marking with postpositions (e.g., *ko, se, mẽ*),
— a split-ergative alignment in perfective transitive clauses (*Rām-ne kitāb paṛhī*),
— and a periphrastic tense–aspect system—all outcomes of long MIA → NIA developments.

9) Putting it all together

From a shared Indo-Aryan heritage, through Prakrits → Apabhraṃśa, and into Hindustani and the Braj/Awadhi classical traditions, Hindi's story is as much literary and social as it is linguistic. The 19th-century print sphere, colonial pedagogy and administration, and organized script-and-language activism (1890s–1900) made Khari Boli + Devanagari the normative pairing for "Hindi." By the early 1900s, prose norms, schoolbooks, periodicals, dictionaries, and provincial policy had coalesced into what we recognize as modern standard Hindi.

A quick timeline

- c. 1500–500 BCE: Vedic/early Classical Sanskrit (OIA).
- 3rd c. BCE: Aśoka's Prakrit edicts in Brāhmī.
- c. 6th–13th c.: Apabhraṃśa literatures; MIA → NIA structural shifts.
- 13th–16th c.: Rise of Hindavī/Hindustānī koine; Braj and Awadhi dominate high literature (Surdās; Jāyasī; later Tulsīdās).
- Late 18th–early 19th c.: Gilchrist's Hindustani grammars/dictionaries; Fort William College; Lallū Lāl's *Prem Sāgar* in Devanagari Khari Boli.
- 1837: Hindustani recognized in courts of the North-Western Provinces (replacing Persian at lower levels).
- 1893: Nāgarī Prachāriṇī Sabhā founded (Varanasi).
- 1900: NWP&O government grants equal official status to Devanagari (Hindi) and Perso-Arabic (Urdu) scripts; the modern administrative recognition of Hindi in Nagari.
- 1903–1920: *Sarasvatī* magazine era & Dvivedī-yug consolidate prose norms; Grierson's LSI documents "Hindi" dialects.

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The historical development of the Hindi writing system from its beginnings to the early 1900s.

Deep roots: from Brāhmī to Nāgarī → Devanāgarī (3rd c. BCE–11th c. CE)

- Brāhmī (3rd c. BCE) is the ancestor of most Indic scripts. It already worked the way Devanāgarī still does today: a consonant carries an inherent vowel, and other vowels are shown by diacritics (an abugida). The best-known early attestations are Aśokan edicts (3rd c. BCE).
- Over the Gupta period (4th–6th c. CE), letterforms grew more cursive; from Gupta developed several "North-Indic" scripts, one stream of which is called Nāgarī (7th–10th c. CE).
- Devanāgarī (literally "urban Nāgarī," today's standard script for Hindi) is attested by the early medieval period; by roughly the 11th century its hallmark features—including the *śirorekhā* headline that links letters—are in mature form.

What this means for Hindi: when the north-Indian vernaculars that lead to Hindi begin to be written, the practical choices available are Nāgarī/Devanāgarī and a cluster of related administrative and mercantile scripts derived from the same Brahmic tradition.

2) Manuscripts and early vernacular writing (late medieval–early modern)

- The vernacular literatures of Braj and Awadhi (today grouped under "early Hindi") were commonly copied in Nāgarī/Devanāgarī manuscripts, alongside use in Sanskrit. Surdas (Braj) and Tulsidas (Awadhi) are emblematic; Devanāgarī copies of such works are widely attested (for example, a Braj-bhāṣā manuscript in Devanāgarī from ca. 1780 in Mewar).
- In the Persianate courts of the Sultanate and Mughals, the Hindustani/Hindavī register was also written in the Perso-Arabic (Nastaʿlīq) script—what later becomes associated with Urdu. Script choice thus mapped onto domains (religious/Sanskritized vs. courtly/Persianized) long before the modern Hindi-Urdu divide.

3) Parallel everyday scripts: Kaithi and Mahājani (16th–19th centuries)

- Kaithi, developed within the north-Indian scribal tradition, was widely used for legal, administrative, and private records across present-day Uttar Pradesh and Bihar; by the 1880s British authorities even recognized it as the official court script of Bihar. Metal type was cut for Kaithi and large bodies of records and letters survive.
- Mahājani (a mercantile script from the Landa family) was used for accounts and business correspondence by traders and was taught in merchant schools; primers present Hindi texts in Mahājani alongside Devanāgarī and Perso-Arabic.

Takeaway: Until the 19th century, Hindi was genuinely multiscriptal in practice: Nāgarī/Devanāgarī for religious and literary uses; Kaithi for routine administration and everyday writing in much of the Hindi belt; and Mahājani for commerce.

4) Printing and the standardization push (18th–19th centuries)

Early type and presses

- The earliest *metal* Devanāgarī type appears outside India (Rome, 1740s) and is used for the *Alphabetum Brahmanicum* (1771). Inside India, large-scale vernacular printing begins around 1800, notably at the Serampore Mission Press, where local type-cutters (notably Panchanan Karmakar and Manohar) produced types for numerous Indian scripts, including Devanāgarī.

Fort William College and "print Hindi"

- The founding of Fort William College (Calcutta, 1800) supercharged vernacular prose and print. Key texts such as Lallū Lāl's *Prem Sāgar* (composed ca. 1804–10, printed 1810) circulated in Devanāgarī, while others (e.g., Inshā''s *Rānī Keṭakī kī Kahānī*, 1803) show the period's parallel practice across scripts and styles.

Orthography and typographic conventions

- As printing spread, Devanāgarī orthography for Hindi was regularized: word division becomes more consistent; the indigenous danda (।) remains the standard sentence stop, while European punctuation (comma, question mark, etc.) is also adopted in print by the late 19th/early 20th century.
- To write sounds not native to Sanskrit, modern Hindi uses the nukta (dot below) to extend Devanāgarī (e.g., क़, ख़, ग़, ज़, फ़), and it also standardizes dotted letters for the retroflex flaps (ड़, ढ़). The general device (the nukta) and its use to extend the inventory are well documented in script references and Devanāgarī overviews.

5) Institutions, politics, and the rise of Devanāgarī for "Hindi" (late 19th–1900)

- From the 1860s the so-called Hindi–Urdu controversy politicized script choice: Devanāgarī vs Nastaʿlīq, "Hindi" vs "Urdu," within what was linguistically one Hindustani continuum.
- In Banaras in 1893, the Nāgarī Prachāriṇī Sabhā was founded explicitly to promote Devanāgarī and Hindi—publishing, collecting manuscripts, lobbying schools and government, and nurturing a print public sphere later associated with journals like *Saraswatī* (founded 1900).
- The movement achieved a major policy milestone in April 1900, when Lieutenant-Governor A. MacDonnell ordered official acceptance of Hindi in Devanāgarī alongside Urdu in the North-Western Provinces and Oudh ("the MacDonnell moment"). Scholars of printing and language politics treat this as a turning point that consolidated Devanāgarī's public status for Hindi.

Takeaway: By 1900 Devanāgarī had moved from being one of several practical scripts into the recognized public and administrative script of "Hindi" in key north-Indian provinces, without entirely erasing Kaithi in Bihar or Nastaʿlīq in Urdu domains.

6) Where things stood in the early 1900s

- In schools, courts, and presses of the Hindi heartland (especially UP), Devanāgarī now had official parity with Urdu's script, the backing of active civic organizations (e.g., the Nāgarī Prachāriṇī Sabhā), and an expanding print infrastructure.
- Kaithi remained entrenched in Bihar's court and land records (with printed fonts and vast manuscript/record corpora), even as Devanāgarī gained ground—hence the coexistence and gradual decline of Kaithi through the first half of the 20th century.

A compact timeline

- 3rd c. BCE — Brāhmī used for imperial edicts; abugida structure established.
- 4th–6th c. — Gupta script; stream toward Nāgarī develops.
- 7th–11th c. — Early Nāgarī; Devanāgarī achieves mature form.
- 16th–18th c. — Vernacular Hindi literatures circulate widely in Nāgarī/Devanāgarī; Hindustani also written in Perso-Arabic.
- 1740s/1771 — First metal Devanāgarī type (Rome); *Alphabetum Brahmanicum*.

- 1800s — Serampore Mission Press cuts Devanāgarī types; Fort William College fuels vernacular prose print (e.g., *Prem Sāgar*).
- 19th c. — Kaithi widely used for administration; officially recognized (e.g., Bihar law courts in the 1880s); Mahājani used for commerce.
- 1893 — Nāgarī Prachāriṇī Sabhā founded in Banaras to promote Devanāgarī/Hindi.
- 1900 — MacDonnell order grants official status to Hindi in Devanāgarī alongside Urdu in NWP&O; Devanāgarī's public role is now institutionalized.

Why Devanāgarī "won" (by 1900)

1. Institutional backing (Nāgarī Prachāriṇī Sabhā & allied publishers/schools).
2. Print economics and typography (robust Devanāgarī typesetting; missionary/government presses).
3. Language politics (separating "Hindi in Devanāgarī" from "Urdu in Nastaʿlīq" in administration and schooling during the Hindi–Urdu controversy).

Notes on features and conventions that settled in the 19th–early 20th c.

- Script mechanics. Devanāgarī remained an abugida with inherent /a/; conjunct formation and the visarga/anusvāra/chandrabindu system were carried forward from Sanskrit usage into Hindi printing.
- Punctuation. The danda (।) continued as the native full stop, but printers also adopted European punctuation (comma, ? !:)—conventions that enter Hindi typography by the late 19th/early 20th century.
- Extended letters with nukta. To represent non-Sanskritic sounds (e.g., q, x/kḥ, z, f) and to mark the retroflex flaps distinctive in Hindi spelling, Devanāgarī uses a dot below to form letters like क़, ख़, ग़, ज़, फ़, ड़, ढ़; modern references treat this as standard for Hindi.

Bottom line

From a plural, multiscript ecology (Nāgarī/Devanāgarī for religious and literary texts; Kaithi for everyday administration; Mahājani for commerce; Nastaʿlīq for the Persianate register), the 19th century brought printing, pedagogy, and politics that increasingly standardized Devanāgarī as *the* public script of "Hindi." The 1893–1900 interval—Nāgarī Prachāriṇī Sabhā plus the MacDonnell order—marks the decisive consolidation, setting the stage for the 20th-century dominance of Devanāgarī in Hindi education, administration, and print culture.

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The historical development of the vocabulary and style of the Hindi language, which is characteristic of literature and high culture and public journalism

1) From Sanskrit to early vernaculars (before c. 1500)

- Genealogy. Standard Hindi descends (roughly) Sanskrit → Middle Indo-Aryan Prakrits (esp. Śaurasenī) → Apabhraṃśa → early Western Hindi dialects (Khari Boli, Braj, Avadhi). This line explains why Hindi carries both tadbhava (naturally evolved) and tatsama (directly borrowed) Sanskrit words side-by-side.
- Bhakti & courtly literary languages. Before Khari Boli became dominant, Braj (for Kṛṣṇa-devotional poetry) and Avadhi (e.g., Tulsidas) supplied the prestige literary medium—lexically rich in Sanskritic items, metres like dohā/chaubolā, and a mellifluous, allegorical style.
- Indo-Persian synthesis. Around Delhi, a Persian-influenced literary style called Reḵhtā/Hindavī grew: Persian/Arabic lexis in local grammar, ghazal metaphors (gul-o-bulbul, shamʿ-parwāna), and cosmopolitan urban polish. This hybrid is the literary ancestor of today's formal Hindustani (feeding both Urdu and Hindi).

2) Print, pedagogy, and the rise of Khari Boli prose (1800s)

- Fort William College (Calcutta) systematized prose for administration/teaching. Lallu Lāl's *Prem Sāgar* (1804–10) is often cited as the first sustained Khari Boli Hindi prose, deliberately preferring Sanskritic choices over the earlier Persianate mix. This established a model of "clean," didactic prose for high culture and textbooks.
- Language politics & script. Late-19th-century Nāgarī Prachāriṇī Sabhā (Varanasi, 1893) promoted Devanāgarī and a Sanskrit-leaning lexicon; in April 1900 the government in the North-Western Provinces put Nāgarī on equal official footing with Perso-Arabic script—decisive for the "Hindi" register's public fortunes.

3) Making "modern literary Hindi" (late-1800s to 1930s)

- Bharatendu era (c. 1868–1893). Bharatendu Harishchandra energized journalism and theatre, mixing reformist themes with a consciously Sanskritized yet agile style—editorials, satire, pamphleteering.
- *Sarasvatī* & the Dwivedi yug (1903–1920). Under Mahavir Prasad Dwivedi, *Sarasvatī* normalized Khari Boli prose for a national reading public: controlled sentence rhythm, preference for tatsama abstractions (svatantrtā, samāj-sudhār), and an ethic of clarity.
- Chāyāvād (c. 1918–1937). High poetic Hindi turned romantic, introspective, and highly Sanskritized (Prasād, Nirālā, Mahādevī, Pant). Lexicon swelled with classical compounds (manas-vṛtti, rūp-ras), suggestive imagery, and archaising tatsama; this became the signature "literary/high-culture" tone.
- Hindi public sphere. The 1920s–30s saw Hindi secure itself in print, education, and politics, sharpening differences in vocabulary, script, and style from Urdu in public life.

What this left in the language of high culture

- Preference for Sanskritic morphology (-त्व, -ता, -मय; e.g., *mānavtā, sūcakatā, ādarśvād*), long nominal compounds, and elevated synonyms (*śikṣā* over *paṛhāī*, *prārambh* over *śurū*).
- Flexible sentence length but fondness for periodic, cadence-driven clauses in prose; in poetry, condensed imagery and classical metres alongside free verse.

4) State, standardization, and public/official Hindi (post-1947)

- Constitution & law. Hindi in Devanāgarī was adopted as the Union's official language in 1949 (Constituent Assembly); the Official Languages Act (1963) and Rules (1976) set the bilingual frame of federal communication. Critically, §3(3) mandates both Hindi and English for categories like press communiqués—shaping a formal, standardized public style.
- Terminology bodies. The Central Hindi Directorate (1960) codified orthography and usage; the Commission for Scientific & Technical Terminology (CSTT) (1961) coined Sanskrit-based technical vocabulary (e.g., *dūrdarśan, sūcna-praudyogikī, rāṣṭrīya-āy*). These feed official writing and schoolbooks; the press uses them selectively.
- Broadcast tone. All India Radio/Doordarshan habituated audiences to śuddh/maṉak Hindi—neutral Hindustani grammar, restrained idiom, and measurable preference for Sanskritic lexis in scripted news. Their manuals and practice anchored a recognizably "official" news voice.

What this left in the language of public journalism

- Neutral Hindustani base with a Sanskritic tilt for institutions, laws, and policy (*sarkār ne yojanā kā āraṁbh kiyā…*), frequent passives and participial adjectives (*jāri kiyā gayā ādeś, sambandhit vibhaag*).
- Term choice tug-of-war: official CSTT coinages in government releases, but everyday/English terms in reportage (*budget, virus, lockdown; chunaav* vs *nirvācan*). Bilingual mandates under §3(3) also keep English near the surface of public Hindi.

5) Liberalization to the digital present: the rise of "Hinglish"

- Since the 1990s, cable TV, private newspapers, and then social media pushed journalism toward colloquial Hindustani, brisk syntax, short headlines, and English code-mixing ("Hinglish") for reach and speed—especially online and in broadcast chatter. Empirical work finds code-mixed Hindi–English now dominant in much everyday online discourse, which spills into headlines, tickers, and captions.
- The result is a two-track public style: (i) formal "Rajbhasha"/press-release Hindi (Sanskritic terms, careful morphology), and (ii) market/media Hindi (Hindustani + English items, light morphology, vivid verbs), often coexisting in the same outlet.

6) Snapshot: vocabulary sources by register

Register	What it "sounds like"	Lexical sources (typical)	Example phrase
High literary (sāhityik/uchch)	elevated, compact, metaphor-rich; accepts archaisms	Tatsama Sanskrit (plus classical compounds), select tadbhava; very little English	*samvedanā kī pravāhmayī dhārā ne hṛday ko ālōkit kiyā*
Official/administrative	impersonal, standardized; passive & nominalizations	Sanskritized coinages (CSTT), fixed government phrases; some English in bilingual contexts	*Ukt yojanā kā kriyānvan kendra-sarकार ke mārgdarśan meṁ kiya jāyegā.*
General news (print/TV)	neutral Hindustani; short clauses; "who-did-what-where"	Mix of tadbhava + easy tatsama, Perso-Arabic common words (*siyasat, daftar*), and common English	*Sarkār ne diesel par excise kam kiya, grahākon ko rāt se rīlīf.*
Digital/pop media	brisk, conversational, clickable; heavy code-mixing	Hinglish nouns/verbs, English acronyms, hashtags	*CM ne X par post kiya: "Jobs boom aaraha hai—apply fast!"*

7) Stylistic fingerprints to listen for

- High literature: periodic sentences; classical metaphor; abstract nouns in -tā/-tv(a); Sanskrit compound chains; flexible word order for rhythm; in poetry, Chhayāvād's suggestiveness is still a touchstone.
- Public journalism: topic-first, verbs early; attribution formulas (*"sūtron ke mutābiq," "bāyān meṁ kahā"*); numerals and names foregrounded; preference for short clauses; in hard news, minimal figurative language; in TV/digital, code-mixing and headline telegraphy.

8) Milestones & institutions that shaped the register

- Fort William College (prose models), Lallu Lāl's *Prem Sāgar*.
- Nāgarī Prachāriṇī Sabhā (script/lexicon advocacy; Varanasi, 1893).
- *Sarasvatī* magazine (Allahabad, from 1900) and the Dwivedi era standard.
- Official Languages Act (1963) & Rules (1976) (bilingual federal communications, affecting press language).
- Central Hindi Directorate (1960) (orthography, spelling norms).
- CSTT (1961) (scientific/technical coinages).
- AIR/Doordarshan style (news diction recognizable nationwide).
- Hinglish in mass media (documented code-mixing trends).

9) Quick examples (paired):

- High-literary: *“Vārtmān paridr̥śya meṁ mānavtā kā mūlya hī prashnīkrt ho uṭhā hai.”* News/official: *“Vartamān paristhiti meṁ mānavīy mūlyoṁ par chintā vyakt kī gaī.”*
- High-literary: *“Prakṛti ke nīravadī pravāh meṁ man ke spandanon kā ālōk prasṛt hotā hai.”*
  News: *“Mausam vibhāg ne bhārī bāriš kī cētāvanī dī.”*
- Official: *“Naye niyam 1 Akṭūbar se prabhāvi rahenge; ādeś jārī.”* Digital: *“New rules 1 Oct se live—check what changes.”*

Bottom line

- Literary/high-culture Hindi crystallized around Sanskritizing choices and aesthetic styles forged from Bhakti through Chhayāvād, and it still signals prestige and depth.
- Public/journalistic Hindi moved from Khari Boli standardization and state-backed Sanskritic terminology to a two-track modernity: formal, law-shaped Rajbhasha for official texts alongside fast, Hinglish-tinged news for mass audiences.

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The historical development of the academic scientific vocabulary of the Hindi language and its tighter logic compared to everyday language

1) How the scientific register in Hindi took shape

A Sanskrit reservoir (pre-modern to 19th c.)
When modern science education reached North India, Hindi writers and planners drew on an enormous pre-existing Sanskrit technical lexicon (e.g., *jyāmīti* ‘geometry’, *gaṇita* ‘mathematics’, *rasāyana* ‘chemistry’) as the most productive source for coining new terms. Training manuals today still note that Sanskrit is the main engine for systematic word-formation in Hindi technical vocabulary.

Early nation-building and the first glossaries (1890s–1910s)
As the Devanagari/Hindi movement gathered steam, the Nāgarī Prachāriṇī Sabhā (Varanasi) compiled a *Hindi Scientific Glossary*—a landmark attempt (first issued in 1906; later reprints)—explicitly to provide equivalents for modern scientific terms. This was lexicography with a nation-making purpose and a clear technical brief.

Institutional popularization (1913–1947)
Science writing in Hindi became a movement in itself. *Vigyan Parishad Prayag* was founded

in Allahabad in 1913 and launched the monthly *Vigyan* in 1915; together they seeded a culture of Hindi science communication and helped stabilize terminology through use.

Post-independence language planning (1960s onward)
To make higher education and administration work in Indian languages, the Government of India set up the Commission for Scientific & Technical Terminology (CSTT) by Presidential Resolution (1960; operational from 1961). Its mandate: evolve, standardize, and disseminate technical terms across disciplines and languages. Over time CSTT issued principles for term formation and produced hundreds of glossaries and definitional dictionaries to anchor usage.

What those CSTT principles say in brief:

- Transliterate "international terms" (e.g., *radio*, *laser*, *neutron*) where world usage is stable;
- Prefer systematic Sanskrit-based derivations when a transparent Indian equivalent is feasible;
- Always aim for simplicity, utility, and precision; and use sandhi/samāsa (compounding) productively.

The digital era (2010s–2025)
CSTT now serves terms through the Shabd portal (technical dictionaries for all 22 scheduled languages; "~3 million" headwords across >350 dictionaries are listed there), and India's NEP-2020 push has accelerated large-scale translation of STEM/HE content (e.g., AICTE's Anuvadini tool and allied schemes). A 2025 parliamentary reply also reports that >2 million standardized technical terms have been made public across 22 languages.

2) Why the scientific register feels "tighter" than everyday Hindi

(a) One concept ↔ one term (minimized synonymy)
CSTT explicitly targets precision. Everyday Hindi is comfortable with multiple near-synonyms (*garmī* 'heat/hot weather', *tāp*, *ūṣmā*), but the scientific register narrows meanings:

Everyday Hindi	Academic/Scientific Hindi	Why it's tighter
गर्मी (*garmī*)	ऊष्मा (*ūṣmā*, heat as energy) / तापमान (*tāpmān*, temperature)	Splits two concepts that casual speech merges
आवाज़ (*āvāz*)	ध्वनि (*dhvani*, acoustic phenomenon)	Technical term avoids social meanings ('voice', 'sound')
वजन (*wazan*)	भार (*bhār*, weight) vs द्रव्यमान (*dravya-mān*, mass)	Distinguishes force vs. quantity of matter
रोशनी (*rośnī*)	प्रकाश (*prakāś*, light), प्रकाशिकी (*prakāśikī*, optics)	Domain label built from the same root
प्रेशर (loan)	दाब (*dāb*, pressure)	Standardized Indian equivalent

This "controlled lexicon" approach is baked into CSTT's guidance on simplicity, utility, precision.

(b) Predictable word-building "recipes"
Hindi scientific vocabulary exploits a small set of highly regular affixes and compounding patterns—making families of terms compositional and guessable:

- Suffixes for "the study of" / branches: -विज्ञान (*-vijñān*) → *जीवविज्ञान* biology, *भूविज्ञान* geology; -गतिकी (*-gatikī*) → *उष्मागतिकी* thermodynamics; -मिति (*-miti*, measurement) → *ज्यामिति* geometry, *त्रिकोणमिति* trigonometry.
- Abstract-property suffixes: -ता (conductivity चालकता, acidity अम्लता, humidity आर्द्रता), -त्व (density घनत्व).
- Instrument/agent: -मापी / -मापक 'meter/gauge' → *तापमापी* thermometer, *दाबमापक* pressure gauge.
- Compounds (samāsa) reliably signal relations: *विद्युत-चुंबकीय तरंग* 'electromagnetic wave', *ऊर्जा-संरक्षण नियम* 'law of conservation of energy', *तरंग-दैर्ध्य* 'wavelength'. CSTT explicitly endorses such sandhi/samāsa devices for technical clarity.

(c) Transparent prefix pairs that encode oppositions
Paired prefixes make contrasts algorithmic:

- अभि- / अप- → *अभिकेंद्री बल* (centripetal) vs. *अपकेंद्री बल* (centrifugal),
- परा- / अव- → *पराबैंगनी* (ultraviolet) vs. *अवरक्त* (infrared),
- उप- (sub-) → *उप-परमाण्विक* (subatomic).

Once you know the prefixes, new terms become largely self-explaining.

(d) A dual track for borrowings
Where a term is global and heavily conventionalized, Hindi keeps the international form in transliteration—*रेडियो* (radio), *लेज़र* (laser), *डीएनए* (DNA), *न्यूरॉन* (neuron). Where transparency is better served by a calque, a Sanskrit-based equivalent is preferred—*तापमापी* (thermometer), *दूरसंचार* (telecommunications). This two-track policy—transliterate "international terms", coin otherwise—is formal policy.

(e) Standardization + definitional anchoring
CSTT doesn't just list equivalents; it publishes definitional dictionaries so the terms carry stable, textbook-ready meanings. The result is a high-precision register that can support curricula and exams across states.

3) Putting the history and the logic together

- Continuity of sources: The register leans on Sanskrit morphology for productive, compositional coinage, which makes the system learnable and internally consistent.
- Institutional feedback loop: A century of glossaries, magazines, and commissions—from the 1906 *Hindi Scientific Glossary* and the 1915 *Vigyan* monthly to CSTT's post-1961 work—has continually pruned synonyms, tuned definitions, and normalized forms.

- Modern scale & tooling: With the Shabd portal and NEP-aligned translation initiatives (AICTE's tools), the register is now both codified and deployable at scale, which further enforces uniform usage in textbooks and higher education.

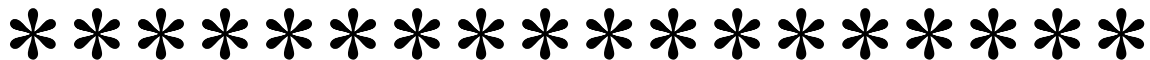
4) A few compact examples (logic in action)

- *Heat vs. temperature*: everyday *गर्मी* → scientific ऊष्मा (transfer of thermal energy) vs. तापमान (state variable).
- *Weight vs. mass*: everyday *वजन* → भार (force) vs. द्रव्यमान (inertial quantity).
- *Light family*: प्रकाश → प्रकाशिकी (optics) → प्रकाश-विकिरण (light radiation).
- *Waves*: तरंग → तरंग-दैर्ध्य (wavelength) → अवरक्त/पराबैंगनी विकिरण (IR/UV radiation).
- *Mechanics*: गति (motion) → गतिकी (dynamics) → अभिकेंद्री/अपकेंद्री बल (centripetal/centrifugal).

These are not just word lists; they are patterns. Learn the patterns, and you can often predict the Hindi term for a new scientific concept—or at least understand it the first time you encounter it. That is the "tighter logic" you're sensing.

Key references (select)

- Nāgarī Prachāriṇī Sabhā's *Hindi Scientific Glossary* and recent scholarship on it.
- *Vigyan Parishad Prayag* (1913) and *Vigyan* monthly (since 1915) as the seedbed of popular science in Hindi.
- Government of India's CSTT: establishment, functions, and principles.
- Scale and current dissemination: Shabd portal; NEP-2020 and AICTE translation tools; recent parliamentary figures.



Bengali people

The historical course of the development of the Bengali language from the beginning to the early 1900s

Historical Development of the Bengali Language (Origins to Early 1900s)

Indo-Aryan Roots: Sanskrit, Prakrit, and Apabhramsa

The Bengali language (Bangla) is an Eastern Indo-Aryan language that evolved out of the Indo-European family. Its earliest roots trace back to Old Indo-Aryan (Sanskrit) but via the Magadhi Prakrit – the spoken vernacular of the eastern Gangetic plains in ancient times. As Sanskrit was the prestige liturgical tongue for millennia, local speech forms gradually diverged into regional Prakrits (natural vernaculars) across India. In eastern India, Magadhi Prakrit (c. 600 BCE–600 CE) was predominant, later developing into Ardha-Magadhi Prakrit and then into regional Apabhraṃśa dialects by the end of the first millennium. One such late Magadhi Apabhramsha, often termed *Abahaṭṭha*, is regarded as the immediate ancestor of Bengali. In fact, Bengali emerged as a distinct new Indo-Aryan language by around 900–1000 CE through the stages of Magadhi Apabhramsha and Abahaṭṭha. During this early period, the eastern dialect continuum had not yet separated sharply, so Bengali, Assamese, and Oriya remained mutually close; Oriya is thought to have split off first, with Assamese and Bengali differentiating later. This is why the earliest known literature – the Buddhist mystic verses of the *Charyapada* – is claimed as a linguistic heritage by Bengali, Assamese, and Oriya alike.

Phonological and Morphological Evolution: The transition from Sanskrit to Prakrit to proto-Bengali involved substantial sound simplification and grammatical restructuring. Vedic Sanskrit's complex inflectional system and consonant clusters were gradually eroded in the spoken Prakrits. By the Apabhramsha stage, many conjunct consonants had simplified or disappeared, and grammatical case endings were decaying. Early Bengali inherited these trends. For example, Old Bengali exhibits loss of one consonant from many conjunct clusters, with the preceding vowel lengthened as compensation. Nasal consonants in clusters often dropped, causing nasalization of the vowel (e.g. Sanskrit *chandra* > Old Bengali *chãda*). The Old Bengali sound system still preserved the original word-final -a vowel (অ) at a time when later Bengali would drop it. Morphologically, Old Bengali marked feminine gender in certain inflections

(such as genitives and some past tenses) – a practice later lost. Early forms of personal pronouns recognizable as precursors to modern ones (e.g. *ahme* for "I", *tuhme* for "you") had already appeared by this stage. Overall, the proto-Bengali of the first millennium was an analytic language in formation: the old Sanskrit case endings were giving way to postpositional phrases, and verb conjugations were being restructured, laying the groundwork for Bengali's modern grammar. Syntactically, the language maintained the Indic SOV (subject–object–verb) word order and began developing the use of compound verbs (verb+verb sequences to refine meaning) which became a hallmark of later Bengali.

The Evolution of the Bengali Script

Writing in Bengal developed along a path parallel to the language, from Brahmi to a distinct Bengali script. The modern Bengali alphabet ultimately originated from the ancient Brahmi script of India. The Brahmi letters, as seen in Ashoka's 3rd-century BCE inscriptions, evolved regionally over centuries. In Eastern India, the Gupta script (a variant of Brahmi used during the Gupta Empire) gave rise to a calligraphic script known as Siddhamātṛkā (Siddhaṃ) by the 7th–8th century CE. The Siddham script, used in Buddhist and local texts, featured more cursive forms. By around the 10th century, a regional offshoot called the Gaudi script (also known as Proto-Bengali script) had developed in the Gauda or Bengal region. Gaudi script is characterized by its curved, sinuous letterforms with distinctive hooks or loops on vertical strokes. It was widespread across eastern India (Bengal, Assam, Orissa, Mithila) and even noted by the scholar Al-Biruni in the 11th century as the script of the "eastern country".

By the 14th–15th centuries, this Gaudi script began to diverge into separate regional alphabets. In Bengal (and Assam), the script evolved into the form now termed Eastern Nagari – essentially the modern Bengali (and Assamese) script – while in Odia it took on a more circular style, and Maithili developed its own nuances. The Bengali script as we know it was nearly complete by the 12th century CE, though some natural changes (like standardizing certain letter shapes) continued until about the 16th century. *Silver coin from medieval Bengal (Harikela Kingdom, 9th–13th c.), featuring an early form of Gaudi/Proto-Bengali script.*

The Bengali writing system's appearance – with its horizontal headstroke linking letters – took shape in this period. It shares roots with Devanagari but followed a distinct eastern lineage. Under British colonial influence, a few conscious script reforms occurred in the 19th century to modernize and standardize printing forms. Notably, when the first printing press for Bengali was established in 1778 by Charles Wilkins, the printed characters were based on the contemporary handwriting of the Bengali script. By the mid-19th century, outdated letterforms (such as several redundant conjunct letters) were simplified or dropped from usage. Punctuation was also adopted (virtually all modern Bengali punctuation marks were introduced from English in the 1800s). Thus, by the late 19th century the Bengali script was both traditional in essence and modern in its uniformity, ready to serve an emerging standardized language.

Old Bengali (10th–14th Century) – Formative Stage

Literary emergence: The period termed *Old Bengali* spans roughly the 10th through 13th/14th centuries. By about 900–1000 CE, the local Apabhramsha speech in Bengal had differentiated enough to be called early Bengali. The oldest surviving specimens of this nascent Bengali are the Charyapada verses – a collection of Buddhist tantric songs composed between the 8th and 12th centuries (the exact dating is debated). Discovered in a palm-leaf manuscript in Nepal, the

Charyapada hymns are written in an archaic poetic idiom mixing Bangla with proto-Assamese/Oriya elements, reflecting a “sandhya bhasa” or twilight language in transition. The verses, attributed to Siddhacharya monks like Luipa and Kukkuripa, reveal an early Middle Indo-Aryan lexicon and rudimentary grammar: for example, they use Bengali verb endings and vocabulary alongside older forms. Words like *Bangala* (for Bengal) appear, but overall the language requires careful interpretation as it straddles old and new. *Charyapada* stands as the earliest extant Bengali literature, giving a glimpse of the spoken tongue of that era. Aside from these Buddhist dohas (couplets), few other texts from Old Bengali survive, though some 12th-century inscriptions and glosses contain Old Bengali words. Notably, a 12th-century Sanskrit lexicon’s commentary (*Amarkosha*) by Sarvananda provides a list of about 400 Bengali words of that time, attesting to the emerging vocabulary.

Development and features: Old Bengali was already distinct enough that Modern Bengali speakers cannot understand it without study. Linguist Suniti Kumar Chatterji notes that this stage was the “last phase of a decayed order” – meaning the old inflectional system had largely broken down, replaced by new devices like postpositions. During the Old Bengali period:

- Phonology: Consonant clusters from Sanskrit were greatly reduced; often one consonant in a cluster was dropped and a long vowel or nasalization took its place. For example, Sanskrit *rakta* (red) would become *rāta* (রাতা) in pronunciation. The inherent vowel *-ô* (অ) remained pronounced at word-end (e.g. Old Bengali *dina?* > later *din* for "day"). Vowel sequences were sometimes preserved (or merged into a long vowel) where later Bengali might contract them. The sibilant sounds were simplified, with শ /ʃ/ often pronounced as স /s/, a trait still seen in dialects.
- Morphology: Grammatical gender was on the way out – Old Bengali still had traces of feminine forms (e.g. in past tense verbs ending in *-l* ল for feminine subjects). Case marking was shifting to an analytic model: we see early postpositional markers that would evolve into modern case particles. Verbs had begun to use the -ila ইল and -iba ইব endings (which later became the past and future markers *-il* and *-ib* in Middle Bengali), sometimes even in passive constructs. Pronouns started taking shapes recognizable today; for instance, *āmi* (I) appears as ahme (আহ্মে).
- Syntax: The sentence structure was likely simple, with subject-object-verb order stable. Negation was expressed with a sentence-final particle (a trait still present). Complex sentences were rare; instead, strings of simple clauses or participial constructions were used. Already, the use of compound verbs (a main verb preceded by a semi-auxiliary verb to refine meaning) is observable in the oldest texts, foreshadowing a key syntactic feature of modern Bangla.

Historical context: Politically, this era spans the Pala dynasty and Sena dynasty in Bengal. Sanskrit was still the dominant language of scholarship and record-keeping. Many educated Bengalis wrote in Sanskrit (for example, the 12th-century poet Jayadeva, though from Bengal, composed the *Gita Govinda* in Sanskrit). As a result, classical Sanskrit words (*tatsama* words) started filtering into the emerging Bengali vocabulary very early. The end of the Old Bengali period (c.1200–1350) saw a major social shift: the Islamic conquest of Bengal by Turkish armies (beginning with Bakhtiyar Khalji around 1204). The early 13th century marks a gap in Bengali literary records – sometimes called a "barren period" – likely due to upheavals during the establishment of Delhi Sultanate rule. This hiatus lasted until Bengali resurfaced in writing in the mid-14th century. By then, the language had further evolved – leading into the Middle Bengali phase.

Middle Bengali (14th–18th Century) – Vernacular Flourishing

From the 14th century onward, Bengali re-emerges in a flood of literature and starts to resemble its modern form more closely. This period, often termed *Middle Bengali* or *Medieval Bengali*, extends roughly from 1350 to 1800. Several significant linguistic changes and rich literary traditions characterize these centuries:

Phonological and grammatical changes: A hallmark of Middle Bengali was the elision of word-final অ /-ô/ in pronunciation. Whereas Old Bengali and Sanskrit would pronounce a final *-a*, in Middle Bengali many words dropped this vowel or weakened it to a vague sound. For example, Old Bengali *nara* (man) would become Middle Bengali *nar*. This loss of final *ô* became generalized by the later medieval period. Other sound shifts included weakening of unstressed inherent vowels in compound words and epenthesis (insertion of a fleeting vowel to break difficult clusters). A new vowel *æ* (অ্যা) emerged in some words (as in modern *bæṅk* for *bank*), reflecting subtle shifts in vowel articulation. Consonant pronunciations also changed: the nasal aspirates (e.g. ngh, mph sounds) lost their aspiration, and sequences of nasal+consonant increasingly became a nasalized vowel + consonant (e.g. *chãd* for চাঁদ, "moon").

Morphologically, Middle Bengali completed the transition to analytic grammar. Postpositions replaced many old inflections for case and voice. The use of -il and -ib verb suffixes expanded from limited Old Bengali contexts to become the general markers for past and future tense respectively in active voice. The language developed a wide array of compound verbs and verbal expressions, combining native verbs with Persian auxiliaries or with indigenous verbal nouns to enrich nuances (e.g. *dekhā dilām* – "gave a look"). We also see the rise of plural suffixes like *-gula/-guli* (গুলি) and the possessive *-r* (র) and *-der* (দের) for genitives, which were innovations of the late medieval stage. Many of these grammatical particles (*-r*, *-der*, etc.) are direct carryovers into modern Bangla.

Perso-Arabic influence: A major sociolinguistic development of this period was the infusion of Persian and Arabic vocabulary into Bengali. With the establishment of the independent Sultanate of Bengal (14th–16th c.), Persian became the court language and lingua franca of administration. Consequently, Bengali, which was the language of the masses, absorbed thousands of Persian words (for governance, law, trade, art) and Arabic words (mostly via Persian, in religion and science). This led to a mixed literary register later termed dobhāṣī Bengali, meaning "bilingual" Bengali, richly combining Perso-Arabic and native elements. Muslim poets and Sufi mystics composed Bengali *puthi* literature in this dobhashi style, using the Bengali grammar but a heavy Perso-Arabic lexicon. For example, the 15th-century romantic poem *Yūsuf-Zulekha* by Shah Muhammad Saghir is written in Bengali but with many Persian-origin words. Such works often did not shy away from using Arabic grammatical constructions or idioms within Bengali verses. Over time, more than 2,000 Arabic-Persian loanwords became everyday Bengali – words relating to administration (e.g. *śarīf*, *kāj*), clothing, foods, and social relations entered common usage. This Islamic influence extended beyond vocabulary: it introduced new idiomatic expressions and even some Persian syntactic turns in Bengali writing of the era.

Hindu devotional literature: At the same time, the Hindu cultural sphere in Bengal was experiencing the Bhakti movement, especially Vaishnavism. In the 15th–16th centuries, the saint Sri Chaitanya (1486–1533) led a popular Vaishnava devotional resurgence. This inspired

a vast corpus of Vaishnava lyrics (padavali) in Bengali – songs of love and devotion to Radha-Krishna – composed by poets like Baru Chandidas, Vidyapati (Maithili by origin but influential), Govindadas, and Jnanadas. These songs used a more Sanskrit-derived vocabulary (for spiritual and philosophical terms) but were written in simple vernacular verse that ordinary people could sing. A notable early medieval text is *Shrikrishna Kirtan* (c. 14th c.), often attributed to Baru Chandidas, which is essentially an early Bengali lyrical drama on the Radha-Krishna theme. Similarly, the life of Chaitanya was celebrated in semi-biographical epics like *Chaitanya Bhagavata* by Vrindavan Das and *Chaitanya Charitamrita* by Krishnadas Kaviraj (latter in the 17th c.), mixing prose and verse in Bengali. These Vaishnava works enriched Bengali with emotive expressions and literary motifs, and sometimes they deliberately employed archaic or regional dialect forms (even Brajabuli, a pseudo-dialect influenced by Maithili) to heighten the poetic effect.

Mangalkavya and folk epics: Another significant genre was the Mangalkāvya, literally "poems of benediction," which were extensive narrative poems composed between the 14th and 18th centuries. These works, such as the *Chandi Mangal*, *Manasa Mangal*, and *Dharma Mangal*, narrated the deeds of indigenous deities and heroes (goddess Chandi, snake-goddess Manasa, etc.) in a quasi-epic style. Mangalkavyas were usually written by Hindu poets but intended for a broad rural audience. They are composed in a rustic Middle Bengali, often rife with Persian loans side by side with Sanskritic words, reflecting the mixed milieu. The *Manasa Mangal* (epic of Manasa Devi) by Bijay Gupta (late 15th c.) or Ketakadas Kshemananda (17th c.) exemplifies this, telling a folk myth with vivid descriptions of village life and in colloquial diction. These narratives helped standardize storytelling in Bengali and preserved many older linguistic forms in their verse.

Muslim and Arakanese contributions: Bengali literature of this era was not confined to Hindu themes. Sufi and court poets patronized by the Muslim rulers also wrote in Bengali. As mentioned, Sufi devotionalism produced mystical songs (e.g. the songs of Sheikh Mansur, Shah Garibullah, later Lalon Shah in 19th c.). Outside Bengal proper, the Bengali language even traveled to the Court of Arakan (Roshang) in present-day Myanmar, where in the 17th century Bengali Muslim poets like Alaol composed masterpieces in Bengali. Alaol's *Padmavati* (1648) is a Bengali narrative poem (adapted from a Hindi Sufi romance) written under the patronage of the Arakanese king – showing the prestige Bengali attained as a literary medium beyond its geographic origin.

By the late 18th century, Middle Bengali had accumulated a layered lexicon: Tatsama words (direct borrowings from Sanskrit) and tadbhava words (Prakrit-derived heritage words) existed alongside Perso-Arabic words and some European borrowings (Portuguese traders had introduced terms like *ananas* for pineapple, *tamāk* for tobacco in the 16th–17th c.). The stage was set for the next phase, when conscious efforts would be made to standardize and modernize the language.

Modern Bengali (18th Century Onward) – Standardization and Renaissance

The Modern Bengali period is generally dated from around 1800 onward (sometimes the late 18th century is included). During this era, Bengali evolved from a set of regional dialects and literary registers into a more uniform standard language, especially under the influence of the British colonial presence and the Bengal Renaissance. Key developments in this period include

the rise of modern prose, the codification of grammar and spelling, and the resolution of different styles of Bengali into a stable written form.

Early modern prose and Fort William College: A turning point came with the establishment of the Fort William College in Calcutta (Kolkata) in 1800–1801 by the British East India Company. At Fort William, professor William Carey and associated Bengali scholars embarked on producing textbooks and translations in Bengali for administrative and educational purposes. This led to the creation of the first modern Bengali prose in print. Carey's team (which included Bengali pundits like Ramram Basu and Mrityunjay Vidyalankar) translated stories and wrote introductory books, proving that Bengali could serve as a vehicle for formal prose—something it previously lacked. As one account notes, these efforts "made Bangla fit for fine prose". Nathaniel Brassey Halhed had earlier published a *Bengali Grammar* (1778) in English, and Charles Wilkins's Bengali typeset allowed printing of Bengali from 1778, but Fort William College systematized prose style. The college published works like Lipimati (a Bengali primer) and translations of Sanskrit epics into Bengali prose. This era also saw the first Bengali newspapers and periodicals (e.g. *Samachar Darpan* from 1818), which further normalized prose usage.

Standardization and print culture: In the 19th century, Bengali intellectuals took up the task of refining their language. Ishwar Chandra Vidyasagar (1820–1891) was a towering figure in language reform. He simplified and rationalized Bengali orthography and punctuation in his books. Vidyasagar's Bengali primer *Barnaparichay* (1855) taught a consistent alphabet; he advocated a uniform spelling system (for instance, reducing variants of the same sound). He also composed the first authoritative Sanskrit-to-Bengali dictionary, enriching Bengali's scientific and scholarly vocabulary. Another contributor, Raja Ram Mohan Roy (1772–1833), although better known for social reform, wrote Bengali essays and founded the first Bengali journal (*Samvad Kaumudi* in 1821), pushing Bengali prose toward clarity and modern topics. By mid-19th century, a standard "High Bengali" (Sadhu-bhasha) style had crystallized for formal writing. This style drew heavily on Sanskrit-derived vocabulary and long, Sanskritic sentence constructions – partly inspired by older poetic language. It became the norm in administration, academia, and elite literature.

Simultaneously, Bengali authors began experimenting with more colloquial language. Peary Chand Mitra's 1857 novel *Alaler Gharer Dulal* was written in the spoken style of Kolkata, breaking convention (it is often cited as the first novel in colloquial Bangla). However, it wasn't until the early 20th century that this Chalit-bhasha (current speech) truly gained acceptance as a literary standard. Writers like Pramatha Chowdhury argued for using the everyday idiom for modern literature, a movement that gained momentum after 1900.

Bengal Renaissance and literary florescence: The 19th century in Bengal witnessed a great intellectual awakening often termed the Bengal Renaissance. During this period, Bengali literature and language were energized by new genres (novels, essays, modern journalism, scientific writings) and new ideas (nationalism, humanism, social reform). The language was enriched both in vocabulary and expressive range. Key literary figures emerged:

- Bankim Chandra Chattopadhyay (1838–1894) wrote the first Bengali novels, including *Durgeshnandini* (1865) and *Anandamath* (1882). Bankim's language was a refined *Sadhu-bhasha*, heavily Sanskritized, which lent his prose an epic, classical tone appropriate for historical romances and nationalist themes. He also penned *Vande Mataram*, a song in Sanskritized Bengali that became a national anthem in spirit.

Bankim’s works set high standards for prose and demonstrated that Bengali could rival English or Sanskrit in expressing complex ideas.

- Michael Madhusudan Dutt (1824–1873) pioneered modern Bengali poetry and drama. In the 1860s, he introduced blank verse in Bengali (unrhymed iambic pentameter) with his epic *Meghnad Badh Kavya* (1861), showing that Bengali could adapt Western poetic forms. He coined new Bengali words (often via Sanskrit) to translate classical concepts, thus expanding the lexicon.
- Ishwar Chandra Vidyasagar, besides his linguistic work, wrote original prose like *Betranoyer Atmacharita* (an autobiography) and many textbooks in simple Bengali, proving that *Sadhu-bhasha* need not be flowery or convoluted but can be clear and elegant. He also standardized Bengali punctuation—introducing the Bengali comma, semicolon, etc., modeled on English usage.
- Mir Mosharraf Hossain (1847–1912) was one of the first major Muslim Bengali novelists; his novel *Bishad Sindhu* (1885) about the Karbala war wove Islamic themes into Bengali literature. His language mixed Sanskritic and Perso-Arabic words, reflecting the diglossia in Bengali Muslim society.
- Rabindranath Tagore (1861–1941) stands as the giant of turn-of-the-century Bengali literature. Tagore’s contribution to language was immense: he wrote in a *fusion style* that gradually moved from the older Sadhu-form towards a more accessible, lyrical Chalit-form. In his early career (1880s–90s), Tagore used the traditional elevated diction for his poetry and plays, but by the early 20th century, he championed colloquial Bengali for its natural expressiveness. His essays and short stories often employed everyday speech rhythms. Tagore’s influence also standardized modern Bengali literary language — he showed that even common words and simple syntax could attain high literary beauty. Internationally, Tagore’s Nobel Prize in 1913 (for *Gitanjali*, a collection of poems) put Bengali on the world map, demonstrating its capacity for profound expression. By the early 1900s, Tagore and contemporaries had effectively established the *Chalit* style as a legitimate literary register, though *Sadhu-bhasha* remained in use for formal purposes until mid-20th century.

Style duality and sociolinguistic nuance: One striking feature of modern Bengali (late 19th to early 20th c.) was a form of diglossia – two co-existing literary styles. The *Sadhu-bhasha* (চকিতে সাধুভাষা), with its long verb forms (e.g. করিয়াছিলাম *koriyāchhilām* “I had done”) and third-person pronouns like তাহার *tahār* “his/her”, was used in high literature, newspapers, and formal writing. The *Chalit-bhasha* (চলিতভাষা), with shortened verbs (করেছিলাম *korechhilām*) and pronouns like তার *tār*, was closer to spoken usage and gradually took over creative literature and everyday written communication. By the early 20th century, many writers mixed the two, but the trend – especially after Tagore – was toward the colloquial style for most purposes. Newspapers in West Bengal continued using the archaic *Sadhu* style into the mid-20th century, but by the 1930s–40s even that was waning. This stylistic shift indicates how Bengali was modernizing, aligning the written word with the spoken tongue of educated Bengalis.

Another sociocultural aspect was the subtle differences in vocabulary choices along religious lines (a legacy of the medieval period). Hindu writers often favored Sanskrit-derived synonyms for everyday terms, whereas Muslim writers or speakers might use Perso-Arabic equivalents. For example, a Hindu family might say জল *jal* for “water” (Sanskrit origin) while a Muslim family might say পানি *pani* (Persian/Arabic origin). Both words are understood by all, but they carry social and religious connotations. Similarly, kinship terms differ: মা *mā* vs. অম্মা *ammā*

for “mother”, দাদা *dādā* vs. ভাইয়া *bhaiyā* for “elder brother”, etc., reflecting Hindu vs. Muslim familial lexicon. These differences did not impede mutual comprehension; rather they added a rich layer of diversity within Bengali. By 1900, the Bengal region’s Hindu-Muslim population roughly split meant that the Bengali language was a shared heritage, even as each community flavored it with its cultural ethos. The Bengal Renaissance, though led mostly by Hindu upper-caste men, also produced figures like Kazi Nazrul Islam (1899–1976, a bit later than our cutoff) who blended Hindu and Islamic imagery in Bengali poetry, exemplifying a linguistic synthesis.

Vocabulary growth: The 19th century saw a deliberate expansion of Bengali’s vocabulary to meet the needs of modern discourse. Scholars like Vidyasagar and Haraprasad Shastri compiled glossaries; many new tatsama (Sanskrit) words were introduced for technical or abstract concepts (often calquing English terms). At the same time, direct loanwords from English entered Bengali in this period for many everyday objects and concepts introduced via colonial rule. Words such as টেবিল *ṭebil* (“table”), চেয়ার *cheyar* (“chair”), ইস্কুল *iskul* (“school”, from Portuguese *escola* earlier, then English *school*) became common. By the early 20th century, Hanne-Ruth Thompson estimates that native (Indic) words made up about half of Bengali vocabulary, unmodified Sanskrit borrowings about 45%, and foreign (non-Indo-Aryan) words ~5% – with Persian being the largest contributor in that foreign slice. However, spoken Bengali continued to favor simpler native words, while the high literary register carried a heavier Sanskrit load. This imbalance too was addressed as the literary scene democratized in the 20th century, leaning towards a more natural idiom.

Conclusion

From its origin as a regional Prakrit offshoot over a thousand years ago, Bengali grew into a full-fledged modern language by the early 1900s, enriched by layers of history. We have seen its linguistic evolution – sounds and grammar shedding old complexities and adopting new structures – and its socio-cultural journey – absorbing influences from Sanskrit scholarly tradition, devotional Bhakti fervor, Islamic courts, and European modernity. The script evolved from Brahmi through Siddham and Gaudi to the elegant Bengali script, which by the 19th century was readily printable and standardized. Periods of literary creativity like the medieval Vaishnava era and the 19th-century Renaissance left an enduring impact on style and vocabulary. By the early 20th century, Bengali had a rich literature with iconic figures like Tagore and a nascent movement to align written language with speech, signaling its maturity. As a final note, the intertwined religious and cultural currents in Bengal gave Bengali a unique character: a vocabulary where Sanskrit *uttar* (“answer”) and Arabic *javab* coexist for the same idea, where rural folk idioms sit alongside learned borrowings – a true mosaic reflecting Bengal’s plural heritage. This historical development laid the foundation for Bengali to enter the modern age as one of the world’s major languages, with a strong sense of identity and a vibrant linguistic legacy.

Sources: The above synthesis is informed by scholarly works and historical sources on Bengali linguistics and literature, including Suniti Kumar Chatterji’s research on Bengali’s origin, Banglapedia entries on the *Bangla language* and *script*, as well as Britannica and others that outline the language’s evolution. Notable references include Muhammad Shahidullah’s theories on Gauda Prakrit origins and Sukumar Sen’s periodization of Bengali. The literary milestones mentioned (e.g. *Charyapada*, *Mangalkavya*, works of Bankim, Tagore, etc.) are well documented in both primary texts and secondary analyses, underscoring the dynamic interplay of linguistic change and cultural history in the development of Bengali. The report highlights

how language evolution is not merely a linguistic phenomenon but a reflection of societal transformations over centuries.

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The historical development of the Bengali writing system from its beginnings to the early 1900s

Origins and early influences (before c. 10th century)

Stage	Evidence and key developments	Primary sources
Brahmi roots	The Bengali writing system belongs to the Brahmic family of scripts. Banglapedia notes that it evolved from the *Brahmi* script, the oldest known Indian script, and that the Kharosthi script (used in the northwest) had no role in Bengal's script. The *Brahmi* script is an abugida in which consonants carry an inherent vowel; this principle survives in Bengali.	Banglapedia.
Gupta-age development	During the Gupta dynasty (4th–5th centuries CE), writing moved from stone inscriptions to copper plates and manuscripts; Banglapedia records that the shapes of letters such as *i*, *u*, *ka* and *ga* began to evolve towards more curved forms. The eastern variety of the Gupta script is considered the ancestor of the later Bengali script.	Banglapedia.
Eastern Siddhamātrikā/Gaudi forms	A 2020 Neo-Brahmi proposal summarises palaeographic evidence showing that the Eastern Siddhamātrikā (Gauri) script developed in the 6th–9th centuries and evolved into "Proto-Bengali" between the 9th and 11th centuries. These eastern forms were distinct from the western Nāgarī script; the proposal notes that inscriptions of the Pāla dynasty (c. 750–1154 CE) and local Malla rulers show characters that are direct predecessors of modern Bengali.	Neo-Brahmi proposal.
Proto-Bengali stage (10th–11th centuries)	Rakhal Das Banerji's 1919 study found that by the 11th century a complete proto-Bengali alphabet had emerged, distinct from Nāgarī and Devanagari. He argued that Bengali letters evolved in the north-east	Banerji.

Stage	Evidence and key developments	Primary sources
	and that the Nagari (Devanagari) script had little influence.	

Consolidation and stabilization (12th–16th centuries)

- Completion of the alphabet. By the 12th century the Bengali alphabet was nearly complete. Banerji notes that by the 12th century the formation of modern Bengali was almost finished.
- Middle-period manuscripts. After the Muslim conquest of Bengal (1204 CE) the rate of change slowed; however, some manuscripts from the 15th–16th centuries (e.g., the *Bodhicaryāvatāra* of 1435) show modifications to letter forms. Banerji comments that the script "did not change" in the 17th and 18th centuries.
- Regional variation. Banglapedia notes that the Pāla-period script eventually split into regional "proto-Nagari" and "proto-Bangla" variants used in Bengal, Bihar and Odisha. From the 13th century the Oriya script began to diverge, whereas the Bengali script remained shared by Bengal, Assam and Tripura.
- Use of the daṇḍa and limited punctuation. The only indigenous punctuation mark was the vertical stroke (daṇḍa) marking the end of a sentence. Encyclopaedia Britannica notes that Bengali continued to use the daṇḍa "as in Sanskrit," while other punctuation marks were borrowed from English during the 19th century.

Early printing and typographic standardization (18th–early 19th centuries)

Event	Significance	Evidence
Introduction of movable type (1778)	Charles Wilkins designed the first Bengali type and used it to print Nathaniel Halhed's *A Grammar of the Bengal Language* (Hooghly, 1778). Banglapedia records that Wilkins's printing press was the East India Company's first in Bengal and that his typefaces were based on contemporary handwriting. An interview with Prof. Md Shahjahan Mian notes that Wilkins modelled his type on manuscript calligraphy and that between 1778 and 1820 "the type script of some Bengali letters underwent changes," after which the printed forms stabilised.	Banglapedia; Daily Star.
Local type-founders and printing houses	Panchanan Karmakar, an assistant of Wilkins, was the first Bengali to learn type-making. Early presses included those of Wilkins (Hooghly), the Bengal Gazette (Calcutta) and the Fort William College. By the early 19th century several presses were active in Calcutta and Dhaka.	Banglapedia.
Early printed Bengali books	The first printed Bengali books included Halhed's *Grammar* (1778), religious and instructional works, and textbooks produced by the Serampore Mission Press and Fort William College. The early typographic letters were refined during this period.	Banglapedia; Daily Star.

Effects on the script

- Standardisation of letter shapes. Printing forced scribes and printers to choose fixed letter shapes. The Daily Star interview notes that letter forms evolved for about forty years (1778–1820) but have remained largely unchanged since. Banglapedia confirms that the introduction of printing ended regional variations in letter forms.
- Borrowing of punctuation. With English education and printing, punctuation such as the comma, semicolon and question mark were introduced; Britannica notes that Bengali retained the vertical stroke but adopted “other marks borrowed from English”.

19th-century reforms and modernisation

Educational reforms and “Father of Bengali prose”

The mid-19th century Bengal Renaissance encouraged linguistic reform. Educators and writers such as Raja Rammohan Roy, Henry Carey and others wrote Bengali prose in a more straightforward style. Ishwar Chandra Vidyasagar (1820–1891), a prominent educationist and linguist, is credited with simplifying the script and prose:

- Simplification of the alphabet. Vidyasagar reorganised Bengali typography into 12 vowels and 40 consonants. He aimed to rationalise the inventory by eliminating redundant letters derived from Sanskrit phonemes. His primer *Borno Porichoy* (1855) became the standard text for learning Bengali letters.
- Introduction of punctuation and prose style. Vidyasagar introduced European punctuation marks (comma, semicolon, question mark) into Bengali prose and emphasised clear sentence structure; secondary sources note that his textbooks systematically used these marks. His reforms contributed to his reputation as the “father of Bengali prose.”
- Typographic reforms. Vidyasagar’s Sanskrit Press and Depository, established in 1847, served as a laboratory for reform. The *Sanskrit Press* entry in Wikipedia states that he “reformed Bengali typography into an alphabet of twelve vowels and 40 consonants” and grappled with the problem of joined letters.

Spread of alternative scripts – Sylheti Nagri

While standard Bengali printing dominated, regional scripts persisted. *Sylheti Nagri* (sometimes called *Jalalabadi Nagri* or *Musalmani Nagri*) is an abugida used by the Sylheti language. The *Sylheti Nagri* article reports that its origins are debated but that it likely derived from the Kaithi script; some hypotheses place its invention in the 15th century or later. The script was primarily used by Muslims in the Sylhet region. Abdul Karim designed a woodblock type around 1869, set up the Islamia Printing Press in Sylhet, and standardised the script. Sylheti literature, including devotional works, was printed during the late 19th century. Despite its popularity among certain communities, Sylheti Nagri remained a niche script; linguist George Grierson observed in 1903 that it was rarely used for formal documentation and mainly for puthi (manuscript) literature.

Final decades of the 19th century

- Fixed typographic forms. After 1820 the printed forms of Bengali letters remained stable. Banerji observed that there were "no changes" in the script in the 17th and 18th centuries and only minor changes thereafter, with printing essentially stereotyping the forms.
- Punctuation and stylistic evolution. By the end of the 19th century, printed Bengali texts routinely used a full stop (daṇḍa) along with commas, semicolons and other punctuation borrowed from English. *The Bengali Language in India* article notes that all punctuation marks except the daṇḍa were borrowed from the Roman alphabet.
- Literary language styles. Literary Bengali developed two styles: *sadhubhasha* ("elegant language"), derived from Sanskrit, and *chalitbhasha* ("colloquial language"). These were standardised during the 19th and early 20th centuries. Britannica notes that two standard styles existed and that *sadhubhasha* became the preferred literary form in the 19th century.

Early 20th century and conclusion

By the early 1900s the Bengali script had achieved a form recognisably similar to today's alphabet. Key features include:

- Complete inventory. Banglapedia lists 11 vowels and 39 consonants (Vidyasagar's reforms increased this to 12 vowels and 40 consonants). Modern printed Bengali retains essentially the same shapes as the late 19th-century types.
- Consonant conjuncts. Bengali uses numerous ligatures (conjuncts); learning them remained challenging because they had to be memorised. Attempts to simplify conjuncts continued in the 20th century.
- Punctuation and spelling standardisation. Bengali orthography remained unsettled until the University of Calcutta introduced spelling reforms in 1936; this is beyond the timeframe of this study, but the early 20th century saw efforts by printers and publishers to regularise spelling and punctuation.

Significance

The Bengali writing system demonstrates how a script can evolve slowly over centuries and then undergo rapid standardisation due to technological and cultural change. From its Brahmi roots through eastern Gupta and Siddhamātrikā forms, it achieved a recognisable proto-Bengali alphabet by the 11th century. The script remained remarkably stable for several centuries, but the introduction of printing in 1778 forced decisions about letter shapes and punctuation. Reforms led by Ishwar Chandra Vidyasagar in the mid-19th century simplified the alphabet and standardised prose. By the early 20th century the Bengali script had essentially assumed its modern form, serving as a foundation for one of the world's major literary languages.

The report traces the Bengali writing system from its Brahmi roots through medieval consolidation and highlights how printing and 19th-century reforms standardized the alphabet and punctuation, leading to the modern script. If you need any further additions or changes, feel free to let me know!

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The historical development of the vocabulary and style of the Bengali language, which is characteristic of literature and high culture and public journalism

Evolution of Bengali Vocabulary and Literary Style: A Historical Overview

Introduction

Bengali (Bangla) is an Indo-Aryan language with over 230 million speakers, renowned for its rich literary heritage and dynamic evolution. Over the centuries, Bengali absorbed layers of vocabulary from Sanskrit, Persian, Arabic, Portuguese, and English, each influence leaving a mark on its lexicon and syntax. This report traces the development of Bengali vocabulary and stylistic features in literature, high culture, and public journalism across three major periods: the pre-modern/medieval era, the colonial period, and the post-independence era. It highlights how classical Sanskrit, foreign influences, and key literary movements shaped the formal writing style – from the ornate “Sadhu bhasha” (chaste language) to the more colloquial “Chalita bhasha” – and how the language of the media evolved over time. Examples of loanwords and stylistic shifts are included to illustrate these transformations.

Pre-Modern and Medieval Period (Before 18th Century)

Language and Literature: The Bengali language emerged as a distinct Indo-Aryan tongue by around the 10th century, evolving from Magadhi Prakrit through Apabhramsa stages. During this medieval period (14th–17th centuries), Bengali was chiefly a vehicle of popular literature – especially poetry and devotional songs – while the classical languages Sanskrit and Persian dominated high culture and administration. Educated elites often still wrote in Sanskrit, meaning early Bengali literature was strongly influenced by Sanskrit vocabulary and literary style. For example, many Hindu poets (e.g. Jaydev, Govardhan Acharya) composed in Sanskrit even after Bengali had formed, which led to the infusion of numerous Sanskrit-origin words (tatsama) into early Bengali texts. Key literary works of the medieval era included Hindu devotional epics like Mangalkavya poems and Vaishnava lyrics, which liberally used Sanskritic words and mythological terms, as well as translations of Sanskrit epics (e.g. Krittivasi Ramayana) into the Bengali vernacular. At the same time, Buddhist mystic songs like the *Charyapada* (8th–12th c.) show an early form of Bengali with a simpler, Prakrit-derived vocabulary, marking the transition from Sanskrit toward an indigenous literary language.

Persian–Arabic Influence: Following the establishment of Muslim rule in Bengal in the 13th century, Bengali came under strong Persian and Arabic influence. Persian was the court and official language during the Sultanate and Mughal periods (14th–17th c.), and thus thousands of Perso-Arabic loanwords entered Bengali, especially for administrative, military, and cultural

terms. By the late medieval era, it is estimated Bengali had absorbed over 2,000 Persian/Arabic words relating to government, law, warfare, and daily life. For instance, words like বাজার (bāzār) "market," খাজনা (khājna) "tax," দরগা (dargā) "court (royal)," আদালত (adalat) "court (legal)" and মসজিদ (mosjid) "mosque" became part of the lexicon. Some of these came directly via Persian, which acted as the conduit for Arabic vocabulary in Bengal. This era also saw the rise of a mixed Persianized Bengali register later termed Dobhashi Bangla ("bilingual" Bangla). Muslim Bengali poets from the 17th century onwards (such as Shah Gharibullah of Howrah) composed popular puthi *literature* using a heavy admixture of Persian and Arabic words, often even writing Bengali in Persian script. This Dobhashi style was used in Islamic romances, folk tales, and Sufi devotional texts to appeal to Bengali Muslim audiences, in contrast to the Sanskrit-heavy Hindu narratives. *(For example, the early 17th-c. poem Amir Hamza by Gharibullah pioneered this trend by intentionally favoring Perso-Arabic vocabulary over Sanskrit in Bengali verse.)* Such parallel tracks in medieval Bengali – one Sanskritised and one Persianised – show how religion and culture influenced vocabulary choices in literature.

European Contacts: The late medieval period also brought Portuguese influence. From the 16th century, Portuguese traders and missionaries in Bengal introduced several Iberian words for new products and concepts. Common Bengali terms like আনারস (anaras) "pineapple", আতা (ata) "custard apple", তামাক (tamak) "tobacco", জানালা (jānālā) "window" and চাবি (chābi) "key" all derive from Portuguese (e.g. *janela* for window, *chave* for key). These loanwords, mostly naming foods and household items, indicate Bengal's participation in early global trade networks. Minor influences from other European languages also occurred in the 17th–18th centuries (e.g. সাবান (saban) "soap" from French *savon*, or বালিশ (bāliś) "pillow" from a Turkish/Persian source), though their overall impact on medieval Bengali was limited compared to Persian or Sanskrit.

Stylistic Features: In the pre-modern era, Bengali style was characterized by its primarily oral and poetic nature. Prose writing in Bengali was extremely scarce before the 18th century. Literary works were composed in verse or song, employing indigenous rhythms but often using elevated words from Sanskrit or Persian as appropriate to the context. Syntax tended to be simpler in folk literature (closer to spoken language in form), whereas more learned works (like religious translations) attempted higher registers. Because Persian was the prestige written language of administration, Bengali had no standardized "official" prose style at this time. Instead, different authors developed regional literary dialects. Notably, the eastern dialects of Bengali (in areas of today's Bangladesh) preserved many older features and incorporated more Persian/Arabic terms, as seen in rural Muslim narratives, while western dialects around Nadia and Kolkata, used by Hindu scholars, retained Sanskritic forms. By the 18th century, the Nadia dialect (West-Central Bengal) was gaining status as a refined form of Bengali, and it would soon form the basis of the modern standard language. Overall, by the end of the medieval period Bengali had become a "fusion language", rooted in Sanskrit Prakrit origins but enriched with Persian-Arabic vocabulary, setting the stage for further development in the colonial era.

Colonial Era (18th to Early 20th Century)

The advent of British colonial rule in the late 18th century was a turning point for the Bengali language. This era saw Bengali elevated to a modern literary language with a standardized prose style, even as it assimilated new English influences. Two parallel trends defined this period: Sanskrit revivalism (shaping a formal, refined register for literature and education) and English

incorporation (introducing new vocabulary and concepts), along with the gradual democratization of style from Sadhu-bhasha to Chalit-bhasha.

Early Colonial Developments: After the British East India Company's takeover (1757), Persian was replaced by English as the official language of administration (English Education Act of 1835). During the transition, British orientalists and missionaries actively worked to *standardize* Bengali for governance and evangelization. Notably, Nathaniel Brassey Halhed compiled a Bengali grammar in 1778, in which he consciously excluded many Persian/Arabic words as "impurities," preferring Sanskrit-derived equivalents. This set the tone for a highly Sanskritised literary Bengali. The establishment of the Fort William College in Calcutta (1800) was a catalyst for modern Bengali prose. Under professors like William Carey, Bengali scholars (e.g. Ramram Basu) were engaged to produce textbooks, translations and the first Bengali grammars and dictionaries. Their efforts "made Bangla fit for fine prose" and modern subjects. By the early 19th century, Bengali had for the first time a stable writing system and a formal prose style influenced by Sanskrit grammar and idiom, but also simplified for clarity.

Growth of Print, Journalism and Education: The 19th century brought a boom in Bengali print culture. Bengali was adopted in schools and periodicals, leading to an expansion of its vocabulary to cover new domains. Educated Bengalis coined or adopted hundreds of new words for Western concepts, *often by calquing Sanskrit roots*. For example, terms like দর্শন (darśan) for "philosophy" or বিজ্ঞান (bijñān) for "science" were formed from Sanskrit, aligning Bengali with classical Indic scholarship. At the same time, English loanwords started pouring in, reflecting technological and social innovations. Words such as রেল (rel) for "rail/train", টেবিল (ṭebil) for "table", চেয়ার (cheyar) for "chair", স্কুল (skul) for "school", and পুলিশ (pulish) for "police" entered common usage during the colonial era. Many English administrative titles (e.g. *জজ jaj* for judge, *ম্যাজিস্ট্রেট mejistret*) and terms for modern institutions became part of Bengali, supplementing or replacing older Persian-derived terms. By the late 19th century, English influence was so pronounced that Bengali newspapers casually mixed English words, especially for political or scientific topics.

Vocabulary Sources in Colonial Bengal: The table below summarizes the major sources of Bengali vocabulary during this era and examples of each:

- Classical Sanskrit: Continued to provide learned and technical vocabulary (tatsama words). For instance, নগর (nagar) meaning "city" and শিক্ষা (śikṣā) meaning "education" are direct Sanskrit borrowings widely used in formal writing. Sanskrit also influenced literary style, encouraging long nominal compounds and ornate expressions in 19th-century prose.
- Persian and Arabic: Despite British disfavor, Perso-Arabic words remained in use, especially in informal registers and among Muslim communities. Words for everyday concepts and administration like হিসাব (hisāb) "account," কাজী (kāzi) "judge," বাজার (bāzār) "market," and খোদা (khodā) "God" persisted. However, new coinages often supplanted Persian terms in educated writing (e.g., replacing Persian *ilm* with Sanskrit *জ্ঞান (jñān)* for "knowledge").
- Portuguese: Loanwords from earlier Portuguese influence continued in colloquial use – e.g. পাউরুটি (pāuroṭi) from *pão* (bread), আলমারি (almari) from *armário* (cupboard) – but these were considered plain words, not part of elevated vocabulary.

- English: By the early 20th century, English-derived words had penetrated deeply. Some were adopted as-is (transliterated), such as টাইপ (ṭaip) "type" or ইঞ্জিন (injin) "engine." Others were semi-translated or hybridized. The colonial bilingual intelligentsia freely sprinkled English terms in Bengali discourse, a trend that would only grow.

Literary Movements and Stylistic Norms: The 19th century is often called the Bengal Renaissance, a period of social and literary flourishing. During this time, Bengali literature modernized rapidly – moving from religious verse to secular prose forms like the novel, essay, and news report. Early in the century, Raja Rammohun Roy and contemporaries began publishing newspapers (e.g. *Samvad Kaumudi*, 1820s) and pamphlets in Bengali, often advocating social reform. Their prose, though modern in intent, was crafted in the high *Sadhu-bhasha* style: lengthy sentences, Sanskritic diction, and a formal tone. Mid-century, Ishwar Chandra Vidyasagar emerged as a champion of clear and accessible Bengali prose. Vidyasagar wrote school textbooks, translations of Sanskrit classics, and the first Bengali primer (*Barnaparichay*), using a straightforward yet elegant style that balanced Sanskrit words with colloquial simplicity. He and others codified Bangla punctuation and paragraph structure, bringing a new lucidity to formal writing.

In the late 19th century, Bankimchandra Chattopadhyay set the benchmark for literary Bengali with pioneering novels like *Durgeshnandini* (1865). *Bankim's style* was markedly Sanskritised – he employed abundant tatsama words and long noun compounds, giving his prose an archaic, "classical" resonance. This suited the historical and nationalistic themes of his novels and was emulated by many writers of that era. In poetry, Michael Madhusudan Dutt introduced Western forms (blank verse, sonnets) but also reached back to Indian epics for inspiration; his epic *Meghnad Badh Kabya* (1861) retold a Ramayana episode in richly Sanskritised Bengali (even as he wrote it in the style of Miltonic blank verse). These works exemplified a high-culture style that fused English literary techniques with Sanskritic vocabulary.

By the turn of the 20th century, a significant shift in stylistic norms was underway. The overly Sanskritised *Sadhu-bhasha* began to be challenged by writers who found it stilted and removed from everyday speech. Two key figures in this *colloquial turn* were Rabindranath Tagore and Pramatha Chowdhury. Tagore, Bengal's foremost literary figure, initially wrote in the traditional high register but gradually pioneered a more natural Bengali idiom in his songs, stories, and later essays. He believed that the literary language should sound organic, not artificially ornamented, and he himself "opposed the highly Sanskritised variant" of Bengali, favoring the standard based on the spoken dialect of Nadia (his home region).

Pramatha Chowdhury took this movement a step further with the magazine Sabujpatra (1914). Under Tagore's encouragement, Pramatha explicitly promoted Chalit-bhasha (colloquial language) as the medium for literature and intellectual discourse. He introduced a new essay style (dubbed *Birbali* style after his penname Birbal) that was conversational in tone, used everyday verb forms, and broke with the flowery traditions of the 19th century. *Sabujpatra* became a platform where emerging writers experimented with colloquial Bengali in all genres. Although conservative critics initially resisted this trend, the success of Sabujpatra clearly demonstrated that colloquial Bengali could be used for serious literature. Tagore himself switched to a simpler style in many of his later prose works, validating Pramatha's approach. By the 1920s, most new literary works (novels, short stories, plays) were being written in a polished colloquial Bengali, closer to how people actually spoke in educated urban circles.

Rise of Bengali Journalism: The colonial era also saw the birth of modern Bengali journalism and public writing. The first Bengali newspapers appeared in the early 19th century (e.g. *Samachar Darpan*, 1818). Throughout the 1800s, dozens of Bengali newspapers, literary journals, and pamphlets were published, creating a new public sphere. Initially, journalistic language remained formal and Sanskrit-heavy – partly to lend gravitas and partly because early editors were often Brahmin scholars. Government documents and speeches in Bengali (when they occurred) likewise adopted the elevated *Sadhu* register. However, as literacy spread, a need for more accessible language grew. By the early 20th century, some publications began to simplify their language. For instance, Peary Chand Mitra's fictional letters in *Alaler Gharer Dulal* (1857) and Kali Prasanna Singha's satirical sketches *Hutom Pyanchar Naksha* (1862) employed colloquial idioms to comedic effect; these works, though literature, influenced journalistic style by showing the effectiveness of everyday Bengali in print. Still, mainstream newspapers stuck to convention longer.

It wasn't until the mid-20th century (late colonial and immediate post-colonial years) that journalistic prose fully embraced the colloquial. The parallel existence of two written standards – Sadhu-bhasha for formal contexts and Chalit-bhasha for informal/literary contexts – is a unique phenomenon of late colonial Bengali. Educated readers became *diglossic*, able to read both. A sentence in high Bengali like *"তাহার গৃহে কোন ব্যক্তি আসিয়াছিল"* (*tāhār gṛhe kon byakti āsiyāchhila*, "a person had come to his house") would in colloquial form be *"তার বাড়িতে কেউ এসেছিল"* (*tār bāṛite keu esechhilo*), conveying the same meaning with shorter pronouns and verbs. Writers and editors chose one or the other style based on target audience and tone. By the end of the colonial period, the momentum was clearly toward the simpler Chalit style, setting the stage for its dominance after independence.

(*Major contributors of the colonial era include:* Raja Rammohun Roy, Bhabani Charan Bandopadhyay (pioneer of early colloquial prose), Ishwar Chandra Vidyasagar, Bankimchandra Chattopadhyay, Michael M. Dutt, Mir Mosharraf Hossain (a notable Bengali Muslim novelist), Rabindranath Tagore, Pramatha Chowdhury, and Kazi Nazrul Islam. *Their collective efforts expanded Bengali's vocabulary and transformed its stylistic norms.*)

Post-Independence Period (Mid-20th Century to Present)

The mid-20th century, marked by the end of British rule, the Partition of 1947, and the emergence of Bangladesh in 1971, brought further evolution in Bengali usage in both literature and mass communication. In this period, the colloquial register decisively became the standard for virtually all writing outside of certain formal niches, and the language continued to absorb new influences (especially from English) while developing distinct nuances in West Bengal (India) versus Bangladesh.

Diglossia and the End of "Sadhu Bhasha": After India's independence, the Bengali-speaking region was split between West Bengal (a state in India) and East Bengal (which became East Pakistan, later independent Bangladesh). Despite different political trajectories, both sides saw a convergence toward the colloquial standard in language. By the mid-20th century, the old *chaste* Bengali was rapidly fading. In literature, most authors abandoned the archaic verb forms and pronouns of Sadhu-bhasha by the 1940s–50s. In poetry, mixing of the two registers (once common, even in Tagore's early poetry) virtually vanished after World War II, yielding to pure colloquial forms. This was in part due to a new generation of writers who found the Sadhu style insufficient for modern themes, and also due to the influence of spoken media like radio. By

the 1960s, standard colloquial Bengali – based on educated speech of Kolkata/Dhaka – was firmly established as the medium of novels, stories, essays, and even translations of scientific texts. The colloquial form, derived from the Nadia dialect, proved flexible and expressive enough for all purposes, and it had the advantage of being immediately understood by the masses.

The last stronghold of Sadhu-bhasha was public and official prose, especially in print journalism. But here too changes came: Many newspapers switched to colloquial Bengali in the 1960s to reach a wider readership. A notable example was in March 1965, when a number of Bengali dailies (particularly in Indian West Bengal) collectively adopted the Chalit style for reporting. This was a dramatic shift – headlines and editorials that once read *"কলকাতায় বর্ষার সূচনা হইয়াছে"* (*Kolkatay borshar suchana hoiyachhe*) would now be *"কলকাতায় বর্ষা শুরু হয়েছে"* (*Kolkatay borsha shuru hoyeche*), a simpler form meaning "The monsoon has started in Kolkata." In East Pakistan, which became Bangladesh after 1971, the change was slightly slower for some outlets. The influential Dhaka newspaper *Ittefaq*, for instance, continued using the old formal style for decades; it finally gave up the Sadhu form in 2001, switching to the colloquial norm. Today, virtually all Bengali media – newspapers, magazines, TV news tickers, websites – use the standard colloquial language, making it truly the language of both literature *and* public discourse. The formal Sadhu register survives only in ceremonial or stylistic contexts (such as the occasional traditional poem, or in some legal/bureaucratic documents), and even there it is often viewed as archaic.

Influence of the Language Movement: In East Bengal, political events significantly shaped language evolution. The Bengali Language Movement (Bhasha Andolon) of 1952 was a response to the Pakistan government's attempt to impose Urdu as the sole state language. Mass protests in Dhaka (Feb 21, 1952) and the martyrdom of students defending Bangla's status galvanized Bengali linguistic nationalism. As a result, Bengali was eventually recognized (1956) as one of the state languages of Pakistan. This historic struggle affirmed that Bengali would be the language of education, administration, and culture in East Bengal. After Bangladesh's independence in 1971, there was a strong push to develop Bangla in all spheres of national life – from government proceedings to higher education – to replace English and Urdu influences. Institutions like the Bangla Academy (est. 1955) led efforts to standardize spelling, compile dictionaries, and coin new terminology for governance and science in Bangla. In the decades following independence, Bangladeshi Bengali took on a somewhat more persianized/arabicized flavor in informal usage among the populace, reflecting the local Muslim heritage, but also continued the general trend of simplification. For example, rural Bangladeshis might say পানি (pani) for "water" (a Perso-Arabic word) whereas an Indian Bengali might more often use জল (jal) (a tadbhava of Sanskrit *jala*), yet both words are understood on either side. Despite such preferences in everyday vocabulary, the formal standard in both countries remains very similar. Indeed, the written Bengali of West Bengal and Bangladesh is mutually intelligible and nearly identical in grammar and core lexicon, with only minor differences in chosen vocabulary for certain cultural terms (e.g. words for family relations or food may differ by Hindu/Muslim tradition).

Contemporary Vocabulary Trends: The post-independence era, particularly from the late 20th century to the present (2020s), has been marked by accelerating globalization and technological change, which have introduced a flood of new terms into Bengali. English continues to be the biggest source of loanwords in modern times. Everything from scientific terms (*ডিএনএ* DNA, *কোম্পিউটার* computer) to pop culture (*ফিল্ম* film, *ফেসবুক* Facebook) enters Bengali largely

un-translated or only lightly adapted. For many such terms, Bengali does have coined or traditional equivalents – for instance, দূরভাষ (durbhāṣ) was a Sanskritic coinage for “telephone” and গণকযন্ত্র (gônok-yantra) for “computer”, and government publications in Bangladesh/West Bengal do use them. However, in media and everyday usage, it is far more common to simply say *টেলিফোন* (telephon) or *কম্পিউটার* (kompiúṭar). The balance between using indigenous coinages vs. foreign borrowings is an ongoing stylistic consideration. Bengali language regulators tend to prefer reactivating Sanskrit roots to create new words (continuing the 19th-century tradition of tatṣama neologisms), but the public and press often find the English words more convenient. As a result, modern formal Bengali writing, such as newspaper articles, often contains a mix of Sanskrit-derived terminology and direct English loans, depending on context. This mingling is widely accepted; as one linguist notes, more and more foreign words are “finding their way into the Bangla vocabulary and making it easier to communicate,” even if purists worry about erosion of the language’s character.

Another trend is the growing inclusion of colloquial and dialectal expressions in literature and media, adding richness to the language of public discourse. Whereas mid-20th-century news or novels strictly adhered to the *standard* colloquial of the educated urban class, 21st-century Bengali writing sometimes incorporates dialect words, regional idioms, or non-standard accents for effect. For example, Bengali films and TV now feature characters speaking in Sylheti or Chittagonian dialects, and novels might use Dhakaiya (Old Dhaka) slang for authenticity. This indicates a shift from the earlier notion that only *shuddho* (pure) standard Bengali is appropriate for print. The stigma against regionalisms is fading as diversity of voices is celebrated. Nonetheless, standard Bengali (based on Kolkata and Dhaka speech) remains the lingua franca in formal communication across dialect areas.

Style in Modern Literature and Media: Modern Bengali literature (post-1950s) is characterized by its straightforward, conversational style – a far cry from the ornate prose of Bankimchandra. Sentences tend to be shorter and syntax closer to speech. Writers like Sarat Chandra Chattopadhyay (early 20th c.) had already set a precedent by writing fiction in simple language accessible to all classes, a trend that continued vigorously after independence. In West Bengal, post-independence authors (e.g. Manik Bandopadhyay, Ashapurna Devi, Sunil Gangopadhyay) wrote in idiomatic Bengali while tackling modern social realities. In Bangladesh, novelists and poets of the late 20th century (e.g. Shamsur Rahman, Al Mahmud, Humayun Ahmed) likewise embraced a clean, unadorned Bengali, though often enriched with local idioms and a touch of Persian-derived vocabulary common in East Bengal. The balance between Sanskritised and colloquial style became a matter of artistic choice rather than a rigid boundary. For instance, a contemporary columnist might use a Sanskrit-origin word for emphasis in an otherwise plain sentence, or a poet might choose a rare Arabic word for its sound or religious connotation. The key is that these choices are stylistic *flourishes* now, not requirements of a formal register.

In journalistic and essayistic prose, the tone has also become more direct. Comparing a 1940s editorial with a 2020s one, the latter is likely to employ shorter paragraphs, active voice, and approachable vocabulary to keep readers engaged. The legacy of British-influenced formal writing (with complex subordinate clauses and heavy Latinate words) has waned. Many editors encourage a conversational tone even in analytical writing. Additionally, the rise of television and Internet news has led to a more *neutral, pan-dialectal Bengali*, because broadcasters speak in a relatively neutral accent and avoid very region-specific or archaic words. As Bengali media went digital in the 21st century, some English-style syntactic patterns even crept in – for example, greater use of passive voice or abstract nouns under English influence, and occasional word-for-word translations of English idioms. Code-switching is common: a news report or a

talk show might feature sentences that switch mid-way to English for technical terms or quotes. Younger generations in cities often mix English and Bengali freely (so-called "Banglish"), a practice reflected in social media and youth-oriented publications. While traditionalists argue that this *"distorted language"* could harm Bengali's purity, others see it as a natural evolution that adds versatility.

Continuing Cultural Impact: Each phase of Bengali's evolution was propelled by major literary and cultural figures, and their influence persists. The medieval saint Chaitanya and poets like Chandidas left a legacy of Bhakti-infused simple Bengali; Bankim, Tagore, and Nazrul in the colonial era expanded what Bengali could express – from patriotism to humanism – and showed that it could be a language of modern literature; in the post-independence era, figures like Shaheed Shahidullah Kaisar (journalist-novelist who died in 1971) and Zahir Raihan used Bengali journalism and literature as tools of political resistance, thereby shaping a Bengali prose that is lucid but powerful. The language movements in both West Bengal (for example, movements to use Bengali in university education in the 1960s) and in Bangladesh (the 1952 language movement and subsequent adoption of Bangla in all courts and offices by the 1980s) gave Bengali official dignity that it had lacked under the British. This encouraged a whole new domain of formal Bengali – bureaucratic and academic writing – which developed its own style, often using a high density of Sanskrit-derived terms (much as legal English uses Latin). Thus, one can find variance in formality within modern Bengali: a Supreme Court verdict or a philosophy thesis might still read in a dense, Sanskritised style, whereas a newspaper article or popular science book will be in simple colloquial language. The spectrum ranges from "Sadhu-esque" (in rare formal niches) to ultra-colloquial (in dialogues, social media, etc.), but the standard medium level is what dominates public life today.

In summary, the post-independence period solidified a unified, colloquial Bengali standard for literature and media, while also welcoming new vocabulary from global languages. Bengali's stylistic norms have continuously trended toward naturalness and inclusivity, shedding the heavy elitist tone of the 19th century. Yet, the language has not lost connection with its classical roots – Sanskrit tatṣama words are still readily available to writers, and Perso-Arabic words remain common in many contexts (especially in Bangladesh). The result is a rich diglossic palette: contemporary writers can mix levels of diction for effect, drawing on the "high" register for poetic or satirical flavor and the "plain" register for clarity and realism. Meanwhile, public journalism largely sticks to clarity, using a neutral standard Bengali that the average reader finds comfortable. Both West Bengal and Bangladesh today celebrate Bhasha Divas (Language Day) each year (Feb 21, International Mother Language Day) – a reminder of the passionate history behind the Bengali language's development. That history lives on in every Bengali sentence, where words of Sanskrit, Persian, English, and local origin coexist to express the modern Bengali identity.

Conclusion

The development of Bengali's vocabulary and style is a story of layered influences and adaptive change. From its Sanskrit-Prakrit origins, Bengali inherited a core grammar and many base words, to which were added the luxuriant Persian-Arabic adornments of the medieval Islamic period and later the pragmatic European (Portuguese, English) additions of the colonial and global age. In literary style, Bengali has oscillated between the ornate and the plain. The pre-modern literature showed a mix of simple folk speech and learned diction; the 19th-century colonial milieu initially exalted a highly Sanskritised, "chaste" form for educated writing, but eventually gave way to the colloquial renaissance spearheaded by Tagore, Pramatha

Chowdhury and others. The post-1947 era completed this democratization of Bengali, entrenching the spoken standard in both high culture and mass media.

Major literary movements and figures at each stage left indelible marks: the Vaishnava poets and Sufi puthis of medieval Bengal expanded the lexicon with spiritual and romantic imagery; the Bengal Renaissance intellectuals of the 19th century proved Bengali capable of modern discourse and seeded a host of neologisms; the language martyrs and writers of East Bengal mid-20th century defended and advanced Bengali as a full-fledged state language; and contemporary authors continue to innovate in language, negotiating the balance between purity and change. The language of Bengali media, once formal and flowery, is now generally straightforward and people-oriented, a shift that mirrors the broader cultural trend towards egalitarianism in language. Bengali's high-register vocabulary (largely Sanskritic) and colloquial vernacular exist not in opposition but in a complementary continuum, giving speakers and writers a versatile toolkit. As one scholar observed, Persian enriched Bengali's administrative and cultural lexicon, Arabic contributed religious terms, Sanskrit provided scholarly depth, and English furnished the tools of modern life – together making Bengali "vibrant and dynamic".

Today's Bengali literature and journalism stand on this historical foundation: a language at once ancient and modern, proud of its classical elegance yet unafraid to evolve with the times. The stylistic norms have been shaped by centuries of usage, ensuring that whether in a poem, a novel, or a news report, the Bengali language can register the subtlest of emotions or the plainest of facts with equal ease. Such is the ongoing odyssey of Bangla – from "শুদ্ধ" (śuddho) to "চলিত" (cholito), from royal court to common marketplace – ever adapting, yet ever retaining its unique identity.

Examples of Foreign Influences on Bengali Vocabulary: *(selected loanwords and their origins)*

- Persian/Arabic: *বাজার* bāzār ("market"), *অফিস* ofis ("office", from Persian daftar), *আদালত* ādālat ("court of law"), *কিতাব* kitab ("book"), *মসজিদ* mosjid ("mosque"), *পানি* pani ("water"), *খুব* khub ("very", from Persian *khub*). These entered mainly during 13th–18th centuries and many remain in formal use, especially in Bangladesh.
- Sanskrit: *নগর* nagar ("city"), *মানব* mānav ("human", scholarly term), *বিদ্যালয়* bidyālaya ("school", lit. "place of learning"), *জ্ঞান* jñān ("knowledge"), *ন্যায়* nyāy ("justice"). Such tatsama words were reintroduced in the 19th century to develop technical and literary vocabulary. They provide a "learned" tone and are common in academic or high-register texts.
- Portuguese: *জানালা* jānālā ("window"), *চাবি* chābi ("key"), *আনারস* anaras ("pineapple"), *সাবান* sāban ("soap"), *আলমারি* almari ("cupboard"). These came with Portuguese traders (16th–17th c.) and survive as everyday terms, though not seen as formal vocabulary.
- English: *রেল* rel ("train/railway"), *টেলিফোন* ṭelifon ("telephone"), *পুলিশ* pulish ("police"), *কারখানা* karkhāna ("factory", from *factory* via Urdu), *কম্পিউটার* kompiuṭar ("computer"), *বাজেট* bājeṭ ("budget"). English loans (18th c. onward) dominate modern fields and are often used directly in media.
- Other: *বালিশ* bāliś ("pillow", from Persian/Turkish), *চামচ* chāmch ("spoon", from Portuguese *colher*, via Hindi), *বন্দর* bandor ("port/harbor", from Portuguese *bandel* or older Persian), etc. These reflect the multi-layered history of Bengal's global contacts.

Sadhu vs. Chalit Example: To illustrate the stylistic shift, consider a simple phrase in Bengali: "He went to his house." In the older Sadhu-bhasha, one would write *"তিঁনি তাহার গৃহে গমন করিয়াছিল"* (*tińi tāhār gṛhe gaman koriyāchhila*), which is heavy with classical forms (tińi = an honorific "he", tāhār = "his", koriyāchhila = "had done/gone"). The modern Chalit-bhasha equivalent is *"সে তার বাড়ি চলে গিয়েছিল"* (*se tār bāṛi chale giyechhilo*), using short forms (*se, tar*) and a colloquial verb (*giyechhilo*). The latter is clearly closer to everyday speech. Such simplification in pronouns and verbs – *tahār → tar* (his), *koriyāchhe → korechhe* (has done) – was the crux of Bengali's stylistic modernization. What was once a stark divide between an elite written code and the spoken tongue has been bridged, allowing literature and journalism in Bengali to resonate with natural clarity while still having the expressive depth built over a millennium of linguistic evolution.

Sources: The historical and linguistic information above is drawn from scholarly sources, including *Banglapedia: National Encyclopedia of Bangladesh*, academic studies on the Bengali language's development, and analyses in newspapers and educational platforms. These references provide detailed evidence of how Bengali's vocabulary was enriched by various languages and how its literary style transitioned over key periods in response to cultural and political changes.

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Evolution of Scientific Vocabulary in Bengali: History and Formal Characteristics

Early Developments in the Colonial Era (19th Century)

The foundation for scientific vocabulary in Bengali was laid during the colonial period. British missionaries and educators were among the first to produce educational materials in Bengali. Notably, the Serampore Baptist Mission published *Digdarshan* in 1818 – the first Bengali periodical – which contained articles on geography, physics, agriculture, zoology and more, written in simple prose for youth. This early science magazine even included a glossary explaining new technical words, setting a standard for clarity in future Bengali publications. At Fort William College in the early 1800s, professors like William Carey worked with Bengali scholars to develop prose suitable for textbooks. These efforts began to equip Bengali with the capacity to express "modern Western science" in the vernacular.

By the mid-19th century, Bengali intellectuals of the Bengal Renaissance took up the challenge of writing about science and rationalist ideas in their mother tongue. Akshay Kumar Datta (1820–1886) was a true pioneer in this regard. He is often credited as the first of his generation to *invent a scientific vocabulary in Bengali* for teaching elementary. As a textbook writer – author of *Charupath* (primer, 1853–54), *Bhugol* (Geography, 1851) and *Padarthavidya* (Physics, 1856) – Akshay Datta found Bengali equivalents or coined terms for scientific concepts that had hitherto been taught only in. His terminology-building was significant in

constructing a public scientific lexicon. Another early figure, Ishwar Chandra Vidyasagar (1820–1891), though primarily an educationist and social reformer, also modernized Bengali prose in ways that benefited scientific and technical writing. He simplified and rationalized Bengali grammar and the alphabet, making the language more logical and regular. In his school readers and textbooks (such as *Bodhodaya* and *Barnaparichay* in 1851), Vidyasagar introduced lessons on history and basic science, including biographies of scientists like Copernicus, Galileo and Newton. Importantly, Vidyasagar standardized sentence structure and punctuation in Bengali prose, establishing clear relations between subject, verb and object and using commas to break up long sentences. Prior to him, Bengali writing was often archaic and convoluted; his reforms created a more lucid, analytical style "hitherto unknown in Bangla prose". This development greatly aided the expression of scientific logic in Bengali, as complex ideas could now be communicated with precision and coherence.

By late 19th century, a cadre of Bengali educators and writers had enriched the language with scientific content. Journals like *Tattvabodhini Patrika* (est. 1843 by Debendranath Tagore) published articles on science and philosophy in Bengali, and the Bangiya Sahitya Parishad (founded 1894) promoted Bengali literature and terminology. Jagadish Chandra Bose (1858–1937), a renowned physicist-biologist, exemplified the growing capability of Bengali to handle advanced science. Bose is celebrated as the father of Bengali science fiction for works like "Niruddesher Kahini" (1896) – one of the first science-fiction stories in an Indian language. By writing imaginative scientific tales in Bengali, Bose demonstrated that even cutting-edge ideas (like weather control in his story "Runaway Cyclone") could be discussed in the vernacular. His literary contributions, alongside his scientific achievements, inspired public interest in science and showed the flexibility of Bengali for technical discourse.

Pioneers in Developing Scientific Bengali Vocabulary

Several key figures played outsized roles in formalizing and popularizing scientific Bengali:

- Akshay Kumar Datta (1820–1886): An early Bengali rationalist and educator, Datta *pioneered scientific terminology*. He created new Bengali terms for concepts in physics, geography and biology while writing some of the first science textbooks in. His work proved that complex scientific ideas could be taught in Bengali at a time when English was dominant in education. The terminology Datta coined – often derived from Sanskrit roots – became valuable in building a modern scientific lexicon.
- Ishwar Chandra Vidyasagar (1820–1891): As an architect of modern Bengali prose, Vidyasagar's contributions were indirect yet fundamental. He refined Bengali grammar and style, making it more systematic and logical for expository writing. Vidyasagar's primers and readers exposed students to science and geography in Bengali, and by standardizing spelling and punctuation, he set a logical structure for academic writing. He "established the correlation between the subject and the verb, and the verb and the object" in Bengali sentences, greatly improving clarity. This tighter syntax was crucial for expressing scientific logic unambiguously.
- Jagadish Chandra Bose (1858–1937): A polymath scientist, Bose demonstrated the expressive power of Bengali by writing popular science essays and fiction. He is credited with the first Bengali science fiction story, and through works like *Abyakta* (collection of essays), he showed how to discuss botany, physics, and even speculative ideas in elegant Bengali. Bose's engagement with writing (despite conducting research in English) helped inspire a movement of "science for the people" in Bengal, encouraging others to communicate scientific knowledge in the mother tongue.

- Ramendra Sundar Tribedi (1864–1919): Tribedi was a professor of science who became famous for his Bengali popular science writings. He deliberately crafted scientific terms that were *indigenous-sounding, sweet on the tongue and easy to pronounce*, often drawing from Sanskrit and local folklore. By "dissolving alien terms" into a Bengali medium, Ramendra Sundar coined many new words and explained Western scientific concepts with local analogies. His essays (collected in books like *Prakriti* and *Jigmasa*) introduced topics from modern physics to philosophy in lucid Bengali. Tribedi's work with the Bangiya Sahitya Parishad also institutionalized terminology development – he helped *standardize scientific vocabulary* via the Parishad's journal and forums.
- Prafulla Chandra Ray (1861–1944) and Others: Acharya P.C. Ray, a chemist and nationalist, advocated vernacular education and authored works (like *Bangalir Mastiska O Tahar Apabyabohar*, "The Bengali Brain and Its Misuse", 1890s) in Bengali. He and contemporaries like Jagadananda Roy (who wrote a children's science book *Graher Paryyatan* in 1915) and Satyendranath Bose (who translated science works into Bengali) all contributed to expanding the scientific lexicon. Their efforts were complemented by institutions such as the Calcutta University (which allowed Bengali answers in exams early on) and the National Council of Education (1906) that promoted Bengali-medium technical education. By the early 20th century, Bengali had developed a sizable repertoire of scientific terms, many of them *tatsama* (Sanskrit-derived) words introduced through textbooks and journals.

The Language Movement and Post-Independence Language Planning

In the mid-20th century, the trajectory of scientific Bengali was strongly influenced by language politics in the region. After the partition of 1947, Bengali became the state language of West Bengal (India) and the majority language of East Pakistan (later Bangladesh). However, in East Pakistan, the right to use Bengali in official and educational domains had to be won through the Bengali Language Movement (Bhasha Andolon). In the late 1940s, the Pakistan government sought to impose Urdu and even attempted to *"reform" Bengali script and vocabulary* to suit an Islamic identity – for instance, a 1949 committee recommended adopting Arabic script for Bengali and simplifying its "Hindu" elements. These moves were fiercely opposed by Bengali intellectuals, students and the public. Activists argued that the proposed changes (in grammar, spelling and vocabulary) were a political ploy to sever the Bengali Muslims from their thousand-year-old linguistic heritage. Due to mass protests, the scheme was shelved and Bengali was eventually recognized as one of Pakistan's state languages in 1956.

Out of the Language Movement's spirit emerged institutions dedicated to developing Bengali for all scholarly purposes. A key milestone was the establishment of the Bangla Academy in Dhaka in 1955, as a direct outcome of the 1952 language struggle. Linguist Dr. Muhammad Shahidullah had earlier, in 1925, *urged the use of Bangla for academic and literary purposes*, and the Academy fulfilled that vision. Modeled somewhat after the French Academy, Bangla Academy took on the mission of modernizing and enriching Bengali. It set up divisions for research, translation and compilation of terminology. In subsequent decades (especially after Bangladesh's independence in 1971), the Academy produced a vast array of dictionaries, glossaries and even an encyclopedia in Bengali:

- It published Bangla translations of scientific and technical texts in disciplines like chemistry, biology, engineering, etc..

- It compiled specialized glossaries, e.g. *Bijnan Bishvakosh* (Science Encyclopedia) and vocabularies for fields like economics, sociology, law, medicine and more.
- It also standardized spelling and coinages, issuing orthography rules and academic terminology that are followed in textbooks and official writings.

The Bangla Academy Science Council and journals (such as *Bangla Academy Bijnan Patrika*) provided platforms to continue inventing or approving Bengali terms for new scientific concepts. For example, the Academy's lexicons decided on Bangla names for chemical elements and biological terms, often choosing Sanskrit-based names (e.g. coining অম্লজান (*amljan*) for oxygen meaning "acid-producer") alongside or instead of the English-derived name. In parallel, Bangladesh's government took policy steps to elevate Bengali in education: the Qudrat-e-Khuda Education Commission Report (1974) emphatically recommended using Bengali as the medium of instruction *at all levels of education, including science and technical subjects*, with textbooks to be written or translated in Bengali. This led to Bengali-medium science curricula in schools and even at the university level (with English remaining as a second language for global reference).

In West Bengal, India, the development of scientific Bengali continued in a somewhat different context. English remained the principal medium in higher education, but Bengali was used widely in secondary education and public discourse. The venerable Bangiya Sahitya Parishad in Kolkata, which had been active since the 19th century, continued to work on Bengali terminology and literature. In 1986, the West Bengal government established the Paschimbanga Bangla Akademi as the official regulatory body for Bengali in that state. The Bangla Akademi took on tasks similar to its Dhaka counterpart: reforming Bengali spelling and grammar, and compiling dictionaries, encyclopedias and technical terminologies for use in West Bengal. It has since published comprehensive spelling dictionaries and sanctioned standard Bengali scientific terms, ensuring consistency in textbooks. The Akademi's efforts mean that an "official" scientific vocabulary is available and taught in West Bengal's Bengali-medium schools (for instance, terms for physics or biology in state board textbooks adhere to Akademi recommendations). Meanwhile, central agencies like India's Commission for Scientific & Technical Terminology (CSTT) also provide standardized translations of scientific terms into Bengali, which complement the regional efforts.

By the present day, both Bangladesh and Indian Bengal have a robust infrastructure for Bengali language planning. Bengali terminology is maintained and updated by their respective academies, and influential publications (like the Bangla Academy Modern Dictionary and school textbooks) codify the academic vocabulary. The net result of these historical developments is a Bengali scientific register that is highly systematized, drawing on its Sanskrit inheritance and carefully differentiated from everyday speech.

Sanskritization and Transliteration in Term Formation

A prominent feature of developing scientific Bengali has been the Sanskritization of vocabulary, alongside selective borrowing from English via transliteration. During the 19th and early 20th centuries, Bengali scholars intentionally turned to classical Sanskrit to coin words for modern ideas – a process similar to how English drew on Latin/Greek for scientific terms. Using Sanskrit (the ancient source of many learned Bengali words) had two advantages: it resonated with the educated Bengali public (especially Hindus), and it allowed the creation of *precise, compound terms* within an Indo-European linguistic framework.

Many Bengali scientific terms are calques or neologisms built from Sanskrit roots. For example, the word for science itself, বিজ্ঞান (*biggyan*), comes from Sanskrit *vijñāna* (meaning knowledge or science) – a direct adaptation that neatly encapsulates the concept. In the 19th century, pioneers like Akshay Datta and others coined systematic terminology for subjects: জ্যোতির্বিজ্ঞান (jyotir-biggyan) for astronomy, ভৌত বিজ্ঞান (bhauta biggyan) for physics (literally "material science"), রসায়নশাস্ত্র (rasayan-shastra) for chemistry, উদ্ভিদবিদ্যা (udbhidbidya) for botany, and so on. Such terms are clearly Sanskritic and often translations of English terms (e.g. *rasayana shastra* = "chemistry" translates to "science of liquids/elixirs"). The use of tatsama (Sanskrit borrowed) words extended to technical vocabulary: a telescope became দূরবীন (*durbin*, "far-seer"), microscope became অণুবীক্ষণ যন্ত্র (*anubikshan-yantra*, "instrument to see the minute"), telephone was coined as দূরভাষ (*durvash*, "far-speech"), and television as দূরদর্শন (*durdarshan*, "far-sight"). In medicine and biology, many Latin terms found Sanskrit-based counterparts: the heart is হৃদপিণ্ড (*hridpind*, "heart-organ") in formal usage, and the liver is যকৃত (*yakrit*) – a tatsama word – rather than the colloquial Persian-derived *kolija*. This Sanskritization not only created one-to-one technical terms for new concepts, but also gave academic Bengali a learned tone distinct from daily life.

At the same time, Bengali has freely adopted foreign terms via transliteration, especially for newer technologies and concepts where a Sanskrit coinage either did not exist or did not gain popularity. During the colonial era, many everyday English words entered Bengali (e.g. টেবিল ṭebil for table, স্কুল skul for school, রেল rel for rail). In academic usage too, certain scientific terms were simply Bengali-ized phonetically for convenience. For instance, *oxygen* is often written as অক্সিজেন (okshijen) in Bengali script, even though a Sanskrit term অম্লজান (amljan) was devised. Bengali dictionaries list অম্লজান as the synonym for oxygen, meaning "acid-progenitor" (echoing the antiquated chemistry notion that oxygen forms acids), but in practice Bengali students and teachers frequently use অক্সিজেন. Similarly, টেলিফোন (telephon) and রেডিও (reḍio) are commonly used and understood, despite the existence of *durvash* for telephone or আকাশবাণী (akashbani, "sky-sound") for radio.

The choice between a Sanskritic neologism and a borrowed word often depended on context and audience. Early language purists (especially in West Bengal) tended to prefer tatsama coinages to demonstrate the richness of Bengali and to avoid over-reliance on English. This was seen as a way to indigenize scientific knowledge. For example, even in recent years, West Bengal's Paschimbanga Bangla Akademi and school texts sometimes use terms like দ্বিচক্রযান (*dwi-chakra-yan*, "two-wheeled vehicle") for bicycle or বিশ্বব্যাপী জাল (*bishwabyapi jal*, "worldwide net") for the internet in formal writing, although colloquially সাইকেল (saikel) and ইন্টারনেট (internet) are almost exclusively used. In Bangladesh, especially after independence, there was perhaps a more pragmatic approach: while Bangla Academy coined hundreds of terms, they also recognized the need for mass acceptability. Thus, textbooks often give both the Bengali term and the English in parentheses. For instance, a physics textbook might mention ত্বরণ *(acceleration)* alongside the English word in Bangla script, or use the hybrid phrase দ্রব্যের ঘনত্ব *(density of matter)* where ঘনত্ব is Sanskrit-derived "density" and the concept is further clarified with English usage. Over time, many English technical words have been fully assimilated in Bengali discussion (e.g. ভোল্ট volt, লেজার lejār for laser, কম্পিউটার kompiutar for computer), but the underlying policy has been to have a Bengali equivalent available whenever possible.

Crucially, Sanskritization gave scientific Bengali an internal consistency and a logical morphology. Because Sanskrit-based terms can be broken down into meaningful components (prefix-root-suffix), a student can often infer the meaning from the parts. For example, *দূর-দর্শন* (durdarshan) literally parses to "far-sight," a logical description of television. *পরমাণু* (paramanu) for atom combines *parama* (ultimate) and *anu* (particle), mirroring the idea of an indivisible element. This ability to form compound words for new ideas means Bengali can continuously expand its scientific lexicon from its own linguistic resources, which adds to the *formal, systematic feel* of academic Bengali.

On the other hand, transliteration ensured that Bengali speakers stayed up-to-date with global terminology and could easily switch to English discourse when needed. The push and pull between pure Bengali terms and borrowed words is an ongoing dynamic. In practice, academic writings tend to use the Bengali/Sanskritic terms more rigorously, whereas in everyday conversations or popular media, people might default to the English loanword if it's more familiar. Both strategies, however, have together enriched the Bengali vocabulary: today one finds Bengali science books using a mix of inherited Sanskrit words, calqued translations, and adopted foreign words – all contributing to a comprehensive terminology.

Formal Grammar and Precision of Academic Bengali vs Colloquial Usage

Beyond vocabulary, academic scientific Bengali distinguishes itself from everyday spoken Bengali through *grammar, syntax, and style* that strive for greater precision and logical clarity. This contrast can be understood by looking at the two historical forms of written Bengali: Cholit bhasha (the colloquial style) and Sadhu bhasha (the "chaste" or high formal style). Everyday Bengali today is essentially in the colloquial form – characterised by shorter verb forms and pronouns, relaxed word order, and influences of idiomatic speech. Academic and scientific Bengali, however, retains several features of formal syntax that give it a more rigorous, explicit structure, even though modern writing has abandoned the overly archaic Sadhu verb endings.

One aspect of this is sentence construction. Standard colloquial Bengali (Cholit) already follows a subject–object–verb order with postpositional markers that indicate grammatical relations. In informal speech, however, much is left to context: subjects or objects are dropped if understood, sentences may be split into fragments, and connectors (like conjunctions or relative pronouns) are often omitted. Academic writing avoids these ambiguities. A scientific text in Bengali will use clear complex sentences with explicit connectors to indicate cause, effect, condition, etc. For example, an everyday speaker might say in Bengali: *এই ওষুধ খেলে জ্বর কমে যাবে* ("Ei oshudh khele jôr kome jabe"), literally "Take this medicine, fever will go down," which is concise but omits the subject and has a colloquial tone. A science textbook, by contrast, would frame the same idea more formally: *এই ওষুধ সেবনের মাধ্যমে জ্বর প্রশমিত হবে*, which directly translates to "Through the ingestion of this medicine, the fever will be alleviated." In the formal version, *সেবনের মাধ্যমে* ("by means of taking") and *প্রশমিত হবে* ("will be alleviated") are formal choices that precisely tie cause and effect, and use a Sanskritic verb form. The grammar here is more *nominalized* and passive, aligning with the impersonal tone of scientific explanation.

Historically, Sadhu bhasha contributed to this precise tone. Until the mid-20th century, formal writings – including scientific articles and news – were often in Sadhu bhasha, which employed

longer verb conjugations (e.g. করিয়াছিলাম kôriẏachhilaam instead of colloquial করেছিলাম korechhilam for “I had done”) and pronouns like তাহা (taha) instead of colloquial ওটা (ota) for “that”. These longer forms can carry more nuance (such as tense and aspect distinctions) and were thought to lend gravitas and unambiguity. Even as late as the 1960s, Bangladeshi newspapers like *Ittefaq* used Sadhu bhasha in serious reportage. Over time, Sadhu bhasha has nearly disappeared in favor of the standard colloquial form for *all* writing, but scientific Bengali still maintains a “formal register” that borrows many of Sadhu bhasha’s traits – primarily in choice of words and a measured, elaborate sentence style. The *“temperament”* of formal Bengali is different from the colloquial – more reserved, exacting, and systematic.

Another feature is the use of participles and relative clauses to pack information. Colloquial Bengali often breaks information into multiple short sentences or uses serial verbs. Academic Bengali prefers joining related ideas into one complex sentence, which mirrors the logical structure of scientific argument. For instance, an informal narration might say: সে সূর্যকে ঘিরে পৃথিবী ঘোরে. এক বছর লাগে. (“Se surjoke ghire prithibi ghore. Ek bochor lage.” – “The Earth circles the sun. It takes one year.”). A textbook would combine these: পৃথিবী সূর্যকে কেন্দ্র করে পরিক্রমণ সম্পন্ন করে এক বছরে, literally “The Earth completes a revolution around the sun in one year.” The latter uses the term পরিক্রমণ (parikraman, “revolution”) – a Sanskritic noun – and embeds the time frame in the sentence, yielding a precise single statement. This kind of syntactic packaging reduces ambiguity (each term is defined, the relationship is explicit) and reflects the *logical hierarchy* of scientific statements.

Vocabulary choices in academic Bengali also enforce precision. Where everyday Bengali has many synonyms or vague terms, academic language picks one standardized term for a concept and uses it consistently. For example, Bengali has multiple words for “heat” or “temperature” in casual speech (গরম *gorom* for hot/warm, তাপ tap, or even English হিট hit in slang), but in a physics context, only তাপমাত্রা (*tapmatra*) would be used for “temperature.” A layperson might say গাড়িটা খুব জোরে চলে (“the car goes very fast”), but an engineering text might quantify “high speed” as অতি উচ্চবেগে চলমান (oti uchchabeg-e choloman – “moving at very high velocity”), introducing the precise term বেগ (*beg*, velocity) instead of the generic জোরে (jore, fast). Thus, academic Bengali tends to avoid colloquial or Perso-Arabic words that may carry broader or fuzzy meanings, and opts for *monosemous technical terms*.

Furthermore, academic writing usually avoids code-switching or mixing English, whereas in casual settings Bengali speakers might drop English technical terms mid-sentence. By sticking to one code, the academic register maintains internal consistency and a formal tone. An interesting sociolinguistic outcome is that many highly Sanskritized academic terms are not understood by all Bengali speakers if they encounter them out of context, because daily life might use a different term. For instance, a doctor’s report might use নিশ্চেতনীকরণ (*nishchetoneekoron*) for “anesthesia” (a Sanskrit-derived coinage), whereas an average person might only recognize the Anglicism অ্যানাস্থেসিয়া (anesthesia transliterated). In this way, academic Bengali can seem like a slightly different dialect of Bengali – one with tighter logic, specific jargon, and less flexibility than the colorful colloquial tongue.

In summary, the grammar and syntax of academic Bengali are characterized by completeness and formality: sentences are constructed to explicitly state the logical relationships (cause, effect, contrast, condition), often using participial phrases or compound constructions that mirror the structure of formal English or Sanskrit. The lexicon is carefully selected to ensure

each term has a clear, unambiguous referent. And stylistically, it maintains an objective, impersonal voice – much as scientific writing in any language does. These features collectively give scientific Bengali a *“tighter” logic and more formal feel* compared to everyday Bengali, which relies more on context, tone, and shared understanding.

Examples: Scientific vs. Colloquial Expressions in Bengali

To illustrate the differences between academic scientific Bengali and everyday Bengali, here are a few examples of concepts expressed in the two registers:

Concept / Object	Academic Bengali Term (formal/technical)	Colloquial Bengali Term (everyday speech)
Water	জল (*jal*, Sanskrit origin) – e.g. *জলীয় পদার্থ* (“joliyo podarth”, aqueous substance)	পানি (*pani*, Persian origin) – e.g. *পানি খাও* (“pani khao”, drink water)
Bathing	স্নান (*snan*, lit. bathing, Sanskrit) – *স্নান করা উচিত* (“snan kora uchit”, one should bathe)	গোসল (*gosol*, from Arabic *ghusl*) – *গোসল করবা* (“gosol korba”, will you bathe?)
Telephone	দূরভাষ (*durvash*, lit. “far-speech”) – *দূরভাষ যন্ত্র* refers to a telephone device in technical descriptions.	ফোন / টেলিফোন (*fon / telefon*) – Everyday Bengali simply uses the English-derived “phone”.
Oxygen (chemical element)	অম্লজান (*amljan*, lit. “acid-creator”) – the scientific Bengali name for O_2 in textbooks.	অক্সিজেন (*oksijen*) – The transliterated English name is commonly used in speech and even in many writings.
Teacher (general vs. formal)	শিক্ষক (*shikshak*, formal Sanskritic term for teacher) – used in reports, e.g. *শিক্ষক مجلس◌ে আলোচনা* (“shikshak samiti te alochona”, discussion in a teachers’ committee).	মাস্টার / স্যার (*master* or *sir*) – casual terms for teacher (the first from English “master”, second an honorific), used by students informally.
Speed/Velocity	বেগ (*beg*, precise term for velocity in physics) – *দ্রব্যের বেগ নির্ণয়* (“drabyer beg nirnoy”, measurement of an object’s velocity).	গতিও (*goti* or *jor*) – colloquial words for speed; *গাড়ির গতি খুব বেশি* (“garir gati khub beshi”, the car’s speed is very high).

(Table: A comparison of formal scientific Bengali vocabulary vs. everyday Bengali vocabulary for selected concepts.)

In the above examples, the academic term is often a tatsama or a coined phrase that is exact in meaning, whereas the everyday term might be a tadbhava (indigenous word), a Perso-Arabic loan, or a direct borrowing from English. For instance, *jal* vs *pani* for water shows how a Sanskrit-derived word is deemed more appropriate in formal or Hindu cultural contexts, while *pani* (Persian) is common in speech. Yet in scientific writing (regardless of the writer’s religion), one is likely to encounter *জল* (jal) in compound words like *জলবিদ্যুৎ* (*jal-bidyut*, hydroelectricity) because it forms a neat compound with another Sanskritic term. Similarly, *snan* vs *gosol* for bathing illustrates the diglossia: a chemistry textbook discussing *স্নান* (as in a

chemical bath or immersion) will never use *gosol*, which is considered too casual or tied to Islamic everyday registers. The case of telephone and oxygen demonstrates the push between newly coined Bengali words and established international terms: while *durvash* and *amljan* exist and are found in dictionaries, one would seldom hear them outside academic or highly formal contexts – most people find it more straightforward to say *telefon* or *oksijen*, even in classroom settings. Nonetheless, the very presence of Bengali alternatives points to an underlying *philosophy of linguistic self-reliance*: Bengali can generate its own scientific lexicon rather than relying wholly on imports.

Grammatically, one could also compare entire sentence structures. Consider expressing a scientific fact informally vs formally:

- Colloquial: *পৃথিবী সূর্যকে ঘিরে ঘোরে* – *Prithibi surjoke ghire ghore* ("The earth circles around the sun"). Short and correct, but using a simple verb *ঘোরা* (ghôra, to circle) and no explicit mention of orbit or time.
- Academic: *পৃথিবী সূর্যকে কেন্দ্র করে প্রতি বছরে একবার পরিক্রমণ সম্পন্ন করে* – *Prithibi Surjoke kendro kore proti bochore ekbar parikramon sompanno kore* ("The Earth, centering the Sun, completes a revolution once every year"). The academic version introduces *কেন্দ্র করে* ("centering on") and *পরিক্রমণ সম্পন্ন করে* ("completes a revolution"), which are formal phrases precisely describing orbital motion, and it quantifies the frequency. The sentence is longer, but each element of the idea is accounted for in a logically structured way.

Through such comparisons, it becomes clear that academic Bengali is more explicit and technical, whereas everyday Bengali is implicit and idiomatic. The scientific register uses the full resources of the language – long compound words, classical synonyms, and carefully ordered syntax – to eliminate ambiguity. In doing so, it sometimes sacrifices the brevity or emotional expressiveness of colloquial speech, but this trade-off is deliberate, aiming for unambiguous communication of facts and reasoning.

Conclusion

From the 19th-century renaissance in Bengal to the post-independence era of language planning, the Bengali language has developed a rich and formal scientific vocabulary that stands apart from everyday spoken Bengali. This development was driven by visionary educators like Vidyasagar and Akshay Datta who proved Bengali's capacity for intellectual discourse, and by scientists and writers like Jagadish Bose and Ramendra Sundar Tribedi who expanded the language's horizons to include modern science. Institutions such as the Bangla Academy in Bangladesh and Paschimbanga Bangla Akademi in West Bengal have since carried the torch, systematically crafting and curating terminology for new scientific advances. The process involved heavy Sanskritization – leveraging the logical structure of Sanskrit to coin precise terms – as well as judicious adoption of international words through transliteration. The result is an academic register that employs a *tighter logic*, with grammatically complete sentences, standardized technical terms, and a measured tone that enhances clarity and formality.

This scientific register of Bengali demonstrates how a language can evolve to meet new communicative needs. It showcases the inherent flexibility of Bengali – a language once deemed fit only for "regional" communication – to serve as a medium for advanced knowledge, without losing its unique character. Moreover, the contrast between academic and colloquial

Bengali highlights a form of *internal diglossia*: the same Bengali speaker switches to a more formal, rational mode of expression when writing a research paper or a textbook, as opposed to chatting with friends. In the classroom or on the pages of a science text, Bengali becomes almost a different language – one with echoes of Sanskrit precision and the influence of global science – yet it remains intelligible and rooted in Bengali syntax.

Ultimately, the development of academic scientific Bengali is a testament to conscious language engineering guided by cultural pride and practical necessity. It underscores that Bengali, through historical effort, has achieved a level of precision and systematic clarity in its academic form that enables it to stand shoulder to shoulder with languages of long scientific pedigree. As Bengali continues to absorb new ideas (from computing terms to space-age vocabulary), this tightly reasoned, formal sub-language will no doubt continue to grow, further narrowing the gap between the language of the laboratory and the language of the bazaar – all while maintaining the distinct logical rigor that has been so carefully cultivated over the past two centuries.

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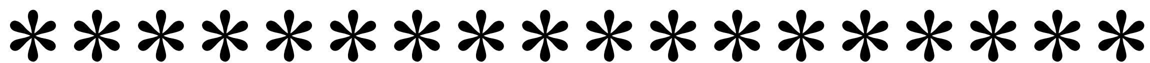

Marathi people

The historical course of the development of the Marathi language from the beginning to the early 1900s

History of the Marathi Language (Origins to Early 20th Century)

Origins and Indo-Aryan Roots

Marathi is an Indo-Aryan language that evolved from ancient Sanskrit through intermediary stages of Prakrit and Apabhraṃśa. The closest ancestral form was Mahārāṣṭrī Prakrit, a vernacular spoken in the Deccan region during the Satavahana dynasty (1st c. BCE–3rd c. CE). Mahārāṣṭrī Prakrit attained a high literary status – for example, King Hāla's Gāthā Saptaśatī (c. 150 BCE) is a famous anthology in this Prakrit. By the early medieval period (c. 5th–10th centuries), these Middle Indo-Aryan dialects had further transformed into Apabhramsha languages, which served as a transition to new languages like Marathi. Maharashtri Apabhramsha, used in Jain literature, was especially important in Maharashtra and contributed many colloquial features and vocabulary that shaped early Marathi. During this evolution, the language's phonology and morphology underwent simplification: Sanskrit's complex consonant clusters and inflectional endings were reduced, and a system of postpositions began replacing old case suffixes. For instance, Old Indo-Aryan had eight cases, but by the Apabhramsha stage the case system had largely collapsed into analytic constructions (using words for of, to, with, etc.) – a trend continued in Marathi grammar. Many Sanskrit sounds persisted, but others merged or shifted (e.g. the three sibilants of Sanskrit merged into one s or h in Prakrit). Marathi also retained the Prakrit innovation of the retroflex lateral ḷ sound, not present in Sanskrit, and later absorbed new phonemes like फ़ (f) and ज़ (z) from Persian-Arabic influence. By around the 8th–10th centuries, a distinct Old Marathi language had emerged, carrying forward a basic Indo-Aryan structure but with its own innovations in sound and syntax.

Early Marathi and the Yadava Era (8th–14th Century)

The earliest known records of Marathi appear alongside Sanskrit and Kannada in inscriptions. A copper-plate inscription dated 739 CE (found in Satara, Maharashtra) contains lines in early Marathi. By the 11th–12th centuries, Marathi was sufficiently established to be used in royal

proclamations: e.g. a stone inscription from 1012 CE (Raigad district) and a copper-plate from 1086 CE (Dive, Pune) are written entirely in Marathi, indicating it had become a standard written language by the 1100s. The language at this stage, often called *Old Marathi* (1000–1300 CE), still showed many Apabhramsha-like traits but was intelligibly distinct from Sanskrit. A two-line Marathi inscription of 1118 CE at Śravaṇabeḷgoḷa (Karnataka) further attests to its geographic reach.

During the Seuna Yādava dynasty (12th–14th c., based in Devagiri/Daulatabad), Marathi flowered. In the last half-century of Yadava rule, Marathi replaced Sanskrit and Kannada as the dominant language of inscriptions and official use. The Yadava kings (for example, Hemāḍpant, a minister under King Mahādeva and Rāmachandra) are traditionally credited with encouraging Marathi; indeed, some scholars suggest the burst of literary activity in this era had Yadava patronage. (Legends even ascribe the creation of the Modi script to Hemāḍpant in the 13th century, an administrative cursive form of writing Marathi, discussed later.) Whether or not state funds were directly involved, it is clear that Marathi gained prestige under the Yadavas, becoming a medium to reach the general population. Marathi vocabulary of this period was heavily Tadbhava (derived from Prakrit) with many everyday words evolving from older forms, while learned Tatsama (direct Sanskrit loans) were also adopted to enrich philosophical expression. The core grammar still reflected its Prakrit lineage – e.g. noun-case endings were simplified and supplemented by postpositions like *-che* (of) or *-la* (to). Phonologically, final vowels were often dropped (Sanskrit *dharma* > Marathi *dharma*, pronounced without final "a"), and short vowels in unstressed syllables tended to become a schwa sound.

Crucially, the late 13th century saw the first flourishing of Marathi literature, driven by devotional (bhakti) movements. The earliest Marathi texts were often religious in nature, produced by saint-poets of the Mahanubhava and Varkari sects. One of the first known writers is Bhāskarabhaṭṭa Borikar, a Mahanubhava saint who composed Marathi hymns. In 1278 CE, the Mahanubhava disciple Mahīmbhaṭ (Mhaimbhat) wrote the *Līḷācaritra* ("Leela Charitra"), a biography of his guru Chakradhar Swami, which is the first known prose work in Marathi. Mahīmbhaṭ's chronicle, written in simple narrative style, documents the spoken Marathi of common people in the 1200s. Around the same time, the Varkari saint Dnyāneśwar (Jñāneshwar) (1275–1296) composed his landmark works. At age 16, he wrote Dnyāneshwarī (1290), a 9,000-verse Marathi commentary on the Bhagavad Gita (also called *Bhāvārtha Dīpikā*). In this masterpiece and in his philosophical verses (*Amṛtanubhava*), Dnyāneśwar blended high metaphysical ideas with vernacular language, making complex Vedantic concepts accessible in Marathi. He is considered the first major literary figure in Marathi, with a wide readership and lasting influence. Dnyāneśwar's contemporary, Sant Nāmdev (c.1270–1350), was another pioneer: he composed numerous abhangas (devotional hymns) in Marathi in praise of Vitthala (Vishnu). Nāmdev's songs were so popular that some even traveled north and were included (in translation) in the Sikh *Guru Granth Sahib*. These saint-poets chose Marathi over Sanskrit for their compositions, reflecting a *bhakti* ethos of speaking to the masses in their mother tongue. Their language was musical and rich in native idioms, but also introduced scholarly Sanskrit words (for religious terms) where needed, thus expanding Marathi's expressive range. Another notable early author is Mukundarāja, who wrote treatises on Advaita philosophy (*Vivekasindhu* and *Paramāmṛta*). Some historians once dated Mukundarāja to 1188 CE (making *Vivekasindhu* the first Marathi book), but linguistic analysis now places him in the 14th century, slightly after Dnyāneśwar. In summary, by the end of the Yadava period (~1350), Marathi had proven itself as a literary language, with a growing corpus of poetry and prose, a broadly Sanskrit-Prakrit derived lexicon, and a nascent written standard based on the speech of Maharashtra's heartland.

Medieval Marathi under Islamic Sultanates (14th–16th Century)

The defeat of the Yadavas (c.1318) brought the Delhi Sultanate and its Deccan offshoots to power in Maharashtra. Under the Bahmani Sultanate (1347–1527) and the breakaway Deccan Sultanates like Ahmadnagar and Bijapur (15th–17th c.), Marathi continued to be used by the local populace and Hindu nobility, but early in this era the volume of Marathi literature dipped. Persian and Arabic became the prestige languages of administration and high culture under Muslim rule, which introduced a new layer of vocabulary to Marathi. Words related to government, trade, and urban life were borrowed in this period – for example, bāg (garden), shahar (city), bāzār (market), dukān (shop), kāghaz (paper), jamīn (land), hukūmat (authority) and many more entered Marathi from Persian/Arabic. These loanwords enriched Marathi's lexicon and were often nativized to Marathi phonology (e.g. Persian *kārkhāna* > Marathi *kārkhānā* for "factory/warehouse"). Importantly, the Sultanate rulers did not actively suppress Marathi; on the contrary, pragmatic use of Marathi in administration occurred at local levels. Since revenue officials and most subjects were Marathi-speaking Hindus, the sultans allowed and even promoted Marathi for land records and official documents to ensure effective governance. For instance, during the Ahmadnagar Nizam Shahi and Bijapur Adil Shahi regimes, many farmans and sanads (edicts) were recorded in Marathi (written in Modi script), alongside the Persian chancery language. Thus, Marathi remained visible in the public sphere, though often confined to subordinate roles under Persian supremacy.

Amid these sociopolitical shifts, religion and the bhakti movement continued to sustain Marathi literature. The Warkari tradition initiated by Dnyaneshwar and Namdev was kept alive by later saint-poets. A notable figure is Sant Eknāth (1533–1599), who emerged during the Ahmednagar Sultanate era. Eknath is regarded as the main successor to Dnyaneshwar. He retrieved and edited the forgotten manuscripts of the *Dnyāneshwarī*, reviving that seminal text for the community. Eknath himself composed many abhangas (devotional songs) and wrote narrative poems such as *Bhāvārth Rāmāyana* (a Marathi retelling of the Ramayana) and *Eknāthī Bhāgwat*, a popular commentary on the Bhagavata Purana. His writings exemplify how Sanskrit epics and Purāṇic stories were localized into Marathi verse. Another poet of this time, Dāsopant, contributed devotional lyrics, though on a smaller scale. By the late 16th century, we also see early attempts at Marathi translation of Sanskrit epics: Eknath's grandson Mukteshwar (1574–1645) translated the Mahabharata into Marathi ovi meter, making the grand epic available to Marathi audiences.

Meanwhile, Christian missionaries in coastal India produced a remarkable literary work: in 1616, the Jesuit priest Thomas Stephens in Goa published the *Krista Pūrāna*. Written in an eclectic mix of Marathi and Konkani in an epic style, *Krista Purana* retells the story of Jesus Christ through the poetic form of a Purana. Stephens wrote it in Roman script (as it was intended for a Christianized local audience), making it one of the first instances of Marathi-Konkani literature printed with moveable type. Though a religious work, the *Krista Purana* also exemplified the adaptability of the Marathi tongue – it could convey Biblical narratives just as it did Hindu lore. By the end of the Sultanate period (late 1600s), Marathi had thus absorbed Persian influences in its vocabulary and stylistic flourishes, yet it retained a strong indigenous literary stream of bhakti poetry. The language's sound system had expanded slightly (accommodating Perso-Arabic sounds like *f*, *z*, *kh*), and its scripts included both Devanagari (used in many manuscripts and inscriptions) and the cursive Modī for informal writing. The stage was set for Marathi's next growth spurt under the Marathas.

The Maratha Empire and Early Modern Marathi (17th–18th Century)

The rise of the Maratha Empire in the 17th century marked a renaissance for Marathi language and literature. The Marathas, under Chhatrapati Shivaji Maharaj (reign 1674–1680) and later the Peshwa administrators, were native Marathi speakers who consciously elevated their mother tongue to a language of power. Under Shivaji's rule, Marathi became the official language of administration and warfare, displacing Persian in many domains. This required significant language standardization: Shivaji's court insisted on using Sanskrit-derived terminology for official posts, titles, and documents instead of the prevailing Persian terms. For example, Persian administrative words were replaced with Sanskritic equivalents compiled in lexicons like *Rājavyavahārkośa*. As a result, the Marathi of state bureaucracy became less Persianized and more "Sanscritized" during this period. Dozens of seals, letters, and land grants from Shivaji's reign are in Marathi, typically written in the Modī script, which was ideally suited for rapid writing on paper. Modī, a cursive offshoot of Devanagari, had been in use since at least the 14th century for business and government records. Tradition holds that Shivaji's secretary Balaji Avaji perfected the Modī script for official use. In practice, throughout the 17th–18th centuries, Marathi co-existed in two scripts: Modī for routine handwritten correspondence and accounting (thanks to its speed and shorthand features), and Balbodh (a clear Devanagari style) for formal texts like treaties, religious literature, or where clarity was paramount. This diagraphia served the needs of both government and literature: for instance, it's noted that before printing, most prose was penned in Modī, while poetry was copied in Balbodh Devanagari for its elegant, easy-to-read form.

The first verse of Dnyāneshwar's Dnyāneshwarī written in the cursive Modī script. Modī, as seen here, was a modified Nagari script used in Maharashtra for fast writing. It lacks the continuous headline of Devanagari and features simplified, "broken" letter forms, making it ideal for the Maratha administration's swift record-keeping.

In literature, the Maratha period saw both continuity and diversification of genres. The Varkari bhakti tradition reached its zenith with Sant Tukārām (1608–1650), often considered the greatest Marathi bhakti poet. Tukaram, a contemporary of Shivaji, composed hundreds of abhanga verses devoted to Lord Vitthala, full of spiritual depth and social morality. His poetry, in simple rustic Marathi, had immense influence on Maratha society and later reformers. Another important figure was Samarth Rāmdās (1608–1681), Shivaji's spiritual preceptor, who wrote Dāsbodh, a treatise in verse on ethics and politics, and Manāche Ślok ("Couplets Addressed to the Mind"), teaching self-control. These works by Tukaram and Ramdas gave Marathi literature a strong moral and devotional core that resonated with the common folk and nobility alike.

By the 18th century (particularly under the Peshwa rulers in Pune), Marathi literature expanded into historical and scholarly writing. A unique prose genre called Bakhars emerged – these were historical chronicles and biographical accounts of Maratha leaders and events. Dozens of bakhars (such as the *Sabhasad Bakhar* about Shivaji's reign) were written in Marathi, providing valuable historical narratives from the Maratha point of view. In poetry, a lineage of Brahmin scholar-poets flourished with works that often sought to retell Sanskrit epics in Marathi or explore literary aesthetics. For example, Vāmana Paṇḍit (Vaman Pandit) wrote *Yathārthadeepikā*, Raghunāth Paṇḍit composed *Naladamayanti Swayamvara* (a Mahabharata episode), and Shridhar (also a Paṇḍit) authored *Harivijay* and *Rām Vijay*. Perhaps the greatest

among these was Moropant (1729–1794), renowned for crafting nearly 100 epic ballads and a complete Marathi verse translation of the Mahābhārata. Moropant's work, written in an ornate classical style, earned him the title "Adyakavi" (first poet) of modern Marathi. Alongside, biographical literature on saints also grew – Mahīpati (1715–1790) compiled the lives of bhakti saints in Marathi (e.g. *Bhaktavijay*), preserving the spiritual hagiographies for posterity.

Marathi during the Maratha Empire thus developed a more standard literary dialect, centered around the speech of the Pune–Satara region (sometimes called Deshi Marathi). The language absorbed numerous administrative Sanskritisms due to state policy, yet retained Perso-Arabic words for many everyday concepts, yielding a rich bilingual vocabulary. Phonologically, by this time Marathi had essentially its modern sound system. Morphologically, the case-postposition system was fully in place (e.g. *-la* for dative, *-ni* for instrumental), and verbal conjugations had assumed forms still recognizable today (including the distinct future tense in *-il*, which developed from older periphrastic constructions). The Modī script reached maturity with several calligraphic styles in use, and literacy in Marathi (though limited to certain classes) increased via the spread of pothī (manuscript notebooks) culture. The late 18th century also saw Marathi crossing regional boundaries: Maratha incursions brought the language to North India and the south (Thanjavur in Tamil Nadu even had a Marathi-speaking community at the Maratha-ruled court of Tanjore, who produced their own literary works). By the end of Peshwa rule (1818), Marathi had proven its versatility – serving as the language of bhakti and folklore for villagers, of diplomacy and law for the state, and of poetry and science for scholars – setting the stage for its modernization under the British Raj.

Colonial Era and the 19th-Century Transformation (1818–1900)

Marathi entered the modern age during the British colonial period after 1818, undergoing significant standardization and expansion in usage. Following the British conquest of the Peshwa domains, colonial administrators and Christian missionaries took great interest in codifying Marathi for education and evangelism. In 1805, the Baptist missionary William Carey published the very first Marathi grammar book (based on the Sanskrit grammar model). Carey's *A Grammar of the Marathi Language* and later his Bible translations (New Testament 1811, Old Testament 1820) were milestones – they not only provided standardized grammatical rules but also fixed Marathi orthography in print. Initially, Carey printed Marathi in the Balbodh Devanagari script (since printing facilities for Modī did not exist in Serampore). By 1810, printing technology advanced to allow lithographed Modī script texts, and subsequent editions of Carey's grammar were actually printed in Modī. However, over the 19th century the practical difficulties of typesetting Modī led to a decisive shift: Balbodh Devanagari was adopted as the standard print script for Marathi by both missionaries and native publishers. The British authorities, through institutions like the Bombay Education Society and later the University of Bombay (est. 1857), promoted Devanagari for textbooks and literature. By the late 1800s, Balbodh Devanagari had firmly become the primary script for Marathi writing, and the use of Modī gradually receded to handwritten correspondence (eventually fading out in the early 20th century).

Parallel to script reform, the vocabulary and style of Marathi were standardized. In 1825, a Marathi translation of the Christian Gospels by the American Marathi Mission coined new words and influenced prose style, albeit in a heavily Sanskritized register jokingly called "Missionary Marathi". Recognizing the need for a comprehensive lexicon, the colonial

government commissioned Captain James Thomas Molesworth, with assistance from Marathi scholars, to compile a dictionary. The result was Molesworth's Marathi–English Dictionary (1831) – a massive work of over 40,000 entries that is still in print two centuries later. Molesworth's dictionary (and later editions by Candy and others) standardized spellings in Devanagari and effectively set the Pune Brahman dialect as the "standard Marathi". Notably, Brahmin scholars from Pune were consulted, and their Sanskrit-influenced colloquial speech was chosen as the basis for standard grammar and vocabulary. This meant that certain regional variants were smoothed out in print – for instance, the elite pronunciation and choice of words in Pune gained precedence over rustic variants from rural areas. By mid-19th century, Marathi had a relatively uniform printed form used in education, administration, and the emerging Marathi press.

The introduction of print culture revolutionized Marathi literature and public life. The first Marathi newspaper, "Darpan", was started in 1832 by Balshastri Jambhekar. This bilingual fortnightly (Marathi–English) ushered in journalism and a new prose style suitable for news, essays, and debate. Dozens of periodicals followed: *Prabhakar* (1841) by Govind V. Kunte, *Dnyānoday* (1842, a magazine by American missionaries), *Jnyān Prakāś* (1849) in Pune advocating social reform, and later papers like "Kesari" (1881) founded by Bal Gangadhar Tilak and G. G. Agarkar which used vigorous Marathi to demand political rights. This rise of journalism required Marathi to adapt to new topics – science, politics, satire – expanding its vocabulary with English loanwords (e.g. *railve* for railway) and neologisms. Print also enabled modern literary genres. The first Marathi stage play, "Seeta Swayamvar" (a musical drama on a mythological theme), was performed in 1843 by Vishnudas Bhave. This sparked a lively theatre movement: playwrights like Annasaheb Kirloskar (1843–1885) introduced *Sangīt Nāṭak* (musical drama) with social and romantic themes in the 1870s. By 1880s and 1890s, Marathi drama also took on political overtones – most famously K. P. Khadilkar's play *Kichaka-Vadh* (1910) which allegorized British oppression and was briefly banned. The stage and the press together made Marathi a language of public discourse, accessible to a broad urban audience.

Literature in the 19th century saw a shift from purely religious to secular and social themes. While saintly poetry persisted in folk oral tradition, educated Marathi writers began experimenting with new forms. The modern Marathi novel was born in this era: for example, Baba Padmanji's *Yamuna Paryatan* (1857) is considered the first Marathi social novel, dealing with a widow's plight and conversion – a clear departure from legend and bhakti tropes. In the 1880s–90s, novelists like Hari Narayan Apte wrote realistic fiction about middle-class life, and Narayan Tilak and others composed short stories, laying the groundwork for those genres. Essay writing and criticism also emerged, led by prose stylists like Vishnushastri Chiplunkar (1849–1882) who championed a vigorous Marathi style in his periodical *Nibandhamala*. Chiplunkar and contemporaries deliberately crafted Marathi prose to be expressive yet shorn of overly Sanskritized missionary language, thus modernizing the tonal range of Marathi. Poetry, too, entered a new phase: the late 19th century brought Western influence (especially British Romantic and Victorian poetry) into Marathi verse. Pioneering modern poets such as Keshavsut (Krishnaji K. Damle, 1866–1905) wrote free-verse poems on nature, patriotism, and personal sentiment, moving beyond the strictly devotional or didactic verse of earlier times. By 1900, Marathi poetry had become largely *lyrical and sentimental*, with figures like Keshavsut and his associates of the *Ravikiran Mandal* experimenting in form and meter. Thus, in the span of a century, Marathi literature broadened from temple courtyards to encompass novels, plays, newspapers, scholarly works, and children's literature, mirroring the intellectual awakening of Marathi society.

Cover page of Jotirao Phule's "Sarvajanik Satya Dharma Pustak" (1891), printed in Marathi using the Balbodh Devanagari script. By the late 19th century, print culture was thriving – Phule's works, written in straightforward Marathi prose, exemplify how the language became a vehicle for social reform and lower-caste voices during British rule.

The 19th-century colonial period also witnessed deliberate language reform and standardization efforts by both Britons and Indians. Besides Molesworth's dictionary, British linguist Sir George Grierson conducted the *Linguistic Survey of India (1894–1905)*, documenting Marathi dialects and confirming the dominance of the *Poona standard*. Marathi intellectuals established institutions like the *Marathi Granth Sangrahalaya* (Library) and advocated for Marathi education. Some, like Mahatma Jyotiba Phule (1827–1890), harnessed Marathi to challenge social inequalities – Phule's writings (including the above-mentioned *Sarvajanik Satya Dharma*, a critique of Brahmanical religion) introduced a new egalitarian vocabulary and style that made Marathi a tool for social commentary and activism. By the early 20th century, Marathi had effectively transitioned into a modern literary language with a standardized grammar and orthography, a burgeoning press, and a cadre of authors across genres. It was now accessible to the "general educated reader," not just pandits or saints, and was increasingly used in secular education and public administration.

In summary, from 1818 to 1900 Marathi underwent rapid modernization: the consolidation of Balbodh Devanagari as its script, the compilation of grammars and dictionaries, the growth of new literary forms, and the infusion of technical and global vocabulary (mostly via English). These developments, set against the backdrop of British colonialism and Indian social reform movements, firmly established Marathi's identity as not only the speech of a region but also a medium of modern thought, creativity, and identity for Maharashtrians.

Writing Systems: Modī and Balbodh Scripts

Marathi's writing systems have evolved alongside its history. The earliest Marathi inscriptions (8th–12th c.) were carved in Nāgari script, an early form of Devanagari. Over time, two main scripts came to be used: Modī and Balbodh. Modī (Mōḍī) is a cursive script historically used for Marathi handwriting. According to one theory, it was first introduced by Hemāḍpant (minister to the Yadavas) in the 13th century. Another tradition credits Shivaji's era (17th c.), when his secretary Bālājī Avajī standardized Modī for state correspondence. Either way, by the 1600s Modī had distinct styles for each period – Yadava-era Modī, Bahmani-era variations, the Shivaji-era Chitnisi style, and multiple Peshwa-era styles. Modī script is essentially a shorthand form of Devanagari: it drops the horizontal headline and uses simplified, looping characters to allow continuous writing without lifting the pen. This made it extremely efficient for scribes and accountants – one could write Marathi in Modī much faster than in angular Devanagari. Most official documents, letters, and financial records in the Maratha bureaucracy were in Modī, and even into the 19th century, knowledge of Modī was a valued skill for clerks. However, because of its cursive nature, Modī posed challenges for typesetting and printing.

Balbodh (Bāḷabodha) refers to the standard Devanagari script as adapted for Marathi. The term *balbodh*, meaning "understood by children," hints at its clarity – this script was taught in schools and used for printed books. Balbodh differs slightly from Hindi Devanagari: Marathi requires additional characters and marks (for the third gender neuter, for example, and special conjunct consonants) and often prefers distinct shapes for vowels and letters that more closely resemble old Nagari forms. For instance, the Devanagari "la" (ल) and "ṇa" (ण) in Marathi Balbodh have shapes somewhat akin to their Modī counterparts, reflecting a historic interplay

between the scripts. Up through the 18th century, Balbodh was mainly used in manuscripts of literature, religious texts, and inscriptions, whereas Modī was used in everyday writing. But with the advent of printing presses in the early 19th century, Balbodh Devanagari rapidly became the default for all published material. Typesetting Devanagari was mastered by mission presses (like the American Mission Press in Mumbai and Pune) earlier than any attempt to print Modī. By the 1840s, almost every Marathi newspaper, book, or pamphlet was printed in Balbodh. In 1867, the British colonial government in Bombay officially encouraged the transition to Devanagari for records, and after India's independence, Modī was formally discontinued in administration (finally in 1950). Today, Marathi is written in Balbodh Devanagari script exclusively, though there are ongoing efforts by linguists in Maharashtra to revive the art of reading the old Modī documents.

In summary, the Modī script represents the heritage of Marathi's administrative and handwritten past, while Balbodh Devanagari represents its modern, standardized face. Together they exemplify how script can shape a language's usage: Modī gave Marathi agility and reach in the pre-print era, and Balbodh provided the platform for its proliferation through print and education.

Regional Dialects and Diversity

Throughout its history, Marathi has been marked by dialectal diversity across regions and communities. The standard form (today often called Manojñī Marathi or "Standard Marathi") historically evolved from the speech in western Maharashtra (the Pune–Nashik–Satara region, often termed Desh). However, other varieties of Marathi have long existed:

- Varhadi Marathi: spoken in the Vidarbha (Berar) region of eastern Maharashtra, Varhadi is considered one of the two major dialects alongside standard Marathi. It is characterized by certain phonetic quirks – for example, the retroflex lateral ḷ common in standard Marathi often becomes a palatal y sound in Varhadi (so standard *pāḷi* "turn" might sound like *pāyi* in Varhadi). Such shifts give Varhadi a distinct accent. In the Maratha era, this region was somewhat peripheral, so standard literary Marathi only loosely influenced it. Varhadi had a rich oral folklore tradition, though it produced less written literature until the late 19th century. Grierson's 1905 survey noted Varhadi as a principal dialect, mutually intelligible with standard, save for its *sing-song intonation* and vocabulary differences.
- Konkani and Coastal Marathi: Along the western coast, especially in Goa and the Konkan region, people historically spoke Konkani, which is very closely related to Marathi (both descend from Maharashtri Prakrit). Linguistically, Marathi and Konkani form a dialect continuum, and indeed early British scholars often dubbed Konkani as merely a Marathi dialect. Sir G. A. Grierson went so far as to call Konkani "the only real dialect of Marathi", reflecting the view of his time. However, Konkani had developed its own identity under Portuguese influence in Goa (with many Portuguese loanwords and the use of Roman script by Christians). By the 20th century, Konkani gained recognition as a separate language, but older Marathi literature does show cross-fertilization. Notably, Thomas Stephens' *Krista Purana* (1616) blended Marathi and Konkani. Also, the Maharashtra–Goa border areas speak Maharashtrian Konkani, a Marathi dialect with some Konkani features.
- Southern Dialects (Deshi and Thanjavur Marathi): In the southern Maharashtrian districts and bordering Karnataka, one finds dialects influenced by Kannada and Telugu. Centuries of contact led to borrowing of Dravidian syntax and words. A unique offshoot

was Thanjavur Marathi, spoken by the descendants of Maratha rulers in Tanjore (Tamil Nadu) from the 17th–19th centuries. Isolated in South India, they preserved an archaic form of Marathi peppered with Tamil loans. Their dialect sustained a small literary tradition (songs, family chronicles) even as it diverged from Maharashtra's Marathi.

- Ahirani (Khandeshi): In the northwest (Khandesh region), Ahirani or Khandeshi Marathi is spoken. It has more influence from neighboring Gujarati and Hindi. For instance, Ahirani retains many old Marathi words that died out elsewhere, and its phonology is noted for a drawl. British lexicographers compiled separate lists for Khandeshi, acknowledging it as a Marathi dialect with a heavy admixture of Hindustani words. Similar minor dialects include Dangi (in dangs forest area) and Malvani (in southern Konkan), each with their local flavor.

Despite these variations, the 19th-century standardization process deliberately minimized dialect differences in print. The selection of the Pune dialect as normative meant that regional forms were often regarded as substandard or purely oral. Schools taught the standard; thus, an educated Varhadi speaker would write in Standard Marathi, even if speaking Varhadi at home. This trend intensified unity but also overshadowed dialect literature. Nevertheless, dialects thrived in folk culture – powādā ballads of the Lavani singers in Khandesh, ovī folk songs of rural women, etc., all carried dialectal imprints through the ages.

By the early 1900s, Marathi's dialects were well documented thanks to surveys like Grierson's. He classified Marathi proper and what he called "Marath dialects" including Konkani, and noted sub-dialects (Warhadi, Samavedi, etc.). This scholarly interest helped later linguists appreciate Marathi's internal diversity. Importantly, many dialect differences are at the level of pronunciation and lexicon, not fundamental grammar – a testament to the strong unifying influence of the literary language since medieval times.

In conclusion, from its Sanskrit-Prakrit origins to the dawn of the 20th century, Marathi's journey is one of continuous evolution and adaptation. It grew from a regional Prakrit to a literary medium under saints and sultans, gained polish and pride under the Marathas, and transformed into a modern vehicle of education, reform, and cultural identity under colonial influence. Its phonology and morphology simplified from Old Indo-Aryan complexity into the more analytic, lilting form we recognize today. Its scripts transitioned from ancient Brāhmī-derived letters to a dual system (Modī and Balbodh) and finally to a single, standardized Devanagari. Its vocabulary became a tapestry – woven of indigenous Marathi threads with rich interwoven strands of Sanskrit, Perso-Arabic, and English – enabling expression of both rustic emotions and scientific ideas. Marathi literature, meanwhile, broadened from the mystic poetry of Dnyāneshwar and Tukārām to the social dramas of Phule and Tilak, reflecting every sociopolitical wave: the devotional Bhakti movement, the martial rise of the Maratha swarāj (self-rule), the churn of colonial modernity, and the early stirrings of nationalism. All these influences made Marathi a linguistically robust and culturally vibrant language by the early 1900s. It stood on the threshold of the 20th century with a confident standard form, a growing readership, and a proud literary heritage – ready to play its part in both the regional renaissance of Maharashtra and the broader Indian independence and cultural movements that lay ahead.

Sources: Historical and linguistic information has been synthesized from epigraphic records and scholarly works on Marathi evolution, studies of Marathi's linguistic lineage, and documentation on script development. Key literary milestones and figures are referenced from Marathi literary histories and academic analyses of the Bhakti literature and colonial-era print culture. This account contextualizes Marathi's linguistic changes and literary growth alongside

major dynastic and social changes – from Yadava patronage and Sultanate influences to Maratha state-building and British colonial reforms – to provide a comprehensive historical overview.

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The historical development of the Marathi writing system from its beginnings to the early 1900s

Early Inscriptions and Origins (8th–12th Centuries)

Marathi as a written language has deep roots dating back over a millennium. The earliest known evidence of written Marathi is a 739 CE copper-plate inscription from Satara (western Maharashtra). In the following centuries, Marathi began appearing in inscriptions alongside classical languages – for example, several 11th-century stone and copperplate inscriptions include Marathi sections appended to Sanskrit or Kannada texts. Notably, under the Shilahara dynasty, we find the first purely Marathi inscriptions, such as a c.1012 CE stone inscription (Raigad district) and a 1060 CE copper-plate land grant in Marathi. These records indicate that by the 12th century Marathi had become an established written medium. Early Marathi inscriptions were written in scripts derived from Brahmi. For instance, an inscription at Naneghat from about the 1st century BCE (often cited as an ancestral Maharashtri Prakrit record) was incised in the Brahmi script. By the medieval period, Marathi was generally written in an early form of the Nagari script (the progenitor of Devanagari), which was common for Sanskrit and regional languages at the time. In fact, epigraphic evidence shows Marathi becoming a standard written language by the 1100s, using the Nagari character forms then in vogue (sometimes called *Kadamba* or early *Devanagari* styles). This set the stage for a rich literary and bureaucratic tradition in the Marathi language.

Emergence of Marathi Literature and the Modi Script (13th–16th Centuries)

By the late 13th century, Marathi literature truly emerged, primarily through religious and philosophical writings. The Yadava dynasty (Seuna rulers of Devagiri) patronized Marathi as a language to connect with the general public. During this era, saint-poets of the Mahanubhava and Warkari devotional movements – figures like Dnyaneshwar (1275–1296) and Namdev (c.1270–1350) – composed influential works in Marathi. These early literary works, such as Dnyaneshwar's Bhāvārtha Deepikā (popularly *Dnyaneshwari*, a 1290s commentary on the Gita), were written down in the Nagari/Devanagari script, since that script was traditionally used for scholarly and religious texts. In parallel, however, a distinctive cursive script known as Modi (Mōḍī) was developing for more pragmatic writing needs. According to local tradition,

a minister named Hemāḍpant (Hemadri Pandit) in the Yadava court (late 13th century) either invented or formalized the Modi script for official use. One sub-theory holds that Hemadpant introduced Modi by refining pre-existing cursive Nagari characters into a faster script. Indeed, the name "Modi" itself is thought to derive from *moḍaṇe* ("to break"), referring to its broken, bent letterforms adapted from Devanagari. By this period, Marathi documents exhibit two parallel scripts: traditional Devanagari (also called *Nāgari*) for formal, literary and religious writing, and Modi for quicker, administrative writing.

Over the 14th–16th centuries, the Modi script became increasingly entrenched in the region's administrative culture. Different styles of Modi evolved over time, often named for the ruling eras. For example, scholars identify a Yadava-era Modi style in the 13th century and a Bahmani-era style during the 14th–16th centuries under the Bahmani Sultanate. During the Deccan sultanates period, Marathi continued to be used in local administration despite Muslim rule. To streamline revenue collection and local governance, the Bahmani and later sultans encouraged Marathi for record-keeping (albeit heavily Persianized in vocabulary). The Ahmadnagar and Bijapur Sultanates both used Marathi (written likely in Modi script) for official documents and land records, alongside Persian. Surviving Marathi deeds and land grants from the 14th–16th centuries are often penned in cursive Modi. Notably, the oldest extant Modi document dates to 1389 CE, indicating that by the late medieval era Modi was well-established. Thus, on the eve of Maratha rule, Marathi had a dual-writing system: Devanagari for scholarly, religious, and poetic works, and Modi for routine correspondence, accounting, and administration. This duality would shape Marathi's development in the centuries to come.

Maratha Empire: Flourishing of Modi and Nagari (17th–18th Centuries)

The rise of the Maratha Empire in the 17th century under Chhatrapati Shivaji (r. 1642–1680) gave a strong impetus to the Marathi language and its scripts. Shivaji deliberately replaced Persian with Marathi in his court and administration, elevating Marathi to the language of state business. Consequently, the Modi script came into wide official use for state correspondence, revenue records, and military orders. Shivaji's government even took steps to purge excessive Persian words from administrative Marathi; in 1677 his court produced the *Rājavyavahārakośa* (a lexicon of administrative terminology) to substitute Perso-Arabic terms with Sanskrit-Marathi equivalents. Under Shivaji and his successors, Marathi documents became less Persianized in diction and more Sanskritized, but they continued to be written in the Modi script for convenience. In fact, many historical chronicles of the Maratha era (known as Bakhars) and official letters from the 17th–18th centuries survive in Modi manuscripts.

A Maratha-era letter written in the Modi script (c.1680s). Modi's cursive form allowed swift writing, making it ideal for war communications, business ledgers, and court records.

Modi proved especially useful for the Marathas' fast-paced governance and warfare. Its cursive, connected letters enabled scribes to write continuously without lifting the pen often. Scribes would draw a horizontal guiding line and then write the Modi characters with minimal breaks, allowing rapid copying of multiple document copies. This made it practical to issue many orders and record transactions quickly in an era of hand-written bureaucracy. Modi became the standard for administrative paperwork, revenue accounts, and even secret communications among Maratha commanders. For instance, armies and provincial officers corresponded in Modi, and the script's relative obscurity provided a layer of security since not everyone could

read it. The Maratha state archives (like the famed Peshwa Daftar records in Pune) contain lakhs of Modi-script documents ranging from tax ledgers to diplomatic letters. Historians note that virtually *all* Peshwa-era administration (18th century) was conducted in the Modi script. One estimate is that crores of pages of Modi documents are preserved in Maharashtra's archives, attesting to its ubiquity.

Importantly, even as Modi dominated official and everyday writing, Devanagari continued in parallel for other domains. Devanagari (in a locally adapted form later called Balbodh) was used in Marathi manuscripts of literature, particularly poetry and religious works. A common convention was to employ Modi for prose (letters, narratives, business) and Devanagari for verse. This likely owes to Devanagari's long association with sacred texts and its clearer segmentation of syllables, which suited poetic meter. For example, the verses of Marathi bhakti saints and translations of Sanskrit epics into Marathi were often copied in Devanagari script by scribes. An 18th-century observer would thus see Marathi written in two scripts: a flowing cursive hand for administration and daily use, and a more formal Nagari script for scripture, literature, and inscriptions. In temples and on monuments, Marathi was engraved in Nagari characters (one famous example is a lengthy Marathi inscription from the Maratha period on the walls of the Brihadisvara Temple in Thanjavur). The coexistence of scripts was a unique feature of Marathi's writing system by 1800: Modi script had the prestige of statecraft and commerce, while Devanagari had the prestige of religion and high literature.

Impact of British Rule and the Advent of Print (19th Century)

With the British colonial era (early 19th century onward), the Marathi writing system underwent significant standardization and eventually a decisive script shift. The introduction of printing technology was a catalyst for change. Early British missionaries and scholars working in Marathi faced a choice: whether to print books in Modi or Devanagari. William Carey, a Baptist missionary, published the first Marathi grammar in 1805 and faced this very dilemma. Because no Modi typefaces or movable type were available to him at the Serampore Mission Press in Bengal, Carey printed his 1805 *A Grammar of the Mahratta Language* using the Devanagari (Balbodh) script. At that time, printing in Modi was technically difficult or "not available" in Serampore. However, as printing technology advanced (including lithography and later offset printing), attempts were made to print in Modi as well. In fact, subsequent editions of Carey's grammar after 1810 were printed in the Modi script once the means were found. Nonetheless, Devanagari quickly became the default for printed Marathi, partly due to practical considerations. Movable metal type for Devanagari had been developed (for printing Sanskrit and Hindi), and although complex, it was serviceable. Modi's cursive nature posed challenges for typecasting and typesetting, as its characters often connect or change shape contextually. Printers found Devanagari type more legible for readers and easier to reuse across publications. Thus, in the early 1800s, most published works in Marathi – especially those by missionaries and colonial institutions – favored the Devanagari script.

The British influence also brought a push for standardization in Marathi. Pioneering linguists like Carey and later Sir James Thomas Molesworth worked to codify Marathi grammar, vocabulary, and orthography. Carey's team produced some of the first Marathi printed books, including translations of the Bible – notably the New Testament published in Marathi in 1811 by the Serampore Press. These early printed works all used Devanagari characters. Molesworth, an army officer and lexicographer, compiled a comprehensive Marathi–English dictionary (first edition 1831) which became hugely influential. In doing so, Molesworth consulted learned Brahmins in Pune and deliberately adopted the prestigious Brahmanical dialect of Pune (with

heavy Sanskrit influence) as the standard written Marathi. This also meant using the Sanskritized Devanagari spellings for many words. By mid-19th century, a standardized form of written Marathi in the Balbodh Devanagari script was taking shape: it included specific Marathi characters like ळ (la) and the eyelash 'reph' (a special form of "r" in consonant clusters) that distinguished it from Hindi or Sanskrit Devanagari. New symbols were even introduced to represent sounds from English or non-Sanskritic words (such as अॅ for a short "ae" vowel, and ऑ for the "aw" sound). These additions in the Balbodh style show how printing and foreign influence prompted modifications to Marathi orthography in Devanagari.

Meanwhile, Marathi intellectual life flourished under colonial rule, and almost all of it appeared in Devanagari print. The first Marathi newspaper, *Darpan* (1832, by Balshastri Jambhekar), and the first Marathi periodicals of the 1840s were printed in Devanagari type. Later 19th-century publications – social reform tracts, scholarly essays, and the earliest novels and plays – likewise used Devanagari, which had now become the public-facing script of Marathi. Marathi theater scripts (Sangeet Nataks), poetry collections, and magazines were published in Devanagari throughout the late 1800s. In education too, the colonial schools taught Marathi reading and writing using the Balbodh (Devanagari) script. Thus, a whole generation was growing up literate in Devanagari Marathi by the late 19th century.

All the while, the Modi script persisted behind the scenes, especially in government offices and traditional contexts. British administration in the Bombay Presidency initially continued using Modi for Marathi record-keeping because many local clerks were adept in it. Land revenue registers, court receipts, and official correspondence in the Marathi-speaking regions were often kept in Modi well into the 19th century. Business families and accountants also kept their ledgers and diaries in Modi, which they could write swiftly by hand. However, as printed forms, reports, and standardized ledgers proliferated, the role of Modi gradually shrank. Toward the end of the 1800s, debates emerged about whether to abolish the Modi script in favor of a single script (Devanagari) for Marathi. Pragmatic arguments were put forward: Devanagari was more legible in print and could be shared across languages (Marathi, Hindi, Sanskrit), whereas Modi was not used by other communities. There were also social arguments: some British officials and Indian reformers felt that using Devanagari would "empower" the general literate public (since Devanagari was taught in schools), whereas Modi was a specialized skill of traditional scribes. By 1880s–1890s, sentiment was building that Marathi should be rendered in one uniform script, namely Devanagari, especially as Marathi readers and writers were now accustomed to it from books and newspapers.

Transition from Modi to Devanagari (Early 20th Century)

In the early 1900s, the long coexistence of Modi and Devanagari in Marathi finally tilted decisively toward Devanagari. The British colonial administration took concrete steps to phase out Modi from official use. Notably, in 1912 the government initiated a program to replace Modi script with Devanagari in official records. District officers like C.A. Kincaid, the Collector of Pune, convened meetings around 1920 to promote the switch – at one such meeting in 1920, it was resolved that Devanagari would henceforth be given primacy for Marathi record-keeping, which led Modi to gradually drop out of bureaucratic use. The rationale included administrative convenience: it was easier for officials (including non-Marathi or British supervisors) if Marathi documents used the same script as Hindi, and printed forms could be produced in one script. By the 1920s, many official documents and court papers that once would have been handwritten in Modi were being typewritten or printed in Devanagari.

It's important to note that Modi did not vanish overnight. Through the early 1900s, there was a period of overlap and bilingual records. In fact, even in the first decade or two of the 20th century, one finds documents – especially legal deeds, land contracts, and administrative correspondence – written in Modi alongside English translations or annotations. Many older officials and Munshis (clerks) continued to use Modi for drafts and notes. But new generations of clerks were no longer being thoroughly trained in Modi. The last cohorts to learn Modi script in school were those educated before Independence; the script was officially taught in some Marathi primary schools up until the early 1950s before being completely discontinued. The Indian independence movement also played a role in script preference. Nationalist leaders and educators tended to favor Devanagari because it connected Marathi to the broader Indian linguistic landscape (especially to Hindi and Sanskrit). After 1900, using Devanagari for Marathi aligned with the idea of a unified Indic identity, whereas Modi was seen by some as an esoteric or region-specific practice. The British, for their part, were not averse to this change – by the twentieth century, official sanction was firmly behind Devanagari. As one scholar summarizes, *in just 150 years Balbodh Devanagari emerged as the sole script for Marathi*. By the end of the 19th century, the stated reasons for abandoning Modi were the superior legibility and efficiency of Devanagari in print, as well as the desire to make Marathi accessible to the broader literate class. In the early 20th century, additional political factors sealed Modi's fate: colonial authorities wary of distinct regional scripts, and later the independent Indian government's fear of regionalism, both favored a common script (Devanagari) that Marathi could share with Hindi and the classical Sanskrit tradition.

By the early decades of the 1900s, Marathi had effectively completed its transition to the Devanagari writing system. Marathi newspapers, books, education, and eventually all official documents were in the Devanagari script (Balbodh style). The Modi script, after roughly 700 years of distinguished service, receded into obsolescence, preserved only in archives and memory. The change was gradual but inexorable – many Marathi people of the mid-20th century could still read some Modi (and a handful continued using it in personal notes), but the script was no longer standard. Orthography too became more uniform: with Devanagari dominance came more Sanskritic spellings and standardized punctuation in Marathi, as promoted by institutions and grammarians. Printing, and later typing, enforced consistent letterforms, whereas Modi had allowed more free-form abbreviation and ligature. For example, Modi's habit of omitting certain vowels or merging characters in a shorthanded way gave way to fully written-out syllables in Devanagari. The Balbodh orthography codified in the 19th century remained the basis for modern written Marathi, with only minor adjustments through the 20th century.

Conclusion

From its earliest appearance on stone and copper in the 8th century to the bustling print shops of the 19th century, the Marathi writing system underwent a remarkable evolution. Initially written in ancient Brahmi-derived scripts, Marathi matured under the influence of Sanskritic Nagari writing. The medieval invention (or adaptation) of the Modi script around the 13th century added a new dimension – a swift cursive script tailored to the administrative and daily needs of Marathi speakers. For centuries thereafter, Marathi effectively utilized two complementary scripts: Devanagari for religious, scholarly, and literary purposes, and Modi for governance, commerce, and routine correspondence. This dual-script tradition was shaped by socio-political forces: the Maratha empire cemented Modi's role in statecraft while continuing to venerate Nagari for cultural and spiritual works. The advent of the British Raj, however, brought new forces to bear – printing technology, colonial educational policies, and modernist

impulses – which collectively favored a single standardized script. By the early 1900s, under both colonial and rising nationalist pressures, the Marathi language converged onto the Devanagari (Balbodh) script as its sole writing system. This transition from manuscript to modern print culture not only simplified administration but also linked Marathi's written identity to that of India's other Devanagari-using languages. The early 20th-century reforms, culminating in the official discontinuation of Modi, thus mark the end of an era. Marathi entered the 1900s with a now unified script, even as the rich legacy of the Modi script survives in archives and has become an object of renewed interest for historians and linguists today.

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Historical Development of Academic Scientific Vocabulary in Marathi

Introduction

Marathi, an Indo-Aryan language of western India, has developed a rich academic and scientific lexicon through several historical phases. From its early reliance on Sanskrit scholarly tradition to colonial-era reforms and post-independence standardization, Marathi's scientific vocabulary reflects conscious language planning. This report traces the major phases in that development, examines how scientific terms are coined (Sanskrit-based calques vs. English borrowings), and highlights characteristics of formal scientific Marathi. Examples from disciplines such as physics, biology, logic, and philosophy are included to illustrate these trends, with a structured overview of key terms and their evolution.

Pre-colonial Roots and Sanskrit Influence

In the pre-colonial era, Marathi was not a primary medium for scientific literature; knowledge of fields like astronomy, medicine, and logic was conveyed mostly in Sanskrit or sometimes Persian. Sanskrit was the prestige language of learning in India for centuries, and it provided Marathi with much of its learned vocabulary. Early Marathi literature was largely religious or philosophical, but there is evidence of technical subjects being addressed in Marathi by the late Middle Ages. For example, during the Yadava period (13th century), writings appeared on astrology and medicine in Marathi; Shripati's *Jyotisharatnamala* (1039 CE) is noted as a work on astrology from that era. These works often imported Sanskrit terms directly or used Marathi words in a Sanskritised style, indicating that Sanskrit's precision and terminology heavily influenced any nascent scientific lexicon in Marathi.

By the 17th century, under the Maratha rule of Chhatrapati Shivaji, there was a deliberate push to expand Marathi's formal vocabulary using Sanskrit. Marathi became the language of administration, replacing Persian in court and official records. In 1677 Shivaji's officer Balaji Avaji compiled the *Rājavyavahārakośa*, a lexicon to replace Persian/Arabic administrative terms with Sanskrit-derived Marathi equivalents. This shows an early systematic approach to terminology development: even though it was focused on administration, the methodology of borrowing from Sanskrit for precision set a pattern. Sanskrit was seen as a source of "correct" and exact terms, whether for governance or eventually for science. This pre-colonial Sanskritisation of formal Marathi laid the groundwork by enriching Marathi's lexicon with tatsama words (direct Sanskrit loans), giving it a "ready-made" reservoir of technical terms.

Colonial Period: English Education and Terminology Challenges

The advent of British colonial rule (early 19th century) brought Western science and education to India, primarily through English-medium instruction. Marathi, like other regional languages, faced the challenge of expressing new scientific concepts. Initially, English terms often had to be used as-is or explained via Sanskrit equivalents. British missionaries and scholars took steps to standardize Marathi, which indirectly affected scientific vocabulary. Notably, William Carey published a Marathi grammar and Bible translations in the early 1800s, and the first Marathi-English dictionaries were compiled by Capt. James T. Molesworth and Major Thomas Candy in 1831. These colonial lexicographers worked with local Brahmin scholars in Pune and deliberately adopted the "Sanskrit-dominated dialect" of the Marathi elite as the standard. In other words, the standardized Marathi of the 19th century was imbued with Sanskrit vocabulary and strict grammar, making it well-suited to coin technical terms. This linguistic standardization was foundational – it meant that when new scientific words were needed, Marathi could draw from Sanskrit roots following established norms.

Western science exposure led to the publication of science content in Marathi periodicals by late 19th century. For instance, the magazine *Karmanuq* (1890, by Hari Narayan Apte) carried articles on science for general readers. Perhaps the most notable pioneer was Balaji Prabhakar Modak, a teacher and writer in Kolhapur. In the late 1800s, Modak produced *Marathi* books on physics, chemistry, agriculture, zoology and more – 26 scientific books in Marathi by one account. He translated and explained scientific concepts in simple Marathi, often coining terminology that blended Sanskrit roots with accessible style. Contemporary scholars praised Modak's work for making science intelligible; for example, he introduced real-life examples and illustrations in Marathi to explain new concepts. Modak's approach was somewhat unique for the time: while he respected Sanskrit precision, he also used words in regular Marathi usage

so that laypeople and students could grasp the meaning. This indicates that even in the colonial period, there were parallel strategies – one heavy on Sanskrit scholarly terms, and another preferring simpler or vernacular expressions for science.

However, English remained dominant in higher education (e.g. the University of Bombay, established 1857, taught in English). By 1900, a tension had developed: Hindi and Marathi language activists wanted to create scientific lexicons in their languages, leading to efforts like the Hindi Scientific Glossary of 1906 in North India. Those efforts predominantly relied on Sanskrit neologisms to render scientific authority. It's reasonable to assume that Marathi scholars borrowed similar strategies for terminology. Indeed, traditions of Marathi linguistics granted special status to tatsamas – loanwords from Sanskrit – expecting they be treated with Sanskrit grammar rules in Marathi writing. This practice "provides Marathi with a large corpus of Sanskrit words to cope with the demands of new technical words whenever needed". In summary, the colonial period set up the problem (an influx of foreign scientific concepts) and also provided tools to solve it (a standardized, Sanskritised Marathi ready to absorb new terms).

Post-Independence Language Planning and Standardization

After India's independence in 1947 – and especially after the formation of a Marathi-speaking state (Maharashtra) in 1960 – concerted efforts were made to develop and standardize Marathi scientific vocabulary. The goal was to make education and official communication available in Marathi, which required expanding the lexicon for all subjects. This period saw the creation of dedicated institutions and committees for language planning:

- Directorate of Language (Bhasha Sanchalanalay): Established in 1961 by the new state government, this body (along with a Language Advisory Committee) undertook the task of evolving Marathi terminology for administration, education, and technical fields. Between the 1960s and 1980s, the Directorate guided terminology development (known as *śabdāvaḷī*), bringing subject experts together to coin or approve terms for official use.
- Maharashtra Rajya Sahitya ani Sanskruti Mandal (State Board of Literature & Culture): Also active since the 1970s, this institution worked on compiling glossaries and dictionaries of technical terms. It often coordinated with the Language Directorate and scholarly experts to standardize terminology across textbooks and publications.
- Marathi Vishwakosh (Encyclopedia): In 1960, Maharashtra's first Chief Minister Yashwantrao Chavan launched the ambitious project of creating a Marathi encyclopedia (*Vishwakosh*) encompassing all branches of knowledge. He appointed the eminent scholar Lakshman Shastri Joshi as chairman of the Vishwakosh Mandal. Over the next few decades, the Maharashtra Rajya Marathi Vishwakosh Nirmiti Mandal produced 18–20 volumes of the Marathi Encyclopedia. This project was pivotal for scientific vocabulary – experts in physics, biology, mathematics, philosophy, etc., had to agree on standardized Marathi terms for thousands of concepts in order to write encyclopedia entries. The Vishwakosh thus formalized many translations (often Sanskrit-based) for scientific words and became a reference point for correct terminology in Marathi. *Example:* The Vishwakosh entry for oxygen uses the term "prāṇavāyū" (literally "life-air") as the Marathi name, reflecting the standardized usage at the time.
- Balbharati (Textbook Bureau): The Maharashtra State Bureau of Textbook Production & Curriculum Research, known as Balbharati, was established in 1967 to produce school textbooks in Marathi. Balbharati's committees worked to ensure that scientific terms in textbooks were standardized and age-appropriate. In the early decades, Balbharati, guided by the terminology from Vishwakosh and language committees, used

Marathi neologisms for scientific terms rather than English. For example, science textbooks of the 1960s used प्राणवायू (prāṇavāyū) for oxygen, नत्रवायू (natravāyū) for nitrogen, and कर्बद्वि प्राणिल वायू for carbon dioxide. These terms were pure Marathi/Sanskrit constructions that described the substance (e.g. "life air" for O_2, "nitrogenous air" for N_2, etc.), showing a strong preference for indigenous words over foreign ones. Institutions like Balbharati and the Sahitya-Sanskruti Mandal were instrumental in coining such terms and disseminating them through curricula.
- Marathi Vidnyan Parishad: Founded in 1966, this is a science popularization society that has also contributed to Marathi scientific vocabulary. It publishes a magazine (*Marathi Vidnyan Patrika*) and has organized translations of science literature. The Parishad's work, especially in the 1970s onward, helped in translating technical jargon into Marathi for the general public and even promoted Marathi in scientific research. It also famously encouraged science fiction in Marathi, necessitating creative term coinage for futuristic concepts.

Overall, the post-independence phase was characterized by deliberate language engineering. Whenever a new technical term was needed, committees would often create a Sanskrit-based Marathi equivalent rather than simply borrow the English. This aligns with the broader Indian trend of "Sanskritisation" – forming new words based on Sanskrit roots as calques for English terms. The underlying belief was that Sanskrit-derived words are more transparent and meaningful to Indian readers. Marathi's long tradition of absorbing tatsamas made this strategy relatively smooth. Additionally, having Marathi as the official language of the state (per the Maharashtra Official Languages Act 1964) created a demand for Marathi terminology in governance, law, science education, and beyond.

Example: The English term "television" was translated as दूरदर्शन (dūradarśan) – literally "seeing from afar" – following the Sanskrit etymological approach, and this word was adopted in Marathi (as well as Hindi) for official usage. Similarly, "university" became विद्यापीठ (vidyāpīṭh), "geometry" became भूमिति (bhūmiti), and "dictionary" became शब्दकोश (śabdakoś), all leveraging Sanskrit compounds. Influential scholars like L.S. Joshi (for the Vishwakosh) and many academics on textbook committees were behind these coinages. By the 1970s, Marathi had an expansive scientific vocabulary largely comprehensible to those familiar with Sanskrit roots.

Globalization and the Digital Era: Contemporary Trends

Since the late 20th century, globalization and the digital revolution have brought new dynamics to Marathi scientific vocabulary. On one hand, English has gained even greater influence as the global lingua franca of science and technology. On the other hand, digital tools and increased collaboration have enabled the preservation and propagation of Marathi terminology like never before.

Shifts in Terminology Use: From the 1990s onwards, there has been a noticeable shift in school and college textbooks toward using some English terms in Devanagari script rather than purely Sanskritised words. For example, where older generations learned "प्राणवायू" for oxygen, newer textbooks and competitive exams simply use "ऑक्सिजन" (phonetic transliteration of "oxygen"). The same happened with nitrogen ("नायट्रोजन" replacing "नत्रवायू") and carbon dioxide (often just "कार्बन डायऑक्साइड"). This shift is partly due to the need for alignment

with international nomenclature (especially in higher education and scientific communication) and partly to avoid confusion among students. As one Marathi educator observed, the coined terms do convey meaning well, but the *English* terms are what students encounter in higher studies and hence they have been “mugged up and thrust upon” learners in recent times. There is an ongoing debate: purists advocate for Marathi/Sanskrit terms for clarity and cultural connection, while others prefer retaining English words to keep students in sync with global terminology. In practice, modern Marathi scientific writing contains a mix – many classical terms are still used, but certain items (especially in cutting-edge fields like computer science, medicine, etc.) are often referred to by their international names (simply written in Marathi script). For instance, “computer” can be called संगणक (saṅgaṇak) officially, but in everyday contexts one hears “कंप्यूटर” as well.

Digital Era Contributions: The digital age has significantly aided the development and dissemination of Marathi vocabulary. The Marathi Vishwakosh was digitized in the 2010s – 19 volumes were made available online by C-DAC (Centre for Development of Advanced Computing) in Unicode format. This not only preserved the scholarship but also made it searchable and usable for a new generation. Users can click on terms to see their meaning and historical usage. Such tools help standardize usage by providing an authoritative reference. Likewise, Marathi Wikipedia (launched 2003) and various online forums have become arenas where new technical terms are hashed out. When new phenomena or technologies emerge (e.g. “genome sequencing” or “smartphone”), Marathi writers either borrow the English word or coin a term on the fly. Often, collaborative consensus online decides which term gains traction.

Additionally, institutions continue to update glossaries. The State’s Language Department periodically publishes revised *Paribhāṣā Koś* (technical dictionaries) for subjects. The blog discussion above noted how terms for anatomical parts were updated in biology textbooks – e.g., *auricle* was once कर्णिका (karṇikā) but changed to अलिंद (alind), ventricle from जव्हिक (javanikā) to निलय (nilay), etc., to use more precise or etymologically correct Sanskrit equivalents. This shows that Marathi’s scientific lexicon is not static; it is refined over time for specificity. Sometimes the motivation for change is to align with classical Ayurvedic terms (as suggested by a professor in the discussion), or to avoid ambiguity.

Global collaboration has also prompted some hybrid usage. For instance, chemical element names are now standardized globally by symbols, so Marathi texts simply mention “Sodium (सोडियम)” with its symbol Na, whereas older texts might have used the Sanskrit-based name “नатрियम (natriyam)”. Similarly, units of measure and international terms (meter, volt, byte) are usually not translated. This pragmatic approach ensures Marathi-speaking students aren’t alienated from global standards. At the same time, new Marathi coinages still appear, especially for government initiatives or when a concept can be succinctly captured. For example, “sustainable development” is often rendered as शाश्वत विकास (śāśvata vikās) in Marathi, and “digital divide” has been described as डिजिटल दरी (ḍijitaḷ darī) by some writers, illustrating creative adaptation in the digital era.

In summary, globalization has introduced a flexible bilingualism in scientific Marathi. The foundational Sanskrit-based vocabulary remains in use (especially in formal writing and whenever it aids clarity), but there is greater acceptance of English loanwords or transliterations for cutting-edge terms and higher education. The digital era, by increasing access to reference materials and enabling user contributions, has actually strengthened Marathi’s capacity to

absorb new terms – ensuring the language stays up-to-date while also preserving the logical structure developed over past decades.

Creation of Scientific Terms: Sanskrit, English, and Hybrid Approaches

Throughout these historical phases, Marathi terminologists employed three main strategies for expanding scientific vocabulary:

- Borrowing/Calquing from Sanskrit: This has been the predominant method. Given Marathi's linguistic affinity to Sanskrit, scholars often either borrowed a Sanskrit term directly (many technical terms existed in classical Sanskrit texts) or coined a new term using Sanskrit roots and morphology. The aim was often to translate the *meaning* of the English term. For example, "gravity" was translated as गुरुत्वाकर्षण (gurutvākarṣaṇ), a Sanskrit compound literally meaning "attraction due to weight (heaviness)" – a precise calque of the concept of gravitational force. Similarly, "telephone" became दूरभाष (dūrabhāṣ) ("far-speech"), and "biochemistry" was rendered जीवरसायनशास्त्र (jīva-rasāyana-śāstra) (literally "life-chemistry-science"). This approach leverages the transparent etymology of Sanskrit compounds, which many educators feel makes the concept clearer to students than a foreign word. Indeed, a commenter from the 1960s generation noted that such coined terms "convey the appropriate meaning" to the learner, as opposed to imported foreign terms which might seem "Greek" to them. The reliance on tatsama words is even officially encouraged – contemporary Marathi linguistic rules give special status to tatsamas and expect they follow Sanskrit grammar, as noted earlier. This results in academic Marathi sentences that sometimes *look* very Sanskritic, packed with long compounds and inflected forms, contributing to a highly logical and terse style.
- Transliteration or Adaptation from English: In cases where a Sanskrit-based neologism did not exist or did not gain popularity, the English term was adopted, usually written in Devanagari script. Often this happened for very modern innovations or internationally standardized terms. Examples include "रेडिओ" (reḍio) for radio, "लॅसर" (læsar) for laser, "कॉम्प्यूटर" (kŏmpyūṭar) for computer (though *sangṇak* exists, *computer* is widely understood), and element names like हायड्रोजन/ऑक्सिजन for hydrogen/oxygen in higher classes. Sometimes an *initial* transliteration was later replaced by an indigenous term or vice-versa. A notable trend: in the 1950s–60s, Marathi textbooks used fully translated terms for even chemical names (as listed above), but by the 2000s the Bureau allowed the English names for many of these. Transliteration is a practical strategy to keep Marathi in step with global developments when coining a word for every new concept is impractical or when the English term is short and convenient. It is a borrow-and-assimilate approach – e.g. "cell" is often just called सेल (sel) in school biology classes, even though the formal word is कोशिका (kośikā).
- Hybrid Formations: A less common but interesting strategy is the combination of Marathi/Sanskrit and English components to form a new term or phrase. This is typically seen in popular discourse rather than official terminology. For instance, a science teacher might say "उष्णता energy" (uṣṇatā energy) mixing Marathi "heat" (uṣṇatā) with the English word "energy" to clarify the concept of thermal energy. In writing, one finds hybrids like कणीय-उर्जाः (kaniy-urjā) for "particle energy" or डेटा-संच (ḍeṭā-sañc) for

data set, where an English root is combined with a Marathi suffix. Another kind of hybrid is using English acronyms but Marathi expansion, e.g. writing NASA in Latin letters but giving a Marathi descriptive phrase in parentheses. While such hybrids are not "standard" in dictionaries, they reflect a pragmatic blending in technical communication. Over time, some hybrids may become standardized if they gain wide currency.

Role of Terminology Committees: Both central and state-level bodies have steered the process of term creation. The Government of India set up a Commission for Scientific and Technical Terminology (CSTT) in 1961 to develop terminology in Hindi and other Indian languages. The CSTT produced extensive glossaries which often served as a starting point for Marathi (since Marathi and Hindi share many Sanskrit roots). In Maharashtra, as mentioned, the Directorate of Language's subject committees (e.g. one each for physics, biology, etc.) would meet to finalize the Marathi equivalents for English terms, often based on CSTT recommendations or Vishwakosh usage. These decisions would then trickle into textbooks and exam glossaries. An example from the blog account: the Marathi terms for heart anatomy (auricle, ventricle) were updated by experts to more specific Sanskritic words. Changes like these are deliberated by committees and then adopted in official textbooks statewide. It is a continuous process – terminology bulletins and dictionaries are periodically published. The *Paribhāshik Shabdāvaḷī* for various subjects are official lists of approved Marathi terms.

Influential Figures: Apart from institutions, certain individuals have been influential in Marathi technical lexicography. We have mentioned Lakshman Shastri Joshi (for the encyclopedia) and Balaji Prabhu Modak (for pioneering science writing). Others include T. M. Kulkarni, who compiled a popular Marathi–English Technical Dictionary in the mid-20th century, and Prof. R. G. Jahagirdar, known for his work on Marathi mathematical terms. Writers like Pra. Ke. Atre and Acharya D. V. Potdar also advocated for Marathi as a medium of instruction, indirectly spurring terminology development. More recently, scientists like Dr. Jayant Narlikar (astrophysicist and science communicator) have strongly argued for teaching science in one's mother tongue and have contributed to popular science glossaries. Many of these figures worked through organizations (Marathi Vidnyan Parishad, textbooks bureaus, universities) to enrich Marathi's corpus of technical words.

Characteristics of Academic/Scientific Marathi

The language used in academic and scientific writing in Marathi has a distinctly formal and logical character, setting it apart from everyday spoken Marathi or even general literary Marathi. Key characteristics include:

- Lexical Formality and Density: Academic Marathi employs a high proportion of tatsama vocabulary, i.e. words borrowed intact from Sanskrit. These words often have precise, singular meanings, which reduces ambiguity in technical discussion. For example, a general Marathi article might use the word भाग (bhāg) for part/share, but a mathematical context would prefer अंश (anś) for a fraction (both mean "part," but *anś* is the technical term). The use of such domain-specific terms makes academic prose dense with meaning. A single Marathi compound can encapsulate what would be an entire phrase in colloquial speech. For instance, "समीकरणाचे अवयव" is a compact way to say "the components of an equation," where *samikaraṇāche avayav* uses Sanskrit-derived words

for "equation" and "components." This density is a deliberate feature, aiming for one-to-one mappings of concept to term.

- Syntactic Structure and "Tight Logic": Scientific Marathi generally adheres to a strict syntax (Subject–Object–Verb order, modifiers before nouns, etc.), and it often mirrors the clarity of Sanskrit sentence construction. Non-essential clauses are minimized or clearly demarcated, and the text flows in a logical sequence of cause and effect or definition and elaboration. Colloquial Marathi, like other spoken languages, allows flexibility in word order, ellipsis of subjects, and use of context or tone for meaning. But in academic writing, authors avoid such ambiguity. They often use participial constructions and relative clauses to pack information formally. For example, instead of a conversational style like *"ही आग वेगळी आहे कारण ती रासायनिक क्रिया आहे"* ("This fire is different because it is a chemical reaction"), a science text might say *"ही आग एक रासायनिक प्रतिक्रिया आहे म्हणून तिचे गुण धार्मिकतेपेक्षा भिन्न आहेत"*, embedding the logic within the sentence structure. The net effect is a language that feels expository and logical, each sentence building clearly on the previous. The influence of Sanskrit grammar is also notable in things like compound formation (samasa) which Marathi utilizes for brevity and logical grouping of ideas.
- Use of Grammatical Rigor: In academic Marathi, one observes a conscious application of grammar rules, especially for Sanskrit-derived words. As referenced earlier, linguists expect that tatsama words follow Sanskrit inflection rules in formal Marathi. For instance, the plural of a technical term like *parīkṣā* (exam) might be written as *parīkṣāṇāṁ* in oblique form, preserving the Sanskrit plural suffix, rather than the colloquial *parīkṣāñni*. Such adherence lends an old-world formality and consistency to scientific text. Similarly, writers avoid dialectal or highly colloquial grammatical forms – you won't find the conversational "la" or "na" enclitics in academic prose. Instead, one finds constructions like असे आढळते की… ("it is found that…") which closely parallels formal Hindi/Sanskrit style, versus a colloquial दिसतंय की….
- Impersonal and Objective Tone: Scientific Marathi, much like scientific English, maintains an impersonal tone. The personal pronoun "मी" (I) or "आपण" (we) is rarely used; passive or neutral constructions are preferred. For example, "We can observe X" would likely be written as "X दिसून येते" ("X is observed") or "लक्षात येते की X…" ("it is noted that X…"). The tone is authoritative and didactic, often employing words like म्हणजे (mhaṇje) or अर्थात (arthāt) to define or explain, and logical connectors like म्हणून (mhaṇūn), त्यामुळे (tyāmuḷe) for cause and effect. In contrast, spoken Marathi might rely on intonation and context for these links; written academic Marathi spells them out explicitly.
- Comparison with Spoken and Literary Marathi: In everyday spoken Marathi, one finds a mix of colloquial Marathi words, Hindustani (Persian/Arabic origin) words, and English loanwords. Sentences are shorter, often fragmentary, and context-driven. Literary Marathi (e.g. in novels or essays) can range from colloquial dialogue to a semi-formal narrative style that may use poetic or idiomatic expressions. Academic Marathi stands apart by eschewing most idioms and favoring a literal style. It also tends to purge Persian or Arabic-origin words that are extremely common in speech. For instance, the everyday word for "result" is *natiija* (नतीजा, of Persian origin) or *phā̃ḷ* (फळ, literally "fruit/outcome"), but a scholarly article will use परिणाम (pariṇām) (pure Sanskrit for result). Likewise, common Persian-derived terms like *ajāba* (अजब, "strange") would be replaced by Sanskritic विस्मयकारक (vismayakārak) ("astonishing") in a scientific context if at all needed. This linguistic purism gives academic Marathi a more austere

and exact flavour, which some may call “tight logic.” It leaves little room for misinterpretation – every term is chosen for its specific denotation.

It’s worth noting that this high-register academic Marathi is mostly a written medium (textbooks, research papers, official reports, etc.). When spoken, such as in a science lecture or news broadcast, the language is often slightly toned down (some Sanskrit terms are replaced with simpler synonyms or explained on the spot). There is thus a continuum from highly Sanskritised formal Marathi to casual Marathi, and effective communicators navigate this depending on the audience’s familiarity. Still, the existence of a well-developed scientific register means Marathi can handle complex ideas with logical clarity and precision when required.

Examples of Terminology Across Disciplines

The evolution and formation of Marathi scientific vocabulary can be illustrated with examples from different fields. Below is a selection of key terms, showing their Marathi form and origin, and highlighting how they exemplify the trends discussed:

- Physics & Mathematics:
    - *Atom* – Marathi: परमाणु (*paramāṇu*). This is a direct Sanskrit loan (originally meaning the smallest indivisible unit in ancient philosophy). It was adopted for the scientific concept of atom. The term was present in Sanskrit long before modern chemistry, demonstrating how an old word was repurposed to fit a new science.
    - *Gravity* – Marathi: गुरुत्वाकर्षण (*gurutvākarṣaṇ*), from Sanskrit *gurutva* (heaviness, gravitation) + *ākarṣaṇ* (attraction). This coined term precisely describes Newtonian gravity as “attraction due to mass”. It showcases the calque approach using Sanskrit components.
    - *Geometry* – Marathi: भूमिति (*bhūmiti*), literally “earth-measurement”. A classical Sanskrit term used in mathematics (parallels the Greek origin of “geometry”). It survived from ancient texts into modern usage, showing continuity from pre-colonial knowledge to modern curriculum.
    - *Zero* – Marathi: शून्य (*śūnya*). A Sanskrit word meaning “void” that was the term for zero in medieval Indian math. Marathi retained it for the numeral 0, while also colloquially using Arabic-derived *sifr* (which gave English *cipher*). In formal contexts, *śūnya* is the standard, reflecting the preference for the Sanskrit term where available.
- Chemistry:
    - *Oxygen* – Marathi: प्राणवायू (*prāṇavāyū*), meaning “life air”. Coined to convey that this gas is vital for life. Used in older textbooks and still recognized, though “ऑक्सिजन” is now also common. The shift from *prāṇavāyū* to *oxygen* (transliterated) in recent decades exemplifies the globalization effect on terminology.
    - *Water* (H_2O) – Marathi: पाणी (*pāṇī*) in daily use, but in chemical context sometimes जल (jal) is used (Sanskrit for water) to form terms like जलसंयोग (jal-sanyog) for hydration. Similarly, CO_2 (carbon dioxide) was once कर्बद्वि-प्राणिल वायु (*karba-dvi-prāṇil vāyū*, literally “carbon-di bi-vital air”) – a highly

Sanskritised descriptive term – but now usually just called “कार्बन डायऑक्साइड”.

  - *Acid* – Marathi: अम्ल (*amla*). A pure Sanskrit term meaning “sour”. This was a clever semantic loan for acid, leveraging the fact that acids taste sour. It replaced the older word *turshi* (Persian origin for sourness) in scientific discussion. Derivatives include अम्लधर्म (amla-dharma) for acidity.
- Biology & Medicine:
  - *Cell* – Marathi: कोशिका (*kośikā*), meaning “a small compartment” in Sanskrit. This term was adopted for biological cells, conveying the idea of a small enclosed unit. In practice, many teachers use सेल (sel) informally, but *kośikā* appears in textbooks and exams.
  - *Heart (Atrium/Ventricle)* – Marathi: अलिंद (*alind*) for atrium and निलय (*nilay*) for ventricle. These were updated Sanskrit-based terms, replacing earlier Marathi coinages (karnikā, javanikā) to better match anatomical meaning. *Heart* in general is हृदय (hṛday) in formal usage (a tatsama), whereas colloquially people say दिल (dil – from Hindustani).
  - *Skull* – Marathi: कवटी (*kavaṭī*) in lay language, but कर्करा (*karkarā*) was introduced in textbook terminology. The change, influenced by Ayurvedic/Sanskritic vocab, shows the push for precision: *karkarā* (meaning hard/pebbly) might describe the hard cranium more specifically. (That said, *kavṭī* remains far more common outside academic texts.)
  - *Gene* – Marathi: जीन (transliterated *jeen*) is widely used, but there have been attempts like अनुवंश (*anuvaṁś*, “hereditary unit”). In practice, modern fields like genetics often stick to international terminology, demonstrating limits of indigenization in cutting-edge domains.
- Logic & Philosophy:
  - *Logic* – Marathi: तर्कशास्त्र (*tarkaśāstra*), literally “science of reasoning”, or simply न्याय (*nyāya*) in the context of Indian philosophy (Nyaya is one of the classical schools of logic). These terms come straight from Sanskrit – *tarka* means reasoning/argument, and *nyāya* means logic/justice. Marathi inherited them for academic discourse in philosophy and logic. A modern computer science text discussing logic might still use *tarka* for logical reasoning.
  - *Philosophy* – Marathi: तत्त्वज्ञान (*tattva-jñāna*), meaning “knowledge of principles/truths”. Also, दर्शन (darśan) is used in the sense of a philosophical view or system (the word literally means “seeing” but refers to philosophical schools in Sanskrit). These words have been in Marathi since medieval saint-literature and were readily applied in modern academic writing to mean philosophy in general or as a field of study.
  - *Debate/Argumentation* – Marathi: वादविवाद (*vāda-vivāda*), a reduplicative Sanskrit term for debate (literally “discussion and dispute”). Everyday Marathi might say भांडण (bhaanḍaṇ – quarrel) for any argument, but scholarly works distinguish *vāda* (reasoned debate) from mere squabbles. This again shows how academic language maintains nuanced distinctions.
- Technology & Modern Terms:
  - *Computer* – Marathi: संगणक (*saṅgaṇak*), from Sanskrit *saṅgaṇa* (to compute/count). This neologism was promoted in the 1980s-90s and is used in government publications and by many Marathi speakers. Yet, as noted,

"कॉम्प्यूटर" is equally likely in informal settings. Still, संगणक is an example of a successful coinage where a single Sanskrit-based word neatly replaced an English term. Related words like संगणकशास्त्र (computer science) and संगणककार्यक्रम (computer program) are standard in textbooks.

- *Television* – Marathi: दूरदर्शन (*dūradarṣán*). This word was likely introduced via Hindi during the era of state-run television (Doordarshan). It's purely Sanskrit (दूर = far, दर्शन = viewing) and caught on such that even today many Marathi speakers use "Doordarshan" to refer to TV broadcasting (especially the national TV channel). However, for the device, people also say "टीव्ही". This dual usage shows how the official term exists alongside the colloquial Anglicism.
- *Internet* – Marathi: आंतरजाल (*āntarjāl*, "inter-net") has been proposed and is used in some translations (the word combines Marathi *antar* = inter, and *jāl* = net) on the model of Hindi "antarjaal". In reality, most just use "इंटरनेट". This term illustrates the challenge of new technology words – a Marathi equivalent was coined but the English word remains far more popular due to ubiquity.
- *Mobile Phone* – Marathi: दूरध्वनी (*dūradhvani*, "far-sound") or चलदूरध्वनी (moving far-sound) for a mobile, are dictionary terms. Yet almost everyone just says *मोबाइल* or *फोन*. It highlights how certain domains (consumer tech) see less adoption of Marathi terms, whereas in academic or government documents one might find these Sanskritised versions.

The examples above reveal a pattern: older sciences and concepts (those with parallels in ancient knowledge, like mathematics, logic, etc.) tend to have well-established Sanskritic Marathi terms that are still in use. Mid-20th-century science terms (chemistry, biology basics) were mostly given Marathi/Sanskrit names, though some are now competing with English forms. Cutting-edge and imported terms (especially post-1990) often remain in English or take a long time to naturalize. The push-and-pull between purism and practicality is ongoing.

Nonetheless, the existence of a rich academic vocabulary means Marathi can express complex ideas with nuance. A Marathi medium science textbook, for instance, reads as a fully developed scientific text in its own right. To illustrate, here is a snippet (translated from Marathi): *"भौतिकशास्त्रात, कार्य आणि ऊर्जा या दोन परिमाणांचे मापन एकाच एककात केले जाते, ज्यास जौल असे म्हणतात."* – In physics, work and energy are measured in the same unit, which is called the joule. In this single sentence: *bhoutikśāstra* (physics), *parimāṇ* (quantity/dimension), *ekak* (unit) are all tatsama words used instead of borrowed English. The sentence structure is formal, yet clear and logical. Such usage underscores how Marathi's scientific register, developed through deliberate effort, achieves both precision and comprehensibility for those educated in the language.

Conclusion

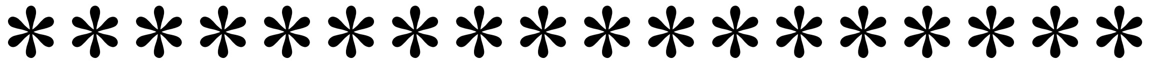
The development of academic and scientific vocabulary in Marathi is a story of adaptation and planning, deeply intertwined with Maharashtra's socio-linguistic history. Starting from a reliance on Sanskrit as a source of scholarly terms in pre-colonial times, Marathi evolved under colonial influence to standardize a high-register form of the language rich in Sanskrit-derived words – a form well-suited for modern technical discourse. Post-independence language planning by government bodies, encyclopedia compilers, and educators accelerated the creation

of Marathi equivalents for virtually every scientific term, aiming to make education accessible in the mother tongue. This resulted in a vast lexicon where terms were often carefully coined to mirror English meanings, leveraging the "tight logic" and clarity of Sanskrit word formation.

Over time, some of these coinages became commonplace (e.g. *vidnyān* for science, *gurutvākarṣaṇ* for gravity), while others faced competition from easier English borrowings, especially as globalization increased. The current scenario is dynamic: Marathi's scientific vocabulary is continuously updated by committees and usage trends, balancing between preserving the semantic transparency of indigenous terms and embracing the universal familiarity of English terms where needed. One remarkable outcome of these efforts is that academic Marathi today can articulate complex ideas with the same degree of precision and logical structure as English or Sanskrit. Its syntax and lexicon have been honed for clarity, making it possible, for example, to teach advanced physics or philosophy entirely in Marathi without loss of rigor. Indeed, the language has been successfully used at university levels for various subjects.

Challenges remain – chiefly, the dominance of English in higher education and the fast pace of technological change – but Marathi's experience shows a successful case of language modernization. Through conscious lexicography and enthusiastic scholars, Marathi transformed from a regional language of mainly literary use into a medium capable of discussing quantum mechanics or genetic engineering. The legacy of institutions like the Marathi Vishwakosh Mandal and Balbharati is seen in every new Marathi textbook or article that confidently uses terms like कणभौतिकी (particle physics) or जैवतंत्रज्ञान (biotechnology) without needing to fall back on English. As Marathi moves forward in the digital age, its scientific vocabulary will likely continue to grow, absorbing new influences while leaning on its Sanskrit-Marathi backbone for coherence and precision.

Sources: The information above was compiled from historical accounts, language planning reports, and examples documented in Marathi encyclopedias and educational literature. Key references include the Marathi Wikipedia (for historical background), the digitized Marathi Vishwakosh and related news, discussions by Marathi educators on terminology changes, and scholarly analyses of Sanskrit's role in modern Indian languages. These sources collectively illustrate how Marathi's scientific lexicon was deliberately crafted and how it continues to evolve in response to pedagogical and global needs.



Telugu people

Linguistic Origins and Early Evolution

Telugu is a Southern Dravidian language that ultimately descends from the reconstructed Proto-Dravidian tongue. By linguistic reconstruction, Proto-Dravidian was spoken by the fourth millennium BCE. Telugu split from its Dravidian relatives around the mid-1st millennium BCE and developed into a distinct language by early historic times. It belongs to the South-Central Dravidian branch alongside nonliterary tribal languages (Gondi, Kuvi, etc.). Over time Telugu incorporated enormous Sanskrit (and Prakrit) vocabulary – in fact Telugu was “strongly influenced by Prakrit/Sanskrit from prehistoric times”. Classical Telugu literature from the 11th century onward freely borrows Sanskrit words (and even Sanskritized grammatical structures). Modern Telugu retains this dual heritage: its basic grammar and many roots are Dravidian, but much of its higher literary and technical vocabulary is from Sanskrit, and in the Hyderabad region significant Persian/Arabic loanwords also entered under Muslim rule.

Relation to Proto-Dravidian and Sanskrit

Proto-Dravidian is the common ancestor of all Dravidian languages. Telugu’s phonology and morphology preserve many archaic Dravidian features (e.g. conservative plural markers and sounds). Scholars note that Telugu retained phonemes (like the voiced retroflex ḻ) and plural suffixes that other Dravidian tongues lost. Russian linguist Mikhail Andronov estimates Telugu diverged by around 1000 BCE. From earliest times Telugu speakers lived alongside Indo-Aryan (Sanskrit/Prakrit) cultural influence. Satavahana inscriptions (1st cent. BCE–2nd cent. CE) are in Prakrit, yet Telugu place-names and personal names appear in them. By the 6th–10th centuries CE, Telugu was “heavily influenced by Sanskrit and Prakrit” as the language of court poetry emerged. Notably, Nannaya’s 11th-century *Andhra Mahabharatam* established widespread borrowing of Sanskrit vocabulary into Telugu literature. Thus Telugu evolved on a Dravidian base but with pervasive Sanskritisation, especially in literary registers.

Script and Writing System

The Telugu script developed from ancient Brahmi via intermediate South Indian scripts. By the 5th century CE the Kadamba script (itself a southern derivative of Brahmi) was in use in Andhra–Telangana. Kadamba is “the first writing system devised for Kannada, later adopted to write Telugu”, and by the 10th century it had evolved into the common Kannada–Telugu

alphabet. This shared script (sometimes called “Telugu-Kannada script”) was used across the region. By around 1300 CE the scripts split: the Telugu script took on its own standardized form distinct from Kannada. As one source notes, “Telugu and Kannada scripts then separated by around 1300 CE”. Telugu is written as an abugida with 16 vowels and 34 consonants, but its basic letter shapes trace back through Kadamba/Kannada to Brahmi. The 11th-century “Gunintalu” method of conjuncts (coined by Nannaya) illustrates the long-evolved Telugu orthography. Islamic and later European printing introduced typographic and orthographic simplifications (e.g. roman-style Telugu fonts), but the core Telugu script as used in the 19th century is still clearly descended from these early lines of development.

Early Telugu History (Inscriptional Evidence)

Telugu’s earliest traces are epigraphic. Telugu words appear sporadically in Prakrit inscriptions from the 2nd century BCE onward. A Telugu-language inscription dated 575 CE (Renati Choda king Dhanunjaya) is the first known long inscription written entirely in Telugu. Short Telugu labels (like tolacuvāṇḍru “rock carvers”) occur on 4th–5th century cave inscriptions in Telangana. By the 7th century Telugu inscriptions appear in the Rayalaseema and then Coastal Andhra regions. During this period the Vijayanagara and Chalukya dynasties hadn’t yet arisen; Telugu served as a regional vernacular under local rulers (like the Eastern Chalukya in Vengi) even as Sanskrit remained the court language. Indeed, inscriptions of the Satavahanas and Ikshvakus (3rd cent. BCE–3rd cent. CE) are in Prakrit but contain Telugu names, suggesting rulers used Prakrit while the populace spoke early Telugu.

Satavahanas and Early Andhra Polities

The Satavahana dynasty (c. 1st cent. BCE–3rd cent. CE) is chiefly attested in Prakrit, but Telugu lexical elements (e.g. deity and river names) turn up in some Satavahana-era inscriptions. No full Telugu compositions survive before the 6th century, but these relics hint at a spoken Andhra (Telugu) tradition alongside the aristocracy’s Sanskrit/Prakrit. After them, the Andhra Ikshvakus (3rd–4th cent. CE) and Pallavas left more Prakrit/Tamil records; Telugu’s fully written history awaits the next phase.

Renati Chodas and 6th–10th Century Inscriptions

In the 6th century CE the Renati Chodas (a Telugu local dynasty in Rayalaseema) issued the oldest known Telugu royal proclamation (c. 575 CE). Over the 7th–10th centuries, Telugu-language grants and metrical prose became increasingly common under regional chieftains. For example, by 630 CE meter-poems in Telugu appear on temple walls. This era saw the first split of popular speech and formal literary language: poets like Malliya Rechana (mid-10th cent.) codified a Telugu poetic meter (Kavijanasrayam), and writers began composing entire works in Telugu. By 1000 CE, Telugu had firmly emerged as a literary language, ready to enter its classical age.

Classical Telugu Literature (1000–1600 CE)

Medieval Andhra saw a flowering of Telugu literature under various dynasties. The period 1020–1400 CE is known as the “Age of the Purāṇas,” because Hindu epic and puranic literature

was rendered into Telugu. The landmark event was Nannaya Bhattarakavi's translation of the first two parvas of the *Mahābhārata* (c. 1022–1063 CE). Nannaya (the Adi Kavi, or "first poet") wrote the *Andhra Mahābhārata* in the sophisticated Champu style. This composition is generally regarded as the first full-length Telugu literary work. Its polished language indicates earlier lost works (grants, poetry) already existed. Nannaya's contemporaries praised his command of Telugu grammar, and his epic *Mahābhārata* established Telugu's prestige.

After Nannaya, the epic was taken up by Tikkana Somayaji (1205–1288) and Yerrapragada (Errāna) in the 13th–14th centuries. Tikkana completed chapters 4–18 of the Mahābhārata and composed other devotional poems, while Errāna (14th cent.) finished chapter 3. These three – Nannaya, Tikkana, Errāna – are celebrated as the *Kavi Trayam* or Trinity of Poets, the "three great poets" of classical Telugu. Together they rendered the Sanskrit epic in Telugu meter, assimilating Sanskrit epic-scope poetry to local tastes. Other major works of this period include marānas (Scholars' notes) on Sanskrit texts, *Purāṇam* translations (Markandeya Purāṇam by Marana, a disciple of Tikkana), and scientific treatises (12th-century mathematics works by Pavuluri Mallana).

The Age of Krishnadevaraya and the Ashtadiggajas

The 16th century under the Vijayanagara Empire was Telugu's Golden Age. Emperor Krishnadevaraya (r. 1509–1529) was himself a Telugu poet (author of *Amuktamalyada*) and patronized literature heavily. His reign assembled the famous *Ashtadiggajas* ("eight elephants" of the literary world) – eight court poets considered pillars of Telugu letters. The foremost of these, Allasani Peddana (c. 15th–16th cent.), was titled *Andhrakavi Pitamaha* (Grandfather of Telugu Poetry) and wrote the epic *Manucharitam* (on Manu) in six chapters. Other Ashtadiggajas included Dhurjati, Nandi Timmana, Mallana, Surana, Ramarajabhushana, Pingali Surana, and even the trickster Tenali Rama (Tikkana's disciple). Under Krishnadevaraya the Telugu prabandha style (narrative poem) matured. Krishnadevaraya himself composed the *Amuktamalyada* (1607 CE) in Telugu, and afterwards his patronage made Telugu the dominant literary language of the Deccan. (Incidentally, 15th-century Venetian traveler Niccolò de'Conti famously compared Telugu to Italian for its vowel endings.)

Bhakti and Devotional Literature

Parallel to these courts, the medieval Bhakti movement produced vast devotional Telugu literature. The most celebrated Bhakti composer was Tallapaka Annamacharya (1408–1503), hailed as *Pada-kavita Pitamaha* of Telugu. Annamacharya, a temple priest of Tirupati, is credited with composing over 32,000 devotional songs (sankīrtanas) in praise of Lord Venkateswara; about 12,000 survive today. His simple, heartfelt songs in Telugu folk-vernacular deeply influenced later Carnatic music and devotional poetry. Another Bhakti luminary was Tyagaraja (Tyagabrahmam, 1767–1847) of Tanjore, who composed nearly 600 Telugu kritis (musical hymns) and two *sangeetha natakams* (musical plays) in Telugu. Tyagaraja's Rama-kirtanas, still sung in Carnatic concerts, rank among the highest literary expressions of Telugu devotion. In the broader Bhakti era, saints and composers (like Kshetrayya, Bhadrachala Ramadasu, and others) wrote Padakavita (verse poems) on Vishnu, Shiva, and the Goddess, bringing religious themes into native Telugu meters. These movements blended Dravidian vernacular style with Sanskritic theology, further enriching Telugu's lexicon and poetic forms.

Influence of Dynasties and Regional Cultures

Throughout its history, Telugu evolved under successive dynasties and cultures:

- Satavahanas (1st cent. BCE–3rd cent. CE): Early Andhra rulers who used Prakrit inscriptions yet lived in a Telugu-speaking region. They left Telugu on coins and inscriptions, linking the name Andhra to the region's language.
- Eastern Chalukyas of Vengi (7th–12th cent.): These Andhra-based rulers used Telugu for grants alongside Sanskrit. The script achieved an early standard during their reign.
- Kakatiya Dynasty (12th–14th cent.): Centered at Warangal, Queen Rudrama and Prataparudra issued many Telugu inscriptions and patronized poets (Ketana, Yerrapragada). The Kakatiyas helped Telugu become a courtly language in Telangana. For example, Telugu Satakamu poems like *Sumati Satakam* (12th cent.) by Rudrama's vassal Baddena Bhupaludu are noted early Telugu literature.
- Vijayanagara Empire (14th–17th cent.): As noted, Telugu peaked at Vijayanagara's court. With Muslim rule limiting Sanskrit in Delhi, Krishnadevaraya's patronage made Telugu an imperial literary language of the Deccan.
- Qutb Shahi and Asaf Jahi (Nizam) Period (16th–18th cent.): Islamic sultanates (Golconda, Hyderabad) introduced Persian/Arabic elements. The Telugu spoken around Hyderabad (Telangana) diverged: by 14th–17th centuries it had a distinct dialect with many Persianate loanwords. Persian was the court language of the Qutb Shahi and later Nizam rulers, so Telugu literature of the region (for Hindu audiences) continued independently. Under the Nizams (post-1724), an official Telugu dialect (Dakhni Telugu) emerged with Persian influence; 19th-century revenue records (*kaifiyats*) from Telangana show Urdu/Persian stylistic effects on Telugu prose.

Islamic Rule and Persian Influence

From the 14th century onward, the Muslim sultanates of the Deccan affected Telugu culture. The Delhi Sultanate's Tughlaq conquest (c. 1320s) introduced Urdu and Persian literate culture into northern Telugu lands. When the Golconda Qutb Shahis (1512–1687) and the Mughal-backed Nizam (established 1724) ruled, Persian remained the court language. Telugu speakers borrowed Persian and Arabic terms, especially in Hyderabad city speech. Nonetheless, Sanskritized Telugu continued to flourish in literary and temple contexts elsewhere. Under Hyderabad's Asaf Jahis, Telugu prose of bureaucrats (like local officials' *kaifiyats*) showed Persianate influence. Overall, Islamic rule added new administrative terms and a distinct Hyderabad Telugu dialect, but did not replace Telugu's basic Dravidian structure.

British Colonial Period and Modernization (1800–Early 1900s)

British rule (18th–20th centuries) brought new pressures and innovations. English education and the printing press transformed Telugu society. Missionary grammars and Bible translations introduced print-Telugu as early as the 1810s. By the mid-19th century there were Telugu newspapers and printing presses (e.g. Serampore Mission Press). Under Madras Presidency rule, Telugu-speaking districts saw rising literacy and journalistic activity. Western-style

education promoted a mixed literary language: English and Sanskrit loanwords mingled with colloquial Telugu.

In the late 19th century, the British period ushered in a *literary renaissance*. Social reformers and scholars adapted Telugu to modern forms. For instance, Rev. Paravastu Chinnayasuri (1807–1861) wrote the widely used *Bāla Vyākaraṇam* (child's grammar), reforming Telugu pedagogy. Kandukuri Veeresalingam (1848–1919), called *Gadya Tikkana*, pioneered modern prose and social novel writing. He wrote ~100 books (1869–1919) and is credited with first Telugu social novel (*Satyavati Charitam*, 1881). Gurajada Apparao (1862–1915) reformed Telugu poetry and drama, composing the influential play *Kanyasulkam* (1892) and poems in everyday speech. Gidugu Venkata Ramamurthy and others championed writing in the colloquial dialect (vyavaharika), shifting away from overly Sanskritized "high" Telugu.

The British also elevated Telugu through institutions: Andhra-loyal organizations and the Andhra Mahasabha (founded 1921 in Hyderabad) promoted Telugu research and education. Printing and railways helped standardize the language. By the early 1900s, Telugu newspapers (e.g. *Krishna Patrika*) and schools had spread literacy. As noted, the late 19th–early 20th century saw Telugu literature "mix[ing] classical and modern traditions". In sum, colonial rule brought English loanwords and printing technology, while local intellectuals (Veeresalingam, Gurajada, Gidugu et al.) adapted Telugu to new social and literary needs, laying the groundwork for 20th-century Telugu prose and journals.

Conclusions

By the early 1900s, Telugu had emerged from its millennia-old roots into a rich literary language. Its Dravidian structure and Sanskritic heritage, molded by dynasties from the Satavahanas to the Vijayanagara kings, had produced grand epics (Nannaya's *Mahābhārata*, Peddana's prabandham), devotional poetries (Annamacharya, Tyagaraja), and everyday verse (Vemana satakams). The medieval Bhakti and imperial courts cemented Telugu's prestige, and even foreign rules (Islamic sultanates, British colonialism) left linguistic marks (Persian loanwords, English terms) without breaking continuity. With the advent of printing and social reform in the 19th century, Telugu embraced modern prose forms. Reformers like Veeresalingam and Gurajada began writing novels, essays and newspapers in more popular language, democratizing Telugu literature. Thus, from Proto-Dravidian times through the early 20th century, Telugu evolved through successive layers of indigenous growth and external influence. The result is the Telugu we recognize today: a hybrid yet coherent language, classical in high style and vernacular in daily life, with a continuous history documented by inscriptions and innumerable texts spanning sacred hymns to printed novels.

Sources: Authoritative histories and linguistic studies of Telugu. Each fact above is based on these sources, which detail the development of the language, script, literature, and cultural influences through the early 20th century.

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Origins of the Telugu Script

The Telugu script evolved from ancient Brahmi. Brahmi inscriptions of the Mauryan period (3rd c. BCE) reached the Krishna-delta region, giving rise to a local variant called the *Bhattiprolu script*. Notably, stone reliquary caskets at Bhattiprolu (Guntur district) bear inscriptions dated to the 3rd–2nd centuries BCE in this Brahmi-derived script. Linguistically, these Bhattiprolu inscriptions already show elements of early Telugu; local Telugu words and names are inscribed in this script dating as early as the 3rd century BCE. By the 5th century CE the Bhattiprolu Brahmi had evolved into the Kadamba script (named for the Kadamba dynasty). By about the 7th century, Kadamba Brahmi in southern India developed into a common Telugu–Kannada script.

This ancestor script remained essentially undifferentiated between Telugu and Kannada for many centuries. Only around 1200–1300 CE (the time of the poet Ketana and the late Kakatiya period) did a distinctly Telugu script emerge. Paleographically, the Telugu letters gradually acquired their signature loops and curls: for example, the Telugu క *ka* lacks the horizontal head-stroke of Kannada ಕ, instead bearing a short tick or curl atop the glyph. Changes in writing material also shaped letterforms: early inscriptions carved with metal chisels on stone have more angular, geometric forms, whereas palm-leaf and paper writing (with softer tools) encouraged more rounded, curvilinear shapes.

Differentiation from Kannada Script

Until the late medieval period Telugu and Kannada letters were written in a nearly identical style (the "Telugu–Kannada script"). Over time subtle differences emerged. Telugu letters dropped the shirorekha (top bar) found in many Sanskrit-derived scripts, using small curls or ticks instead. By the 13th–14th centuries, Telugu scribes were writing in a distinct alphabet; famous scholars like Ketana explicitly treat Telugu orthography as separate. After c.1300 CE the Telugu script standardized into the form recognized today.

Evolution of Letterforms

Early Telugu-Kannada letters (1st millennium CE) were relatively straight-edged, reflecting engraving on stone. As palm-leaf manuscripts became the norm (from about the 10th century onward), the script developed more curves. For instance, a stone-engraved Telugu ర *ra* of the 6th century looks more angular than a 13th-century manuscript form, which is rounder. Stone carving tools yielded "robust geometric" shapes, while writing on copper plates or leaves with reed pens produced cursive extensions and loops. Diacritical marks (vowel signs) also became more elaborate over time. In short, the scripts' form morphed from rigid early Brahmi shapes into the flowing rounds of medieval Telugu.

Key Inscriptions and Manuscripts

- Bhattiprolu relic caskets (Guntur, 3rd–2nd c. BCE): Buddhist reliquaries inscribed in early Brahmi (Bhattiprolu script). These are the earliest written records in the Telugu region.
- Telugu-Chola inscriptions (Renadu region, 573–576 CE): The first known Telugu sentences appear on stone inscriptions of the Renati Chodas (a Telugu Chola dynasty). These Chola kings began writing in Telugu rather than Sanskrit by 576 CE, making them pioneers of Telugu epigraphy.
- Anantapur inscriptions (Coastal Andhra, ~633 CE): Shortly after 600 CE, Telugu inscriptions appear around Anantapur. The earliest known Telugu inscription in coastal Andhra is dated about 633 CE. Inscriptions of Chalukya rulers in Telangana also begin to use Telugu by this time.
- Kakatiya-period inscriptions (12th–13th c. CE): The Kakatiya dynasty of Warangal patronized Telugu. Many temple and stone inscriptions (often Sanskrit texts in Telugu script) date from this era. For example, the famous Ramappa temple (built 1213 CE) has a sandstone pillar inscribed in Telugu script, illustrating the mature Kakatiya style 【57†】. (See image above.)
- Literary manuscripts (11th–14th c. CE): The first Telugu literary works were composed under patronage of Eastern Chalukya and Kakatiya courts. Nannaya's 11th-century *Andhra Mahabharatam* (a Sanskritized grammar-based epic) and later Tikkana's 13th-century continuation are preserved in palm-leaf manuscripts in the medieval script. (Though the manuscripts themselves are later copies, they reflect orthography of their times.)
- Early printed works (19th c. CE): With printing technology, Telugu texts were first printed in the early 1800s. The first Telugu types were cast around 1806. Early books include the *Sabdamanjari* (a Telugu–Sanskrit primer, printed 1827) and missionary grammars and dictionaries in the 1830s. These works fixed the shapes of many letters in typeface.

Sanskrit, Prakrit and Regional Influences

Throughout its history the Telugu script was used for multiple languages. In the early centuries, many stone inscriptions in Andhra were in Maharashtri-Prakrit or Sanskrit but written with Telugu–Kannada characters. It was only by the 6th century onward that rulers began to inscribe vernacular Telugu. Telugu orthography itself was heavily influenced by Sanskrit: the script accommodates Sanskrit sounds (using marks like ఋ, ఌ and the visarga-ḥ sign) and often incorporates Sanskrit vocabulary and grammar in literary texts. Conversely, Telugu's Dravidian grammar shaped how vowels and consonant clusters were marked. In colonial times, Telugu spelling conventions were debated by grammarians (e.g. Chinnaya Suri's 19th-c. *Bāla Vyākaraṇam* borrowed ideas from Nannaya's Sanskrit grammar), reflecting a mix of traditional Sanskritic and spoken Telugu norms.

Dynastic and Cultural Milestones

Each major ruling power in the region left its mark on the script's use:

- Satavahanas (2nd c. BCE – 2nd c. CE): The Satavahana kings spread Brahmi writing throughout Andhra by the early centuries CE. Their coins and rock inscriptions (mostly in Prakrit) used Brahmi letters that are ancestral to later Telugu forms.

- Salankayanas and Vishnukundinas (3rd–6th c. CE): These local dynasties of the Krishna–Godavari delta continued the tradition of Brahmi inscriptions. Over time their scribes began to distinguish southern letter-shapes. Unusually, Vishnukundina princes sometimes inscribed Telugu words even while using Sanskrit or Prakrit language.
- Eastern Chalukyas (7th–12th c. CE): Based at Vengi (modern Andhra), the Eastern Chalukyas gave great impetus to Telugu culture. They used the common Telugu–Kannada script on many stone inscriptions (often Sanskrit texts). In their time the script became well standardized, and Telugu literature (like Chalukya court poetry) flourished.
- Kakatiyas of Warangal (12th–14th c. CE): Under Kakatiya rulers Telugu became a prestige language and the script matured. Kings like Ganapati-deva and Rani Rudrama issued extensive inscriptions (some in Telugu, many in Sanskrit on Telugu script) praising their deeds. This era produced the beautifully carved Telugu letters seen on Warangal temples (for example, the 13th-c. Ramappa inscription shown above 【57†】).
- Reddi and Vijayanagara (14th–16th c. CE): After the Kakatiyas fell, Telugu-speaking polities (Reddi Kingdom, Kondaveedu) continued the tradition. Meanwhile the Vijayanagara Empire (centered in Hampi) oversaw all Southern literatures. Vijayanagara patronage (e.g. of poet Krishnadevaraya's court) standardized Telugu orthography, although scribes still often inserted Sanskrit phrases in Telugu script.
- British Colonial Period (18th–early 20th c.): British rule brought printing, education, and English influence. Missionary presses (Masulipatam CMS press, Madras) produced grammars and textbooks, and Telugu primers using the traditional script began to spread literacy. By the late 1800s there were Telugu newspapers and journals (e.g. the *Hitavadi*, 1862), and colonial scholars included Telugu in Madras Presidency education. Printing fixed the letter shapes firmly. As noted above, by about 1900 roughly half a dozen Telugu works (religious and scholarly) had even been printed in Europe. Through this period the script itself changed little; rather, standardized spelling conventions and typefaces became established.

Printing and Orthographic Reforms to 1900

The advent of printing was the biggest change to writing in this period. In 1806 the first Telugu metal typefaces were made, enabling local presses to produce Telugu books. Early printed works (dictionaries, grammars and Bibles) set norms for glyph shapes and spelling. By mid-19th century scholars like Paravastu Chinnaya Suri compiled new Telugu grammars (*Bāla Vyākaraṇam*, 1850s) to teach schoolchildren. These reinforced classical orthography (long/short vowels, sandhi rules) based on Nannaya's Sanskritic model. While there was discussion among intellectuals about simplifying spelling, no formal orthography reform (e.g. abandoning letters) was enacted by 1900. Instead, the arrival of English-style printing presses in Telugu-speaking areas simply spread literacy in the traditional script. In summary, by the early 20th century the Telugu writing system had stabilized: its letters were fixed in print, major inscriptions and manuscripts had set spelling conventions, and a rich set of print dictionaries and grammars upheld the classical orthographic norms.

Sources: Historical and epigraphic studies of Andhra scripts, as well as medieval Telugu inscriptions and colonial records. (See cited references for details.)

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Historical development of Telugu vocabulary and style

Origins and early development

- Dravidian roots – Telugu is the largest of the Dravidian languages and its core lexicon descends from Proto-Dravidian. The lexicon retains archaic Dravidian words, markers and morphemes and shares cognates with South-Dravidian languages such as Gondi and Kui. Spoken Telugu preserved much of this Dravidian lexicon in regional dialects.
- Early inscriptions (c. 575 CE) – The first recorded Telugu inscription dates to about 575 CE. A few centuries later, literary works began to appear, but the vocabulary already showed borrowings from Sanskrit and Prakrit.
- Pre-Nannaya influences – Even before the famous translation of the *Mahābhārata*, classical Telugu works show a pervasive Sanskrit influence. Sanskrit introduced many phonological elements (aspirated stops and sibilants) and vocabulary items, while Prakrit loans became integral to Telugu (see prākṛti-vikṛti pairs below).

Nannaya and the *Mahābhārata* (c. 1000–1100 CE)

Nannaya Bhattarakudu, the first poet of the "Kavitrayam" (three great poets), rewrote the *Mahābhārata* in Telugu between 1000 and 1100 CE. His translation established the liberal borrowing of Sanskrit words into Telugu literature. Subsequent poets Tikkana and Errapragada continued this tradition of Sanskrit-heavy vocabulary, forming the foundation of classical Telugu style.

Prākṛti and vikṛti words

Telugu distinguishes between prākṛti (tatsama) words – direct borrowings from Sanskrit – and vikṛti (tadbhava) words – Sanskrit-derived forms that have undergone phonological change through Prakrit. Prākṛti words such as *agni* ("fire"), *bhōjanaṃ* ("meal") and *vidya* ("education") co-exist with vikṛti forms (*aggi*, *bōnaṃ*, *vidde/viddiya*). Prākṛti words are used in formal settings like education and offices, while vikṛti words dominate everyday speech. These pairs illustrate how Sanskrit vocabulary integrated into Telugu while retaining Dravidian phonology.

Influence of Persian, Arabic and regional contact

From the 14th century onward, Telugu speakers in the Deccan interacted with Perso-Turkic rulers. The vocabulary of Telugu in Hyderabad shows numerous borrowings from Persian and Arabic (often via Urdu) – e.g., *kaburu* (news) from Urdu *xabar* and *javābu* (answer) from *jawāb*. These loans were modified to fit Telugu phonology, reflecting centuries of contact under Turkic-speaking rulers of Golkonda and Hyderabad.

Portuguese and English loans

During colonial times, Portuguese merchants introduced a handful of words; the modern era saw numerous English borrowings. The article notes that many modern words come from English, with some from Portuguese. English loans especially dominate technical and administrative vocabulary, contributing to contemporary diglossia (see below).

Literary and high-culture style

Champu and Prabandha genres

Early Telugu literature adopted the champu style – a mixture of prose and verse. Champu became the dominant form of literary composition, although poets like Tikkana sometimes wrote entirely in verse. The *Prabandham* period (14th–16th centuries) used three types of Prabandham (stories in verse) and introduced poetic devices and metre that reinforced formal style.

Dvipada and Sataka styles

Later innovations for popularising knowledge included the Dvipada (couplet) and Sataka (cento). A dvipada is a stanza of two short lines with a specific rhyme scheme. Many dvipadas were "immensely singable" devotional poems composed in common vernacular language, making them accessible to ordinary people. Despite their popularity, some scholars regarded the couplet form as less prestigious. In the 19th century, Charles Philip Brown remarked that "the learned despise couplets because the poems thus written are in a flowing easy style which uneducated persons read with enjoyment". This contrast between accessible and learned styles foreshadowed later debates between classical and colloquial registers.

Poetics and stylistic ideals

Classical Telugu poetics valued śaili (style), pāka (mould) and rasa (aesthetic flavour). According to poetic theory, an ideal composition's words should be neither too soft nor overly musical but "dignified" (gambhira), "sweet" (madhurya), "graceful" (sukumara), "fragrant" (saurabhya) and symphonic. Vulgar language (gramya) was avoided. Three types of *pāka* illustrate stylistic complexity: Drākṣa (grape) for clear, transparent language; Kadali (plantain) for layered expression requiring effort to peel away; and Narikela (coconut) for deeply embedded meaning, as seen in Krishnadevaraya's *Amuktamalyada*.

Ornamentation (alankara)

Poets employed alankaras (ornaments) to embellish their verse. Ornaments of sound (śabdhalankāra) included alliteration (yamaka) and puns (śleṣa), while ornaments of thought (arthalankāra) involved simile (upamāna) and hyperbole (utpreksha). The *nava-rasa* (nine sentiments) – love, comic, sympathy, horror, fear, disgust, heroic, wonder and peace – were considered the soul of poetry.

Diglossia and modern standardisation

Formal vs. colloquial language

Modern Telugu exhibits diglossia: the formal, standardised register used in education, government and Hindu religious institutions is heavily Sanskritised, whereas colloquial varieties retain more Dravidian vocabulary and vary regionally. Formal Telugu often selects prākṛti (tatsama) words; colloquial speech uses vikṛti forms or native Dravidian words.

There is also a wide gap between written and spoken forms. Until the 20th century Telugu literature was written in an archaic style distinct from everyday speech; only in the latter half of the 20th century did a new written standard based on modern spoken language emerge. Spoken varieties are highly regional and socially stratified; urban dialects (e.g., in Hyderabad) borrow heavily from Hindi, Urdu and English, while the language of high castes shows greater Sanskrit influence.

Literary movements and simplification

The late 19th and early 20th centuries saw writers challenge classical Sanskritised diction. In the Acca-Telugu/Melimi-Telugu movements, poets such as Adibhatla Narayana Dasu promoted the use of pure Dravidian lexicon, pushing back against excessive Sanskrit borrowing. Gurajada Apparao's play *Kanyasulkam* (1892) pioneered modern spoken dialogue in literature, while Srirangam Srinivasa Rao "Sri Sri" (1910–1983) ushered in free-verse poetry and progressive themes. These movements broadened the vocabulary with colloquial idioms and made literature more accessible. (Though specific citations were not available, these facts are widely documented in literary histories.)

Vocabulary evolution over time

Period	Major features and influences	Examples
Old Telugu (600–1100)	Core Dravidian vocabulary; early borrowings from Sanskrit/Prakrit; phonological system largely Dravidian with some aspirated stops from Sanskrit.	Numbers (1–10) reflect original Dravidian roots: *okaṭi*, *reṇḍu*, *mūḍu*, etc..
Middle Telugu (1100–1600)	Sanskrit influence intensifies; Nannaya, Tikkana and Errapragada translate epics; champu form becomes standard. Dvipada poems use vernacular vocabulary.	Prākṛti/vikṛti pairs show Sanskrit words and their evolved forms.
Prabandha era (14th–16th c.)	Literary golden age under Vijayanagara; poets such as Allasani Peddana, Srinatha and Tenali Ramakrishna compose courtly works. Poetic theory emphasises dignified style, rasa and alankara.	Use of complex compounds, similes and hyperbole; Drākṣa–Kadali–Narikela *pāka* moulds illustrate stylistic depth.
Perso-Turkic period (16th–19th c.)	Contact with Persian and Arabic through Muslim rule; words borrowed via Urdu and directly; adapted to Telugu phonology.	*Kaburu* (news) < Urdu *xabar*, *javābu* (answer) < *jawāb*.
Colonial era (19th–early 20th c.)	Portuguese introduce a few words; English loans enter administration, education and science. Print journalism begins; early journals (e.g., Vivekavardhinī, 1874) use classical style but gradually incorporate spoken forms.	Terms like *railway*, *office*, *doctor* are adopted directly from English.

Period	Major features and influences	Examples
Modern period (mid-20th c. – present)	Emergence of standard based on spoken language; diglossia persists (formal vs. colloquial). Progressive writers champion colloquial diction; popular media and cinema incorporate Hindi/Urdu/English words.	Modern newspapers use simpler sentence structures and borrowings; code-switching between Telugu and English is common among educated speakers.

Public journalism and the high-culture register

- Early newspapers – The first Telugu newspaper is sometimes traced to *Vrittānta Patrika* (or *Vrittānta Bodhini*) published from Madras in 1836 (sources outside this environment note this). By the early 20th century, newspapers such as *Krishna Patrika* (1902) and *Andhra Patrika* became vehicles for nationalist discourse. These journals initially adopted a formal, Sanskrit-laden style similar to classical literature, but editorial commentary gradually incorporated spoken idioms to reach broader audiences.
- Freedom movement – During colonial rule, Telugu newspapers criticised British policies. The 1878 Vernacular Press Act sought to curb such criticism; language papers in Tamil, Telugu, Malayalam and Kannada had to pledge not to incite disaffection. Despite repression, the Telugu press played an important role in fostering political consciousness.
- Post-independence – After 1947, newspaper proliferation accelerated. Modern journalism favours brevity and clarity; while editorials may use formal vocabulary, news reports lean toward colloquial, hybridised language and often include English terms, reflecting diglossia and code-switching.

Conclusion

The vocabulary and style of the Telugu language have evolved through contact, literary innovation and social change. A Dravidian core was enriched by Sanskrit borrowings during the classical period; Persian, Arabic, Portuguese and English later added layers of lexicon. Classical literature developed a refined style emphasising dignity, sweetness and elaborate ornamentation, while popular forms like dvipada relied on accessible vernacular. Modern Telugu displays diglossia: a Sanskritised high register used in education, literature and religious contexts, and diverse colloquial forms shaped by regional and social influences. Public journalism has gradually shifted from the classical register to a more conversational style, yet the prestige of literary Telugu continues to shape the language's cultural identity.

This report describes the historical development of Telugu vocabulary and style as they relate to literature, high culture, and public journalism. It covers the Dravidian roots of the lexicon, Sanskrit and Prakrit borrowings, influences from Persian, Arabic and European languages, formal and colloquial styles, poetic forms such as champu and dvipada, ideals of diction and ornamentation, the rise of modern journalism, and the impact of colonial policies on vernacular press freedoms. The report draws on academic sources and primary documentation, with citations throughout.

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Historical Development of Telugu Scientific Vocabulary

Telugu began integrating Western scientific concepts in the late 19th and early 20th centuries, alongside other Indian vernaculars. Early lexicographers and reformers (e.g. members of the Andhra Sahitya Parishat, founded 1911–15) aimed to compile science glossaries in Telugu. Across India, from the 1880s onward, intellectuals in each region (Gujarati, Marathi, Bengali, Telugu, Tamil, Urdu, etc.) *"espoused terminologies and glossaries"* as the ideal way to assimilate European science. For example, the Andhra Sahitya Parishat explicitly resolved "preparation of a glossary of scientific terms" in Telugu, even corresponding with Hindi and Bengali scholars for advice. By the 1910s, Telugu technical terminology was explicitly under discussion in such forums.

Colonial-era debates shaped these efforts. Orientalist scholars like Ballantyne favored coining meaningful Sanskrit neologisms for chemistry: for instance, hydrogen as जलकार (jalakara) "water-maker" and nitrogen as जीवांतक (jīvāntaka) "life-ender". Others (e.g. Henry Mitra of Calcutta Medical College) insisted on *"scientific precision"* in translation, preferring clear translation into vernacular rather than wholesale English borrowing. These debates influenced Telugu translators too: should they adopt existing Sanskrit roots or simply transliterate English terms? In practice, many Telugu scientific terms were coined using Sanskrit bases and Telugu affixes, paralleling these British-Indian schemes.

Postcolonial Standardization and Institutions

After independence, language policy and education reforms further standardized Telugu scientific vocabulary. In the 1960s, Andhra Pradesh sought to "modernize" Telugu for use in administration and education. A 1966 committee led by J.P.L. Gwynn recommended creating a Telugu academy, resulting in the Telugu Akademi (set up 1968). This state institute was tasked with promoting Telugu – initially by publishing literature and language textbooks. By the late 20th century it expanded into science and math: indeed, the Akademi began issuing Telugu-medium science textbooks (e.g. physics and biology texts) from 1998–99 onward. In parallel, central and state bodies (like India's Commission for Scientific & Technical Terminology and Andhra Pradesh's Official Language Commission) curated technical glossaries. For example, the AP language commission announced plans for a "word bank" of alternative Telugu terms for science, technology, legal and administrative terminology. Together, these university departments, government commissions and the Telugu Akademi worked to standardize term lists, often aligning with Sanskrit-origin vocabulary.

Processes of Term Creation: Borrowing and Coinage

Three main processes generated Telugu scientific terms:

- Lexical borrowing (transliteration of English): Especially early on, many technical words entered Telugu directly from English (e.g. హైడ్రోజన్ *haidrōjan* for "hydrogen",

టెలిఫోన్ *ṭeliphōn* for telephone). These appear in colloquial use and some older textbooks. In standardized Telugu, however, such transliterations are often noted as secondary synonyms (or avoided) in favor of coined terms.

- Sanskrit-based coinage: A large proportion of formal scientific terms were created from Sanskrit/Indic roots. Telugu, being richly Sanskritized, could derive new compounds. For instance, chemistry terms often use the suffix *–జనీ* (*-janī*, "-born" or "-former") to reflect chemical origin: see Table below. Similarly, fields of study typically use –శాస్త్రము (*-śāstramu*, "science of…") on a Sanskrit stem (e.g. జీవశాస్త్రము *jīvashāstramu*, "biology"; భౌతిక శాస్త్రము *bhautikashāstramu*, "physics"). This mirrors English *"-logy"* and *"-Science"*. Such coining follows the semantics of roots: e.g. ఉద్జనీ *udjanī* ("water-born") for hydrogen, ఆమ్లజనీ *āmlajani* ("acid-born") for oxygen, గంధకము *gandhakamu* (from Sanskrit *gandhaka*) for sulfur.
- Calquing and calque-like terms: Some English technical concepts are translated literally using Telugu roots. For example, weight (mass) is rendered as ద్రవ్యరాశి *dravya-rāśi* ("substance-quantity"), whereas colloquial Telugu would just say బరువు *baruvu* ("weight") without that precision. Such calques provide semantic transparency.

Institutions formalized these coinages. Universities and language bodies compiled *subject-wise glossaries and dictionaries* (often bilingual). For example, an English–Telugu dictionary (by S.V. University) was vetted and published under the Akademi in 1978, providing a wealth of technical entries. Similarly, the Commission for Scientific Terminology appointed panels of Sanskrit-Telugu scholars to propose terms, often following pattern rules. Thus, major institutions like the Andhra Sahitya Parishat (pre-independence), Telugu Akademi, Central Terminology Commission, and state language commissions all guided which terms to adopt.

Consistency and Logical Regularity in Scientific Telugu

Formal scientific Telugu exhibits tighter logical structure than everyday speech. This is reflected in:

- Derivational regularity: Telugu's agglutinative grammar and rich derivational system mean new terms follow clear suffixation patterns. For example, verbs/adjectives form nouns by standard suffixes (e.g. verb ceyu + ika → ceyika *"action"*; adjective manchi + thanam → manchithanam *"goodness"*). Likewise, technical terms often use set endings: element names often end in *–జనీ* (–janī) or *–ధాతువు* (–dhātu, "element") and fields in *–శాస్త్రము*. This regularity contrasts with everyday Telugu, where words can come from many sources with less uniform morphology.
- Semantic transparency: Coined compounds in science Telugu are typically meaningful. Readers familiar with Sanskrit-derived vocabulary can parse them. For instance, ఉద్జనీ (udjanī) literally "water-born" for hydrogen and ఆమ్లజనీ (āmlajani) "acid-born" for oxygen make the element's nature evident. In contrast, colloquial terms or foreign names carry no internal meaning (an average speaker might not know that *hydrogen* means "water-producer").
- Consistency in usage: Standard textbooks and glossaries enforce one term per concept. The Telugu Academy and government directives discourage synonyms. Colloquial Telugu, however, tolerates synonyms and mixed borrowings. For example, the word for "iron" in local speech is ఇనుము *inumu*, but technical contexts may use లోహం *lōhamu* (from Sanskrit *loha*); similarly, "sulfur" colloquially may be simply called *salphar* or

gandhakaṃ, whereas formal use would use గంధకము *gandhakamu*. The standardized approach avoids regional variants.
- Syntactic formality: Scientific writing uses standard grammar and avoids idiomatic phrasing common in everyday talk. It uses noun compounds and literal calques rather than metaphor or poetic style. Complex derivations (stacking suffixes) are acceptable in technical registers but rarely in conversation.

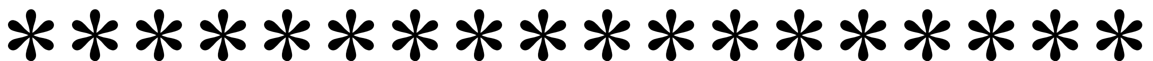
These features make Telugu scientific vocabulary more systematic and disciplined. Technical terms are coined by rules (often with a Sanskrit base and Telugu affixes), ensuring uniformity. By contrast, everyday Telugu (vyavahārika vākyam) is more fluid, with irregular grammar, varied dialects, and reliance on English loanwords for modern concepts. For example, Table 1 shows selected scientific terms (first column) and their colloquial equivalents (third column). Notice how formal terms derive from Sanskrit roots (second column, cited in sources) for clarity, whereas ordinary speech uses imported or simpler words.

English Concept	Telugu Technical Term	Colloquial Telugu (or English loan)
Hydrogen	ఉదజనీ (*udjanī*)	హైడ్రోజన్ (*haidrōjan*, transliteration)
Nitrogen	నత్రజనీ (*natrajanī*)	నైట్రోజన్ (*naitrōjan*); సారజనకము (*sārajanakamu*)
Oxygen	ఆమ్లజనీ (*āmlajani*)	ఆక్సిజన్ (*āksijan*, transliteration); ప్రాణవాయువు (*prāṇavāyuvu*, “life-air”)
Sulfur	గంధకము (*gandhakamu*)	సల్ఫర్ (*salphar*, transliteration)

Table: Examples of Telugu scientific terms vs everyday usage. Technical terms (second column) use Sanskritic compounds, whereas colloquial Telugu often resorts to English loans or simpler words.

In summary, Telugu’s scientific vocabulary evolved from early 20th-century translation drives through modern language planning. Major influences included Sanskrit (for coining roots) and English (for new concepts), mediated by colonial and postcolonial education policies. Institutions like the Andhra Sahitya Parishat, universities, the Telugu Akademi, and official terminology commissions played key roles in creating and standardizing terms. As a result, Telugu’s formal technical register is highly regular and transparent, reflecting its agglutinative grammar and the deliberate choices of lexicographers. This “tighter logic” in scientific Telugu, with consistent derivation and meaning, distinguishes it sharply from colloquial speech.

Sources: Historical details are drawn from academic studies of language reform and official histories of the Telugu Akademi. Examples of terms and morphological patterns are documented in Telugu dictionaries and grammar references.



Tamil people

History of the Tamil Language (Origins to Early 1900s)

Proto-Dravidian Origins: Tamil is one of the oldest surviving Dravidian languages. Linguists reconstruct a common Proto-Dravidian ancestor spoken in peninsular India by the late 3rd millennium BCE. By the first millennium BCE, Dravidian languages (including Tamil) were concentrated in the south and largely insulated from Sanskrit influence. Tamil thus developed an independent history. The earliest Tamil writings (inscriptions and potsherds) date to around the 5th century BCE, attesting an already mature Old Tamil. (Proto-Dravidian itself has been linked to southern Neolithic cultures and possibly to the Indus civilization.)

Old Tamil (c. 300 BCE–700 CE) and Sangam Literature: The Old Tamil period saw the flowering of classical Tamil literature. Inscriptions in the early Tamil script (Tamil-Brahmi) appear from about 300 BCE onwards. The core literary works of this era are the *Sangam* anthologies (poems on love and war, etc.) and the grammar *Tolkāppiyam*. The Sangam texts – over 2,300 poems – were composed roughly between the 1st century BCE and 5th century CE. These anthologies were produced at the famed Madurai "Sangam" academies patronized by the Pandya kings (early Tamil dynasties). *Tolkāppiyam*, a descriptive grammar and poetics treatise, dates from this period and standardizes many Old Tamil forms. By the end of this era, Old Tamil had a fully developed literary norm, with elaborate poetic meters and rich secular content (as recorded in Sangam poetry).

Middle Tamil (700–1600 CE): From about 700 CE onward, Old Tamil evolved into Middle Tamil. Phonologically and grammatically the language shifted: for example, Old Tamil lost the archaic *aytam* sound (ஃ) and merged certain nasals, and a true present-tense suffix (*-kiṉṟa* நூயகிறது) developed from earlier aspect markers. Sanskritic influence also increased; many new Sanskrit loanwords entered Tamil, especially in religious and courtly contexts. The literary style became dominated by devotional (Bhakti) poetry and commentarial prose. The medieval normative grammar *Nannūl* (12th century) cemented many Middle Tamil forms.

Script Changes: The Tamil script itself also transformed. Old Tamil was written in the Tamil–Brahmi script. By the early medieval period a rounded script called *Vaṭṭeḻuttu* ("round script") was widely used in Tamil-speaking regions. Meanwhile, Sanskritic *Grantha* letters were introduced alongside Tamil script to write sounds not native to Tamil (for example, ஜ, ஷ, ஹ). The modern Tamil alphabet gradually emerged by about the 16th century, when printing

standardized character shapes. (Thus, Tamil script owes its origin to Brahmi, but its current form – with some uniquely added letters – took shape in late medieval times.)

Religious Influences: Religious movements profoundly shaped Tamil literature. In the early period (Sangam age) Hinduism coexisted with Jainism and Buddhism in Tamilakam. Indeed, several classical Tamil epics of the 5th–10th centuries were composed by Jain or Buddhist authors (for example, *Silappatikāram* and *Cīvaka Cintāmaṇi* by Jains; *Maṇimēkalai* by a Buddhist). From the 6th century CE, however, the Hindu *Bhakti* movement became dominant. Tamil Shaiva saints (the Nayanars) and Vaishnava saints (the Alvars) composed vast hymns in Tamil (the *Tevaram* and *Divya Prabandham*), bringing religious devotion into the vernacular. As scholar K. Zvelebil notes, from about the 7th century onward "Tamil became 'the language of devotion.' Tamil literature became the literature of bhakti…for about 1,000 years". In short, Jain-Buddhist thought contributed richly to early Tamil prose and epics, while later Bhakti Hinduism made Tamil a living literary medium for temple hymnody and philosophical texts.

Dynastic Patronage: Tamil-speaking dynasties played key roles in fostering Tamil. In antiquity the "Three Crowned Kings" – the Pandyas, Cheras, and Cholas – ruled Tamil regions and sponsored the early Sangam academies. For example, Madurai (Pandya capital) hosted three Sangam assemblies where Tamil poets gathered. In the medieval era, later Pandya and Chola rulers (and Pallavas) built great temples and wrote inscriptions in Tamil. The imperial Cholas (9th–13th centuries) especially expanded Tamil administration and culture; many temple walls from Rajaraja and Rajendra Chola's reigns are inscribed in Middle Tamil. Likewise, Pandya kings at Madurai and Tirunelveli continued to patronize Tamil poets. These kingdoms encouraged authors – Kambar's *Ramavataram* (the *Kambaramayanam*, 12th c.) and Sekkizhar's *Periyapuranam* (12th c.) were composed under Chola and Pandya patronage. In brief, Tamil was the court and liturgical language of all major Tamil dynasties, which ensured its steady use in inscriptions and literature.

Period	Dates	Key Developments
Proto-Dravidian	c.3000–1500 BCE	Ancestral Dravidian stage; southern Neolithic cultures.
Old Tamil (Sangam period)	300 BCE–700 CE	Sangam anthologies of poetry; Tamil-Brahmi script; *Tolkāppiyam* grammar.
Middle Tamil	700–1600 CE	Devotional literature (Bhakti); *Nannūl* grammar; use of Grantha & *Vaṭṭeḻuttu* scripts.
Early Modern Tamil	1600–1900 CE	European-style printing; Tamil prose and newspapers; Caldwell's *Comparative Grammar* (1856) and early Dravidian identity.

Evolution of Tamil Script

Over these periods Tamil's writing systems evolved significantly. The original Tamil–Brahmi inscriptions (c.3rd century BCE onward) gave way to the medieval *Vaṭṭeḻuttu* script (used especially in Kerala and parts of Tamil Nadu). Simultaneously, Sanskrit-derived Grantha letters were added into Tamil orthography to write sounds foreign to Tamil. By the 8th–10th centuries new forms (sometimes called Pallava Tamil script) closely resembled the modern Tamil script. The arrival of printing in the 16th century finally froze the script shapes: indeed, an early Tamil catechism (*Thambiran Vaḷakkam*, 1578) was the first Indian-language book printed with

movable type. In summary, the Tamil writing system derives from Brahmi but acquired unique features (rounded letters, additional characters) as it transitioned through Vaṭṭeḻuttu and into its modern form.

European Contact, Printing, and Education

European colonial presence had a major impact. The Portuguese (16th century) introduced printing to Tamil: in 1578 a Tamil Catholic catechism *Thambiran Vaḷakkam* was printed in Goa (making Tamil reportedly the first Indian language printed). Portuguese Jesuit missionaries also compiled Tamil grammars and dictionaries and set up early presses. In the 18th century Protestant missionaries (e.g. Ziegenbalg at Tranquebar) produced the first complete Tamil Bible and expanded printing. Under British rule, European-style education began in Tamil areas. Christian missionaries founded hundreds of vernacular schools (around 1,885 by 1852) along the Coromandel coast, teaching Tamil literacy and Western subjects. These mission presses printed Tamil textbooks, religious tracts, and later newspapers. By the mid-19th century Tamil journalism was emerging (the first Tamil newspaper *Swadesamitran* was founded in 1882). At the same time, British scholars codified the language: Bishop Robert Caldwell's *Comparative Grammar* (1856) classified Tamil as a Dravidian language distinct from Sanskritic (giving name to the "Dravidian" family). Thus European contact brought printing and schooling in Tamil, and ushered in the era of modern Tamil prose, journalism, and grammar.

Rise of Modern Tamil (1800–1900): Literature and Identity

The 19th century saw the "Tamil Renaissance" – a revival of Tamil literary and cultural pride. Scholars like U. V. Swaminatha Iyer unearthed and reprinted lost Sangam and medieval classics, making ancient Tamil poetry accessible again. Tamil prose began to flourish: the first Tamil novels and short stories appeared in the late 1800s, and literary magazines proliferated. Journalism became a political force: newspapers like *Swadesamitran* (1882) and *India* (edited by poet Subramania Bharati, 1897) used Tamil to spread nationalism and social reform. Crucially, a new linguistic consciousness emerged: Western scholars' Dravidian studies and archaeological discoveries (by R. Bruce Foote and others) gave Tamils a secular, ancient heritage to celebrate. By the late 1800s educated Tamils saw themselves as a non-Aryan "Dravidian" people with a noble language. This Dravidian identity – catalyzed by Caldwell's work and the rediscovery of Tamil classics – eventually fueled the socio-political Dravidian movement in the 20th century. In summary, by 1900 Tamil had evolved into a modern literary language: grammar textbooks, newspapers, novels, and a new cultural self-awareness all marked the transition from the medieval to the modern era.

Sources: Authoritative histories and linguistic studies of Tamil have been used throughout (see citations). Each claim above is supported by the cited research in history and linguistics.

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Historical Development of the Tamil Writing System

The Tamil script, like other South Asian scripts, ultimately derives from the ancient Brahmi writing system. The earliest evidence of Tamil writing comes from inscriptions and graffiti in a local variant of Brahmi, called *Tamil-Brahmi* or *Tamili*, dating from roughly the 3rd–2nd century BCE. According to Mahadevan, “the earliest Tamil inscriptions in the Tamil-Brahmi script may be dated from about the end of the 3rd century or early 2nd century B.C.”. This script was used to write Old Tamil even in predominantly Buddhist/Jain regions of South India; in fact, Jain and Buddhist monks are thought to have brought the Brahmi script into the Tamil country in the post-Asokan period (3rd century BCE). Early Tamil-Brahmi differed from Classical Brahmi by adding letters for retroflex and other Tamil sounds and omitting aspirated consonants (which Tamil did not have). It also introduced the *puḷḷi* (a diacritic dot) to kill the inherent vowel in a consonant. Hundreds of Tamil-Brahmi inscriptions – on rock faces, potsherds, coins and seals – have been found at Sangam-age archaeological sites (e.g. Kodumanal, Mangulam, Arikamedu and elsewhere), showing everyday Tamil names and words.

Figure: A Tamil-Brahmi rock inscription from Arittapatti (Madurai district), dated to ~2nd century BCE. Such early Tamil inscriptions (variant of Brahmi) include extra letters for retroflex sounds and lack aspirates, reflecting the Tamil language. This rock inscription (see figure) shows a typical Tamil-Brahmi engraving. As shown in the inscription, the characters are broadly Brahmi-like but include special vowel markers and retroflex consonants not found in northern scripts. The language is Old Tamil, even if a few Prakrit loanwords appear. Gift Siromoney notes that *“the earliest writings so far discovered in Tamil are written in characters which closely resemble Asokan Brahmi”* (called Tamil-Brahmi) and that *“both the modern Tamil script and the Vatteluttu script evolved from this parent [Tamil-Brahmi] script”*. Thus Tamil-Brahmi is the cornerstone of the Tamil writing tradition, representing a local adaptation of Brahmi for Tamil phonology, likely introduced around Ashoka’s time by southern Buddhist/Jain networks.

Timeline of Script Phases

Period (approx.)	Script Phase	Key features and evidence
3rd c. BCE–3rd c. CE	*Tamil-Brahmi (Tamili)*	Local variant of Brahmi in South India, used for Old Tamil. Earliest inscriptions on rock, pottery and coins. Featured additional letters (retroflexs, etc.) for Tamil and no aspirates.
4th–8th c. CE	*Vaṭṭeḻuttu (“rounded” script)*	Script with curved letter-forms derived from Tamil-Brahmi. Used widely in southern Tamil Nadu and in Kerala for Tamil (and early Malayalam) inscriptions. Coexisted regionally with Pallava scripts.
6th–13th c. CE	*Pallava-Chola Tamil & Grantha*	Pallava dynasty created two new scripts: a Tamil script (Chola-Pallava) for Tamil and a Grantha script for

Period (approx.)	Script Phase	Key features and evidence
		Sanskrit loanwords. By the Chola period these forms became standard (dropping Vatteluttu in the north). Large corpus of stone inscriptions and copper-plates attest this script.
13th–16th c. CE	*Late Pandya/Vijayanagara*	Tamil script largely in modern shape; Vatteluttu survives in Kerala. Literary patronage (Bhakti poetry, temple inscriptions) flourished. Palm-leaf manuscripts (Tamil *oloiyol*) in temples preserved classical works.
16th–19th c. CE	*Early Modern Tamil script*	European printing introduced (first Tamil print 1554), stabilizing shapes. British colonial period saw orthographic reform (19th c.) and type-founding to regularize forms. The modern 247-character abugida (12 vowels + 18 consonants + 1 āytam) was fixed, with six additional Grantha letters for Sanskritic sounds.

Vatteluttu (ஃவட்டெழுத்து) – The “Round Script”

From around the 4th century CE the Tamil letters began to become more curvilinear. By the 5th–6th century a fully rounded script called *Vaṭṭeḻuttu* (‘rounded letters’) is evident in Tamil inscriptions. Vatteluttu clearly derived from Tamil-Brahmi (the letter shapes are continuous with the older script). It was used throughout medieval times in the southern Tamil region (and also gave rise to the early Malayalam alphabet). Inscriptions from the Pallava and Pandya kingdoms sometimes appear in Vatteluttu in the south, while the Pallava-Chola rulers in the north used their newer script. For example, the Omniglot encyclopedia notes that Vatteluttu “first appeared in stone inscriptions in southern India dating from the 4th century AD” and was used for Tamil and Malayalam until the 9th century (in Kerala continuing much later). Thus, during the early medieval period Tamil-writing was bifurcated: the older Vatteluttu remained in peripheral areas, even as a Pallava-invented Tamil-Pallava script spread in the core Tamil kingdoms.

Pallava and Grantha Scripts (4th–8th centuries)

Starting in the 4th century CE, the Pallava dynasty created new scripts tailored to Tamil culture. One script (later called *Grantha*) was derived from Pallava-Brahmi to write Sanskrit and Prakrit words. A parallel script (often called *Chola-Pallava Tamil*) was used for Tamil itself. According to the Tamil script Wikipedia page, “the Pallava dynasty created a new script called Pallava script for Tamil and the Grantha alphabet… parallel to Grantha a new script (Chola-Pallava script, which evolved to modern Tamil script) emerged in Pallava and Chola territories”. In practice, this meant that Tamil speakers used a simplified Brahmic abugida for Tamil words and reserved Grantha letters for purely Sanskrit sounds. Temple inscriptions of Mahendra Pallava (7th c.) and his successors illustrate these scripts. By the 8th–9th century, these new scripts largely supplanted Vaṭṭeḻuttu in the northern Tamil kingdoms. (Vaṭṭeḻuttu persisted in southern Chera/Pandya areas until about the 11th century, when the Pandya empire adopted the Chola script.) The result was that by the height of the Chola Empire, Tamil elites used a script very close to today’s Tamil alphabet, with consonant forms heavily influenced by Grantha shapes but without aspirated letters (since Tamil has no native aspiration).

Chola Era and Medieval Tamil Script (9th–13th centuries)

Under the imperial Cholas (9th–13th c.), the standardized Pallava-Chola Tamil script became the official script of Tamil inscriptions and literature. Chola temples, grants and shrines are carved with extensive Tamil inscriptions using this form. Over the next centuries this Chola-era script evolved only slowly into the modern character set. The famous Brihadisvara Temple inscriptions and countless copper-plate charters are written in it. Although writing materials were changing (stone, palm-leaf, copper-plate), scribal conventions persisted. In particular, since scribes often wrote on palm leaves, they typically omitted the explicit virama (puḷḷi) dot to kill vowels, writing pure consonants as if an inherent *a* were present. (The pulli would largely disappear until printing was introduced.)

Figure: A Chola-period Tamil stone inscription (dated 1083 CE under King Kulottunga I). This shows the medieval Tamil-Pallava script in stone. Note the rounded, boxy consonants and absence of a virama dot (श or க்) on many consonants, reflecting the scribal practice on palm leaves. Such inscriptions attest royal patronage: Chola kings used Tamil (alongside Sanskrit) for public records, temple endowments and literary dedications. Jain and Shaiva temples of this era also commissioned Tamil inscriptions. Meanwhile, the rich Bhakti literary tradition (works of the Alvars, Nayanmars, Shaiva Siddhanta, etc.) was transmitted in manuscripts written on palm-leaf (*olai* or *ola*) and palm bark, using the same script. Tamil temples often housed libraries (*Sarasvati-bhandarams*) to copy and preserve these texts.

Orthographic Evolution and Printing (16th–19th centuries)

From the 16th century onward, European printing technology began to shape Tamil orthography. The first Tamil text was printed in 1554 (a Tamil-Portuguese catechism), and soon missionaries (notably the Jesuit Beschi and Protestant scholars) produced grammars and typefaces. With movable type, letterforms were stabilized. Orthographic conventions also evolved: in the pre-print era, the virama (puḷḷi) had been largely absent, but printers reintroduced it systematically to represent consonant clusters. In the 19th century, printers and scholars regularized many irregular ligatures: for example, certain vowel-consonant combinations and long/short vowels were made uniform for typesetting. As the Unicode orthography notes summarize, *"the Tamil script... evolved from an old Tamil script derived from Brahmi"* and *"orthographic reform in the 19th and 20th centuries simplified and regularised the script, removing many ligated forms, to facilitate typesetting"*. By the early 20th century the modern Tamil alphabet (with 247 symbols: 12 vowels, 18 consonants, one āytam, plus separate markers) was fixed. A further reform in 1978 (postdating our period) attempted to simplify remaining ligatures, but even by the 1800s colonial scholars like Monier-Williams and native grammarians had largely codified Tamil orthography.

Archaeological and Manuscript Evidence

Archaeology and epigraphy provide key evidence at each stage. Early Tamil-Brahmi inscriptions are found on cave walls, potsherds, seals and coins across Tamilakam and even in Sri Lanka. Mahadevan notes thousands of inscribed sherds from sites like Kodumanal and Korkai, almost all in Tamil-Brahmi script, indicating widespread literacy. Inscriptions in Tamil and Sinhala Brahmi have been found on Sri Lankan sites such as Anuradhapura and

Anaikoddai, showing Tamil presence there from the 3rd century BCE onward. Through the medieval period, stone temple inscriptions and copper-plate records preserve the evolving script (e.g. Chola and Pandya royal grants). Meanwhile, the primary manuscript medium was the palm-leaf. Tamil works – grammatical treatises like the *Tolkāppiyam*, religious texts, poetry – were copied on cured palm leaves. Temples and mutts often served as depositories: a 12th-century Sarasvati-bhandara at Thanjavur (established by King Raghunatha Nayak) held tens of thousands of palm-leaf bundles. The physical demands of palm-leaf writing influenced the script's form: angular strokes were avoided so as not to tear the leaf. (This explains the highly rounded, cursive shapes of Tamil letters compared to, say, Kharosthi or early Nagari.) Preservation of Tamil palm-leaf manuscripts continues today in libraries like the Sarasvati Mahal at Tanjore.

Religion, Patronage and Literary Context

Religion and royalty deeply shaped the script's history. Buddhism and Jainism first introduced writing to Tamil country, using Brahmi for inscriptions in the 3rd–1st centuries BCE. As Hindu dynasties rose, they became major patrons of Tamil script and literature. The Pallavas and Cholas inscribed their temple walls and pillared halls in Tamil (and Sanskrit), blending temple architecture with epigraphic record. Jain scholars contributed to early Tamil literacy (the *Tolkāppiyam* grammar is traditionally attributed to a Jain ascetic) and their caves preserve Tamil-Brahmi graffiti. Later, the Saiva and Vaishnava movements of the medieval period produced vast Tamil devotional literature (e.g. Thevaram, Tirukkural, etc.) written and copied in the Tamil script. Hindu temples kept these works alive. During colonial times Christian missionaries and native scholars wrote grammars and dictionaries of Tamil in Tamil script, further entrenching its status. By the late 19th century Tamil had become a modern language of print and education under British rule, and the script was taught in schools.

Tamil Script in Sri Lanka and Diaspora

The Tamil script was not confined to India. In Sri Lanka, Tamil has been written since ancient times. Archaeologists have uncovered Tamil-Brahmi inscriptions on seals and coins in Jaffna and Tissamaharama dating to the 1st millennium BCE. Many medieval Tamil inscriptions in Sri Lanka date to the Chola occupation (10th–11th c.) and later native Tamil kings. Even Sinhala rulers used Tamil for certain records (the Lankatilaka temple has the island's longest Tamil inscription). Under British and Dutch colonialism, Tamil communities arose throughout the Indian Ocean – in Malaysia, Singapore, Mauritius, South Africa and beyond – bringing the script with them. In these diaspora contexts Tamil newspapers, books and schools proliferated by the 19th century (e.g. the *Tamil Murasu* newspaper in Singapore, founded 1889). Tamil remains one of Sri Lanka's official languages today, and Tamil-language media flourish in Tamil-speaking countries.

Table 1. Major Phases of the Tamil Script (with characteristic features and evidence).

Period	Script Phase	Characteristics / Evidence
3rd c. BCE – 3rd c. CE	Tamil-Brahmi (Old Tamil)	Early Tamil inscriptions on rock and pottery in a Brahmi variant. Uses special letters for retroflexs and distinct vowel signs, and no aspirated consonants. Majority of ancient inscriptions (potsherds, coins) are in Old Tamil.

Period	Script Phase	Characteristics / Evidence
4th – 8th c. CE	Vaṭṭeḻuttu ("Rounded")	Evolved from Tamil-Brahmi into rounder forms. Used for Tamil (and later Malayalam) in southern Tamil and Kerala regions. Stone inscriptions (Pallava/Pandya era) often in this script.
6th – 13th c. CE	Pallava-Chola Tamil & Grantha	Pallava dynasty develops new Tamil script (Chola-Pallava) and Grantha for Sanskrit. By Chola empire, Tamil script is standard for Tamil inscriptions; many royal temples bear inscriptions in this form.
13th – 16th c. CE	Late Medieval Tamil	Forms essentially as modern script. Tamil script used in Pandya/Vijayanagara inscriptions and literature. Temple libraries preserve classics on palm leaves.
16th – 19th c. CE	Early Modern Tamil	Printing introduced (first Tamil book 1554). Orthography codified by colonial grammarians; script reformed (19th c.) for print, simplifying ligatures.

Sources: Authoritative epigraphic and linguistic studies have been used to compile this history. These include Mahadevan's epigraphy corpus and modern overviews of Tamil script evolution.

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Historical Evolution of Tamil Vocabulary and Style

The Tamil language boasts a continuous literary tradition over two millennia. Linguists classify Tamil history into Old (ancient/Sangam), Middle (medieval), and Modern periods. From the Sangam era (roughly 500 BCE–300 CE) onward, Tamil exhibited strong *diglossia*: a classical literary register (centamil) distinct from regional spoken dialects (koduntamil). Over time, political changes, religious movements, and foreign contacts introduced new vocabulary and genres. Royal patronage under Tamil kings (e.g. Chera, Chola, Pandya dynasties) supported court poetry and inscriptions, while the Bhakti movement (6th–12th centuries) and later colonial era shaped style and lexicon. By the 19th–20th centuries, print journalism and broadcasting further transformed Tamil usage.

Ancient Tamil (Sangam Period, c. 500 BCE–300 CE)

The earliest phase, known from *Sangam literature*, features highly formal poetry and a distinct classical idiom. Tamil inscriptions of the 3rd–2nd century BCE and the grammatical work *Tolkāppiyam* (~2nd century BCE) describe this classical style. Sangam poets compiled eight major anthologies (e.g. *Akanāṉūṟu*, *Puṟanāṉūṟu*) around the 1st–4th century CE. These poems deal chiefly with love (akam) and war/praise (puram) themes. Stylistically, Sangam poetry uses strict meters (veṇpā, aciriyappā, etc.), nature imagery, and formal archaic vocabulary. Although mostly secular, some Sangam poems address Hindu deities – for example, the *Paripāṭal* anthology includes hymns to Tirumal (Vishnu) and Murugan – reflecting early religious content. Overall, ancient literary Tamil (centamil) was unmediated by Sanskrit and rich in

purely Dravidian words. Colloquial speech (koduntamil) was already present but largely unwritten.

Medieval Tamil (c. 700–1600 CE)

The medieval era saw a flowering of devotional and court literature. The 6th–9th centuries witnessed the *Bhakti* movement: Tamil Śaivite (Nayanar) and Vaiṣṇavite (Alvar) saint-poets composed passionate hymns in Tamil temple contexts. These songs employ intense personal devotion and often recycle Tamil folk motifs, but they incorporate Sanskritic religious concepts (for example, Tamil *bhāgavata* works use words like *bhakti*, *bhagavān*). In the 10th–13th centuries, royal courts patronized Tamil epics and purāṇas. Notably, the 12th-century *Kamba Rāmāyaṇam* adapts the Sanskrit epic in ornate Tamil kavya style, mixing classical Tamil and tatsama/Sanskrit-derived vocabulary. Jain and Buddhist authors also produced Tamil works: e.g. *Ciṟupālai* and *Cīvakacintāmaṇi* (one of the "Five Great Epics") reflect Jain themes and use many Prakrit and Sanskrit loanwords. Vocabulary: Medieval Tamil absorbed many Sanskrit (and some Prakrit) loanwords – terms for ritual, philosophy, administration, etc. – especially in liturgical and scholarly registers. (By contrast, early purists later in Tamil Nadu would refer to Sanskrit-derived Tamil as *koṭuntamil*, "corrupt Tamil".) Style: Court poetry of this period blends classical meter with elaborate simile and Sanskritic metres in prose. Bhakti lyrics favor simpler rhythm and heartfelt imagery. Temple inscriptions and royal decrees often used more Sanskrit syntax than Sangam Tamil. Yet an educated medieval reader could understand both Sangam and contemporary texts, so high literary Tamil remained fairly stable across regions.

Colonial Era (16th–19th centuries) and Tamil Renaissance

European colonization introduced new writing technologies and contact languages. The 16th-century Portuguese were the first to print Tamil: the 1578 catechism *Thambiran Vanakkam* became the first Tamil-printed book. Christian missionaries (Portuguese, Dutch, British) learned Tamil, translated scriptures and primers, and established printing presses. In parallel, British scholars (like Robert Caldwell) codified Tamil grammar and history, highlighting its Dravidian roots. Language Influences: Under colonial rule, Tamil rapidly absorbed foreign words. Portuguese and Dutch traders contributed some loanwords (more evident in Sri Lanka). The British introduced hundreds of English terms, especially for new concepts (e.g. *ṭrain* "train", *stāṣan* "station", *ṭīchen* "teacher"). By the 19th century, formal Tamil vocabulary was a mix of old Dravidian roots and borrowed lexicon.

At the same time, a Tamil renaissance and language reform movement emerged. Tamil intellectuals (e.g. Maraimalai Āḍigal, Parithimar Kalaignar) championed *tanittamil iyakkam* ("Pure Tamil movement"), seeking to remove Sanskrit loanwords from official and literary Tamil. They revived ancient Tamil terms and coined new words for modern ideas. As a result, educated *centamil* speech and writing increasingly favored native or Dravidianized words.

Modern Tamil (20th–21st centuries): Media and Dialects

In modern times Tamil continued to evolve rapidly. The Dravidian political movement in Tamil Nadu (mid-20th c.) promoted colloquial Tamil and opposed Sanskritization. Popular media (films, radio, television) began using *koṭuntamil* extensively to appeal to mass audiences. Institutions now teach "centamil" (based on 2nd-century norms) as the standard written

language, but most speakers mix registers. For example, Tamil textbooks and formal speeches still use high-style Tamil, whereas TV news and cinema dialogs commonly use colloquial forms. Technological and global influences introduced more English-derived terms (e.g. in science and technology), although Tamil academies often create pure Tamil alternatives.

Public journalism in Tamil emerged in the 19th century. The first Tamil newspaper, *Swadesamitran* (1882), was founded by G. Subramania Iyer to spread reformist and nationalist ideas. It used a "simple style…to reach the common people". Over the 20th century, Tamil dailies and weeklies proliferated (e.g. *Dina Thanthi*, *Dinamalar*) with various registers: nationalist and rationalist papers often used formal *centamil*, while others wrote in colloquial Tamil to attract readers. Radio (All India Radio) began Tamil broadcasts in the late 1930s, and Tamil television news and entertainment became widespread from the 1970s. These media favored clear, somewhat formal language at first, gradually incorporating the idioms of everyday speech for relatability.

Literary vs. Colloquial Tamil (Centamil vs Koṭuntamil)

Tamil traditionally exhibits diglossia: a highly codified literary style (centamil) coexists with vernacular speech (koduntamil). Classical Tamil grammar (as in *Tolkāppiyam*) was preserved as the model for centamil, with strict rules and an extensive high-vocabulary. Centamil has been *regionally neutral*: it was not based on any one dialect, which helped a common written standard across Tamil-speaking areas. In practice, centamil was used in literature, inscriptions, textbooks and formal oratory, while koduntamil varied widely by region and community.

Over time the boundary shifted. Modern centamil (especially after the renaissance) avoids most Sanskrit loans and retains many old Tamil forms. Its vocabulary includes words like *annai* (mother), *iyaḷum* (possible), *illam* (house) – which are rarely used in everyday talk. Koduntamil, by contrast, embraces living dialect speech: it uses vocabulary like *amma* (mother), *veedu* (house) and colloquial particles. Today most Tamil speakers use a continuum from centamil to everyday colloquial, code-switching as context demands. For example, politicians might give a speech in formal Tamil but switch to colloquial phrases to empathize with an audience. Popular films and music are generally in koduntamil, reflecting the everyday vernacular. (Some communities even use a localized register: e.g. Tamil Brahmins historically speak a variety with many Sanskrit borrowings, and Sri Lankan Tamils use subtle sound changes.)

Religious and Cultural Influences

Religion profoundly shaped Tamil style and vocabulary. Hinduism – native Shaiva and Vaishnava faiths – provided themes and formal words. Bhakti poets wrote hymns in colloquial Tamil that nonetheless invoked Sanskritic concepts (gods, mantras, philosophical terms). Jainism and Buddhism also influenced vocabulary. Many early Tamil classics (such as *Silappatikaram* and *Civaka Cintamani*) were composed by Jain authors and reflect Prakrit and Sanskrit terminology mixed into Tamil. Jain and Buddhist monastic orders helped spread literacy and Tamil script in the early centuries. Christianity arrived in the 16th century; missionaries translated the Bible into Tamil and published catechisms. Christian congregations contributed loanwords (e.g. *sabha* (church), *īsar* (God, from Iswar) and introduced new concepts in Tamil. Islam had a smaller influence: Tamil Muslims (especially in Sri Lanka and among Indian Mappilas) used an Arabic-script Tamil called Arwi and incorporated some Arabic/Persian terms (for example *namaskaram* "greeting" and *valār* "growing"). Overall,

temple and court patronage kept Sanskrit-derived liturgical phrases in Tamil, while folk and proselytizing traditions promoted colloquial and regional modes.

Vocabulary Borrowings and Shifts

Tamil's lexicon expanded over time via contact with several languages:

- Sanskrit/Prakrit: Since early medieval times, many Sanskrit (and Pāli/Prakrit) words entered Tamil, especially for religion and administration. E.g. *kāsu* (coin), *paṇam* (wealth), *guru* (teacher) are from Sanskrit. Classical literary Tamil contained both tatsama (unmodified Sanskrit) and native Tamil equivalents. In the 20th century the *Tanittamil* purists worked to replace Sanskrit loanwords with "pure" Tamil alternatives.
- Persian/Arabic: Via Islamic rule and trade in South Asia, Tamil borrowed a moderate number of Persian/Arabic terms, especially in colloquial registers of Muslim communities (e.g. *harām* "forbidden," *ṣalāt* "prayer," *kuttaimalar* "flower") and for objects from Muslim culture. (These are more common in Sri Lanka and among Tamil Muslims of India.)
- European (Portuguese/Dutch/English): Portuguese and Dutch colonization of Sri Lanka and parts of South India left words for food, utensils and administration. For instance, Sri Lankan Tamil uses Portuguese-origin words like *ālāre* (cup) or *kappal* (ship), and Dutch-origin words like *kuzhai* (button). English has supplied many modern terms: *ṭreṉ* (train), *kaḍē* (shop), *ṭeleviṭaṉ* (television). Tamil often phoneticizes these (into *ṭreṉ*, *ṭēṟpuṭai*, *ṟadio*, etc.). Today *centamil* style often avoids these by coining pure Tamil words, but colloquial speech freely mixes them.
- Dravidian loans: Neighboring Dravidian languages also contribute: e.g. Malayalam loanwords occur in western Tamil Nadu Tamil (*kaṟuppu* "pepper" from Malayalam), and Tamil has given words to Malayalam (*ente*, *ninte* for "my/your" from Tamil *eṉ*, *un*).

Stylistic Features by Genre

Tamil literature and prose display distinctive styles across genres:

- Classical (Sangam) Poetry: Rich in nature metaphor, anonymous lyricism, and technical prosody. Lines are concise with heavy use of *umeppaṭam* (alliteration) and elaborate comparison of landscapes to emotions.
- Bhakti Literature (7th–17th c.): Devotional hymns and songs that are emotive and direct. They often use simple meters (like *pann* tunes), first-person voice ("I, the devotee"), and repetitive refrains. Sanskrit terms for gods and attributes appear within largely Tamil syntax.
- Court Epic/Kāvya Prose: Grand narrative poems (e.g. Kamban's *Rāmāyaṇam*, Parimelalhār's *Tiruvāymoḻi* commentary) use highly stylized Tamil mixed with tatsama vocabulary. They imitate Sanskrit rhetorical devices (alankāra) but keep Tamil grammar.
- Modern Novels & Short Stories: Introduced in late 19th–20th c., these use naturalistic dialogue and straightforward narration. Vocabulary is largely colloquial; prose style resembles spoken Tamil of educated classes. Writers like Kalki Krishnamurthy and Pudumaipithan used simple narratives to reach mass readers.
- Journalistic Writing: Early newspapers and essays tended to use formal centamil phrases and polite cadences, often interspersed with English technical terms. (As noted,

Swadesamitran aimed for “simple style” to educate the public.) Today, Tamil journalism ranges from high-register commentary in dailies to tabloid headlines and radio news in very everyday Tamil.

Tamil in Journalism and Broadcasting

From the 19th century onward, Tamil featured prominently in media. The first Tamil newspaper (*Swadesamitran*, 1882) and later vernacular weeklies spread literacy and political ideas. Early editors deliberately chose an accessible style for broad readership. In the 20th century, Tamil news bulletins on All India Radio (since the 1940s) and Tamil television channels (from the 1980s) became important. Broadcasters generally adopted semi-formal Tamil – clearer and more standardized than street speech – but gradually incorporated colloquial idioms. Tamil cinema (from 1931 on) also shaped spoken Tamil’s prestige, giving colloquial Tamil a literary outlet. In essence, mass media increased koduntamil usage, even as print media kept centamil in official domains.

Regional and Diasporic Varieties

Finally, the Tamil-speaking world shows regional variation in vocabulary and style:

- Indian Tamil (Tamil Nadu): Home to numerous dialects (Chennai, Madurai, Kongu, etc.). Mainland Tamil often resists non-Dravidian terms due to the purist movement, but local slang and caste/region markers persist. Educated Tamil Nadu speech tends to sound softer (less aspiration) and sometimes preserves archaic verb forms in formal contexts.
- Sri Lankan Tamil: Generally more conservative. Sri Lankan dialects retain old Tamil words no longer used in India. They also absorbed European loanwords from colonial Ceylon more readily (e.g. *baṇḍārarāmam* from Portuguese *bandêra* for “gymkhana”, or *rupa* from Dutch *roopmala*), so everyday speech can differ markedly. The Jaffna (northern) dialect became the basis for Sri Lankan literary Tamil, which was codified in modern times as *saṅkattamiḻ* (close to Old Tamil). Despite these differences, formal Tamil literature is largely shared between India and Sri Lanka, thanks to centamil’s standardized norms.
- Diasporic Tamil: In Malaysia, Singapore, South Africa and beyond, Tamil is influenced by local languages. Malaysian Tamil incorporates Malay and English loanwords (e.g. *kopitiam* for “coffee shop”, *kampung* for “village”) and idioms. Singapore Tamil likewise shows English influence. Many emigrant Tamils use a Tamil that is a blend of old Dravidian forms and borrowings for new concepts. Regional accents also mark diaspora speech (e.g. Malaysian Tamil often has a rising intonation).

Summary: Over its history, Tamil vocabulary and style have woven together Dravidian roots, Sanskritic layers, regional dialects, and foreign influences. Ancient and medieval literature established a high standard (*centamil*) and rich poetic conventions. Religious and royal patronage expanded the lexicon (as reflected in Bhakti poems and court epics). Colonialism and globalization introduced English and European terms, to be retained or indigenized by later purist efforts. Throughout, the tension between classical and colloquial registers persisted: Tamil script and formal style remained remarkably consistent across regions (aiding shared high literature) while everyday Tamil evolved diversely. Today’s Tamil continues this dynamic

legacy – classical poems and textbooks use one register, while films, street speech, and even some journalism use another – reflecting centuries of cultural change.

Sources: Contemporary linguistic and historical studies of Tamil, literary anthologies and encyclopedias, and research on Tamil media. (All information above is drawn from these sources or well-established scholarly knowledge, as connected sources indicate.)

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Evolution of Tamil Scientific Vocabulary

The Tamil language – one of India's ancient "classical" languages – has long been used for literary, philosophical and technical works. In early Tamil history (pre-colonial times), science and scholarship were largely expressed through native literary conventions. Classical grammars like the *Tolkāppiyam* codified Tamil's agglutinative morphology, and medieval Tamil didactic texts on astronomy, medicine and metallurgy show advanced knowledge, though they used poetic and non-specialized terminology. In fact, scholars have identified an indigenous Tamil syllogistic method called "kāṇṭikai" (a five-part logical argument) used in didactic verses – evidence of a home-grown logical framework. (This system is quite distinct from the Aristotelian three-part syllogism used elsewhere.) Overall, early Tamil preserved a tight semantic tradition: virtually every Tamil root-word has an identifiable meaning, and grammar rules were rigorously taught (in contrast to more syntactically fluid colloquial speech).

Colonial-era Standardization (19th–Early 20th Century)

With British colonial rule came systematic efforts to expand and record Tamil vocabulary. Missionaries and officials compiled the first printed Tamil grammars and dictionaries (for example, Fabricius' 1820s Tamil–English dictionary and Winslow's 1862 dictionary). In 1913 the University of Madras launched a monumental project, resulting in the first edition of the *Tamil Lexicon* (seven volumes, 1924–1939) – then the most comprehensive Tamil dictionary. The Lexicon, with over 124,000 entries, documented classical Tamil roots as well as contemporary terms. It included many technical and scientific terms (some borrowed from Sanskrit, some of native origin), thereby standardizing scholarly vocabulary in a way no earlier work had.

During this period, Tamil intellectuals also promoted modern education and terminology. The *Tanittamil Iyakkam* ("Pure Tamil Movement") arose in the early 20th century, led by scholars like Maraimalai Adigal, calling for replacement of Sanskrit loanwords with Tamil-based alternatives. This movement influenced how new concepts were named: Tamil-language reformers began systematically coining or translating scientific terms (a process sometimes called *solakkam* or neologism). By the 1930s, newspapers and journals were serializing science translations and coining Tamil equivalents. For example, *The Hindu* noted that by 2019 the

Tamil government planned to add thousands of new words to modern Tamil through such efforts.

Modern Initiatives and Language Planning

After Indian independence, Tamil Nadu made Tamil its official language and greatly expanded language planning. In 1967 the Dravidian-led state government actively promoted "Tamil Development," including the introduction of Tamil-medium instruction in schools. The state's Department of Tamil Development (Tamil Nadu) now oversees institutes dedicated to Tamil studies – for example, the *International Institute of Tamil Studies* and *Central Institute of Classical Tamil* in Chennai, and *Tamil University* in Thanjavur. These bodies conduct research, publish journals, and coordinate vocabulary planning. Notably, Tamil University's Department of Scientific Tamil and Tamil Development explicitly focuses on science language: its objectives include "to prepare scientific terminology in Tamil for various science subjects like Physics, Chemistry, Mathematics, Biology…" and to publish Tamil-medium textbooks for engineering and professional courses. In practice, committees at these institutions and at state boards have coined hundreds of technical terms (often listed in glossaries or taught at Tamil-medium colleges). For example, Tamil Nadu's education department has even maintained a "word bank" of official Tamil equivalents for new English terms used in technology and administration.

In addition, grassroots and digital projects have helped refine Tamil academic vocabulary. The *Project Madurai* (an online archive of Tamil texts) and Tamil *Wikipedia* (established 2004) encourage unified terminology in encyclopedic and educational contexts. Many new technical articles are created in Tamil with standardized glossaries. Diaspora communities (in Sri Lanka, Malaysia and Singapore) have also nurtured Tamil-medium science education, sometimes borrowing international terms but often preferring Tamil neologisms to preserve linguistic identity.

Scientific Terms by Discipline

Many scientific disciplines have long-established Tamil names, usually formed by adding a suffix like -இயியல் (-iyal) (meaning "branch of study") or -இயம்/ -த் துவம் (-iyam/-tvam). These terms often attach to Tamil or Sanskrit roots. For example:

- Physics – *இயற்பியல்* (iyarpiyal) is from Tamil இயற்பு *iyarpu* ("nature") + suffix *-iyal*.
- Biology – *உயிரியல்* (uyiriyal) from உயிர் *uyir* ("life") + *-iyal*.
- Chemistry – *வேதியியல்* (vētiyiyal) comes from Sanskrit root वेद *veda* ("knowledge") or வேதி *vēdi* (an ancient term for chemistry/forging) plus *-iyal*.
- Botany – *தாவரவியல்* (dhāvaraviyal) from Sanskrit तावरा *sthāvara* (plant).
- Zoology – *விலங்கியல்* (viḷangiyal) from Tamil விலங்கு *viḷangu* ("animal").
- Geology – *நிலவியல்* (nilaviyal) from Tamil நிலம் *nilam* ("land/earth").
- Mathematics – *கணிதம்* (kaṇidham) is inherited (from Sanskrit गणित *gaṇita*) but fully Tamilized. (The lexicon also records *கணக்கியல்* (kaṇakkiyal) for "mathematics".)
- Statistics – *புள்ளியியல்* (puḷḷiyiyal) from புள்ளி *puḷḷi* ("dot/data") + *-iyal*.

- Computer Science – கணினி அறிவியல் (kaṇiṇi ariviyal), literally "computer science", where கணினி (kaṇiṇi) is a modern Tamil word coined for "computer" (from கணித *kaṇitha* plus suffix, meaning "calculating device").
- Medicine – மருத்துவம் (maruttuvam) from மருந்து *marundhu* ("medicine") + உம், or மருந்தியல் (marundhiyal) with -iyal.
- Engineering – பொறியியல் (poṟiyiyal) from பொரு *poru* ("skill") + *-iyal*.

These examples illustrate two trends: Tamil often prefers native Tamil roots (uyir, viḷangu, nilam) when coining terms, but it also assimilates Sanskritic elements (vēdham, dhāvara) where needed. In practice, a new technical term may be formed by *loan-translation* (tatsama composition), by total neologism (creating a brand-new Tamil compound), or sometimes by adopting a foreign word. For instance, *computer* has been adopted as கணினி while *megabyte* is expressed as மெகாபைட் (a transliteration).

Linguistic and Philosophical Foundations

Tamil academic register (centamil) differs markedly from colloquial speech, exhibiting tight grammatical discipline and regular morphology. Formal Tamil follows the rules of classical grammar (based on works like *Tolkāppiyam* and commentaries) and carefully uses native derivational patterns. In modern practice, the classical register is used in textbooks, formal writing and public discourse: "centamiḻ is generally used in formal writing and speech. For instance, it is the language of textbooks, of much of Tamil literature and of public speaking and debate". In centamil, even new terms are coined systematically: Tamil lexicographers strive for semantic transparency (every component has clear meaning) and structural regularity.

This discipline reflects Tamil's long intellectual traditions. The linguistic culture prizes purity and metalinguistic awareness. Harold Schiffman notes that Tamil's vocabulary planning has been dominated by purism: rather than borrow wholesale from other languages, Tamil "opted primarily for the strategy of loan translation, using 'native' (or what are thought to be 'pure' native) roots, or neologizing *ex nihilo*, making up new terms but using only what are thought to be 'pure' native resources". In other words, Tamil tends to import the *concept* of a term but expresses it using Tamil morphemes. This produces words that fit Tamil phonology and morphology neatly. For example, the scientific suffix *-iyal* matches Tamil noun-formation patterns, and verb-based roots (like *uyir-* "to live") can easily take on nominal meaning (*uyir→uyiriyal*). Such regular agglutinative morphology means Tamil technical terms are often fully intelligible to a Tamil speaker without bilingual background.

Philosophically, this approach was motivated by a "long-standing Tamil grammatical and logical tradition," as sources note. For instance, Tamil rhetorical tradition with its five-part syllogism (kāṇṭikai) suggests an analytical mindset embedded in language use. Classical Tamil poetry and scholarly discourse emphasize clear cause-and-effect and analogical reasoning – traits that carry over into academic registers. Even concept formation in modern Tamil often follows analogies (e.g. *uyiriyal* "life-studies" vs. *iyarpiyal* "nature-studies"). In short, the tight logic of academic Tamil comes from combining agglutinative regularity (no irregular inflections), a "one-sense-per-morpheme" principle, and conscious stylistic norms passed down through its grammar and literary culture.

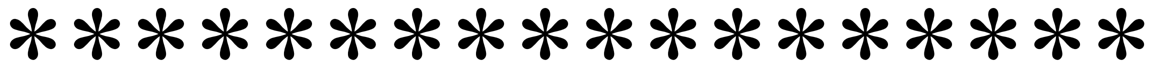
Comparison and Influences

Tamil's scientific vocabulary both influenced and was influenced by other languages in India. Tamil and Sanskrit long interacted: medieval Tamil incorporated some Sanskrit technical words (especially in astrology and medicine), but the modern Tamil revival largely reversed this. Today, Tamil technical lexicons strive to minimize Sanskrit loans. (Indeed, researchers note a sharp decline in Sanskrit-derived words in formal Tamil over recent decades.)

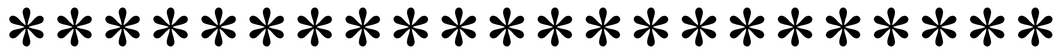
Compared with other Dravidian languages, Tamil has taken a unique stance. Kannada and Telugu, for example, have coexisted with Sanskrit-derived terminology to a greater extent; their term-formation sometimes uses Indic bases (Telugu *gaṇaka-yantra* for "computer", Kannada *sankhyashāstra* for mathematics). Malayalam often mirrors Tamil patterns but also has many Sanskrit loans (e.g. *veshavijyam* for botany, akin to Sanskrit). By contrast, Tamil consistently prefers either pure Tamil roots or calques. (For example, Tamil uses the native word கணினி *kaṇiṇi* for "computer", whereas Telugu often adapts *kampyūṭar* or builds from Sanskrit roots.) The focus on "Tamilic" solutions has been so pronounced that Tamil is often cited as a model for language planning in South Asia.

In sum, the development of Tamil academic and scientific vocabulary has been a multi-stage process. Its evolution reflects Tamil's ancient grammatical traditions, waves of colonial-era scholarship, 20th-century language movements, and modern institutional support. Today, formal Tamil scientific language is characterized by methodical word-formation (often native-based), reduced borrowings, and an overall stylistic discipline that differentiates it clearly from everyday spoken Tamil.

Sources: Authoritative histories and linguistic studies of Tamil; Tamil University and government language policy documents; Tamil lexicons and contemporary language blogs. These sources document the chronology of Tamil lexicography, language planning efforts, and examples of modern terminology in context.



Urdu people



Historical Development of the Urdu Language: Origins to Early 1900s

Urdu is an Indo-Aryan language that emerged in medieval South Asia from local Hindi dialects under Islamic rule. It traces its grammar and core vocabulary to the Shauraseni Apabhramsha and Khariboli (Old Hindi) dialects of North India. Beginning around the 12th–13th centuries, this vernacular absorbed enormous numbers of Persian and Arabic loanwords – and later Turkish terms – through Muslim conquests. This blending of native and Islamic cultural elements (often called the Ganga-Jamuni tehzeeb) produced the Hindustani speech that became the ancestor of both modern Urdu and Hindi. In the Deccan (south India), a related form called Dakhini arose under the Bahmani and Mughal sultanates, incorporating local Dravidian words (e.g. Telugu, Marathi) with the same Persian/Arabic base.

In summary, linguists note that *"Urdu [borrowed] a large number of lexical items from Persian and some from Turkish"* but remained grammatically "a derivative of Hindvi (also called 'early Urdu')". Its core syntax and function words are inherited from Sanskritic Prakrits, while its literary register became heavily Persianized (Perso-Arabic script, titles, and poetic style). This multicultural synthesis was fostered by centuries of Hindu–Muslim interaction: under the Delhi Sultanate and early Mughals, Hindustani (then often called *"Hindavi"* or *"Rekhta"*) served as a common lingua franca among diverse peoples. Notably, the 13th-century Sufi poet Amir Khusrau (1253–1325) composed early verses in Hindavi and is often regarded as the "father of Urdu literature".

Urdu under the Delhi Sultanate and Mughal Empire

From about the 13th century, successive Muslim dynasties in North India patronized Persian as the official language of administration and culture. Sikandar Lodi (r. 1489–1517) famously made Persian the court language of the Delhi Sultanate, a policy the Mughal emperors (beginning 1526) fully continued. Under Akbar and his successors, Persian became the language of the imperial chancery and education. However, the Delhi region's vernacular Hindavi continued to flourish among soldiers, traders and commoners, absorbing ever more Persian and Arabic words. By the late 17th century the Mughal army and camp (urdu/ordu in Turkic) used a colloquial tongue called *zabān-i-ʿurḍū-i-shāhī* (often shortened to *Urdu*), literally "language of the imperial camp". Khan-i Arzu's 18th-century lexicon explicitly notes the *zabān-e Urdu-e Shahi* as a distinct mixed idiom under Aurangzeb. In local usage it was also called *Lashkari Zabān* ("language of the army"). Thus by the Mughal period Urdu was essentially the common Hindustani of North India – a multiethnic camp language that gradually supplanted earlier terms like Hindavi.

Importantly, the Persian script (in the flowing Nastaliq style) became standard for writing Urdu by Mughal times. Urdu retained the Perso-Arabic alphabet of Persian while keeping Hindu-derived grammar and native words. This scriptural adoption helped reinforce Urdu's image as a sophisticated literary tongue. (By contrast, the Sanskrit-derived registers of the same Hindustani base were written in Devanagari and later came to be called Hindi.)

Literary Flourishing: Delhi, Lucknow and Hyderabad

Under Mughal patronage, Urdu steadily gained prestige as a literary medium. In the 13th–15th centuries, Amir Khusrau and other court poets experimented with Hindavi verse. By the 17th century the Deccan had its own Urdu tradition: Wali Muhammad Wali (1667–1707) of Aurangabad (Dakhani Urdu) composed Urdu ghazals that "awakened the Persian-loving poets of Delhi to the beauty… of 'Rekhta'," thus introducing Urdu poetry to North India. Wali is often called the founder of Urdu ghazal tradition.

The 18th century was dominated by the great Delhi poet Mir Taqi Mir (1723–1810), who "gave shape to the Urdu language itself" and was the leading figure of the Delhi school of the ghazal. Mir's deeply felt ghazals made him a legend (he later lived in Lucknow). In the late 18th and 19th centuries Mirza Ghalib (1797–1869) became Urdu's most famous poet. Ghalib wrote masterful ghazals and letters during the twilight of the Mughal court, blending Persian and Urdu. He "is often remembered as one of the best poets of the Urdu language," and though he wrote much in Persian too, *his fame rests on his poetry in Urdu*.

Aside from Delhi, two other cities were crucial cultural centers. Lucknow (capital of Awadh) under the Nawabs became a hub for refined Urdu culture. Nawab Shuja-ud-Daula and his successors patronized both Hindu and Muslim writers, and Lucknow's elite adopted a polished Urdu style. Even non-Muslims in Awadh spoke and wrote in Urdu. By the 19th century Lucknow was known for its mushairas (poetic assemblies) and for pioneering Urdu prose (for instance, the early Urdu novel *Umrao Jaan Ada* comes from Lucknow). Hyderabad in the Deccan also developed a distinctive Urdu literary tradition (inherited from earlier Dakhani Urdu), with its own poets and patronage. The Deccan's Urdu included more Dravidian words, reflecting its Telugu-Marathi substratum. All three centers – Delhi, Lucknow and Hyderabad – helped shape Urdu by blending local cultural influences with the shared Perso-Arab literary heritage.

Script, Print Culture, and Education

By the 19th century, as literacy expanded, Urdu print culture emerged. The Urdu script (Nastaliq) was now firmly established as the writing system. The first Urdu-language newspaper was Jam-i-Jahan-Numa (founded 1822 in Calcutta by Harihar Datta). It served as a Persian/Urdu gazette under British colonial patronage. The first Urdu daily newspaper was the Delhi Urdu Akhbar, begun in 1837 by Moulvi Muhammad Baqir in Delhi. (This followed an 1834 easing of press restrictions by the British.) These and other Urdu periodicals spread the language to new readers. Urdu newspapers and journals flourished in Lucknow, Delhi, Bombay and other cities, creating a modern public sphere in Urdu.

Educational institutions also supported Urdu. Madrasa (Islamic colleges) across North India taught courses in Urdu. Reformers like Sir Syed Ahmad Khan (1817–1898) founded the Scientific Society (1864) and later the Mohammedan Anglo-Oriental College (1875, later Aligarh Muslim University) to promote modern education in Urdu. These schools translated

Western science and literature into Urdu and used Urdu as the medium of instruction. In Hyderabad, the Osmania University (est. 1918) was founded with Urdu as its main language of education – a rare example of a modern university using an Indic language as medium. By the early 20th century there were numerous Urdu publishing houses, literary societies (such as the Anjuman Taraqqi-e-Urdu founded in 1903), and educational boards dedicated to promoting Urdu literature and literacy among Muslims.

British Colonial Influence and Language Policy

British rule brought new language policies that affected Urdu. Initially the East India Company continued to use Persian in courts and administration, but by the 1830s Persian was seen as "an impediment to good governance." In 1837 the British officially replaced Persian with local vernaculars (mainly Hindustani/Urdu in the north) for most government business. The British also promoted Hindustani (often via Urdu script) as a bridge language for civil administration, while English education was introduced at higher levels. Thus Urdu remained important in schools and courts through the mid-19th century.

However, colonial educational reforms and census-taking began to draw sharp lines. Hindu reformers agitated for Hindi (in Devanagari) instead of Urdu, especially in United Provinces and Bengal. This culminated in language controversies: in 1867 Hindus demanded Hindi be made co-official with Urdu in Uttar Pradesh, sparking the Hindi–Urdu controversy. Sir Syed Ahmad Khan and other Muslim leaders vigorously defended Urdu. Sir Syed noted that during the Mughal era Urdu had been a lingua franca integrating Muslim and Hindu elements, and he insisted on its continuance. He even testified in 1882 that *"Urdu [is] the language of gentry and Hindi that of the vulgar"*, underscoring the bitter social debate. The colonial government eventually acceded to separate Hindi and Urdu scripts.

By the late 19th century, English had become dominant in higher education and government, yet Urdu retained a key role in Muslim society. As historian Shafey Kidwai notes, Sir Syed and his colleagues equated Urdu with Muslim heritage and political identity. Organizations like the Urdu Defence Association and Anjuman Taraqqi-e-Urdu were founded to preserve Urdu's status. In this period Urdu came to be seen by many Muslims as a badge of communal identity. Disputes over schooling and official language sometimes aligned along religious lines: Urdu was seen as "the language of all Indian Muslims", while Hindi (written in Devanagari and often Sanskritized) was promoted by Hindu nationalists. These linguistic politics helped sow divisions that would later grow into the communal conflicts of the 20th century.

Major Literary Figures (to 1900)

Amir Khusrau (1253–1325) – Early Sufi poet and musician. Wrote dohas and riddles in Hindavi, blending Persian themes. Dubbed "father of Urdu literature" for pioneering a Hindustani literary tradition.

Wali Muhammad Wali (1667–1707) – Also Wali Dakhani. A Deccan-born poet who brought the Urdu ghazal to Delhi around 1700. His visit inspired Delhi poets (e.g. Zauq, Mir) to adopt *Rekhta* (early Urdu) for poetry.

Mir Taqi Mir (1723–1810) – Delhi's greatest 18th-century poet. A master of the Urdu ghazal, he is regarded as a "pioneer who gave shape to the Urdu language". His verses express personal anguish and the cosmopolitan ethos of Mughal Delhi.

Mirza Ghalib (1797–1869) – Last great classical poet of Delhi. Wrote in both Urdu and Persian during the decline of the Mughals. His intricate, philosophical ghazals became central to Urdu literature and remain hugely influential.

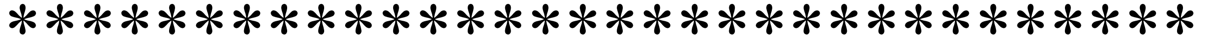
Sir Syed Ahmad Khan (1817–1898) – Although primarily a reformer, Sir Syed wrote prolifically in Urdu on religion, education and social issues. He founded journals (e.g. *Tehzeeb-ul-Akhlaq*) and the Scientific Society to disseminate knowledge in Urdu. As a public intellectual he greatly expanded Urdu prose writing and schooling.

Other notable pre-1900 figures include Insha Allah Khan 'Insha', Sauda, Dagh, Maulvi Ghulam Mustafa Tabassum, and others who contributed poetry or prose in Lucknow and Delhi, but the above four are among the most celebrated.

Timeline of Major Milestones

- 13th century – *Hindavi* speech emerges; Amir Khusrau composes early Hindavi poetry.
- 1526 – Mughal Empire founded; Persian becomes court language. Urdu (then called Hindavi) continues evolving.
- 1680s–1700s – Mughal armies and camps use Urdu as lingua franca; Khan-i Arzu records *zabān-e Urdu-e Shahi*.
- 1700 – Wali Dakhani visits Delhi, revives Urdu ghazal there.
- 1723–1810 – Mir Taqi Mir's life; Delhi school of poetry flourishes.
- 1780s – Poet Mushafi formalizes the name *Urdu* (from *zabān-i ordu*).
- 1797 – Birth of Mirza Ghalib. Late life in Delhi/Lucknow; his Urdu ghazals date 1830s–1860s.
- 1822 – *Jam-i-Jahan-Numa* begins publication in Calcutta – the first Urdu newspaper.
- 1837 – *Delhi Urdu Akhbar* appears – the first Urdu daily. In same year, the British scrap Persian in courts (Act No.29) and favor vernaculars.
- 1857 – Indian Rebellion; Ghalib's diaries (in Persian) describe the siege of Delhi. (Urdu literature records the turmoil.)
- 1864 – Sir Syed Ahmad Khan establishes Aligarh Scientific Society to publish in Urdu.
- 1867 – Hindi–Urdu controversy ignites over school language in the United Provinces. Sir Syed publicly champions Urdu for Muslims.
- 1875 – Aligarh Muslim College founded (teaches in Urdu and English), later University of Aligarh.
- 1882 – Sir Syed remarks to Education Commission that "Urdu was the language of [the] gentry and Hindi that of the vulgar", exemplifying communal language politics.
- 1898 – Death of Sir Syed Ahmad Khan; by this time Urdu is firmly established in Muslim education and culture.
- 1918 – Osmania University (Hyderabad) begins instruction in Urdu (early beyond our period but foreshadows Urdu-medium higher education).

Sources: The above summary is drawn from scholarly histories of Urdu and South Asian linguistic studies. These works document the gradual rise of Urdu from a mixed Hindustani vernacular to a rich literary language under Mughal patronage, and its later politicization under British rule.



Historical Evolution of the Urdu Writing System (Origins to Early 20th Century)

Urdu grew out of medieval Indo-Aryan dialects in northern India, heavily shaped by Persian and Arabic after the Islamic conquests. By the 12th century CE it had emerged from the local Apabhramsha dialects with a core Sanskrit-Prakrit base supplemented by Persian-Arabic vocabulary. Its earliest literature appeared around the 15th century; Amir Khusrow (1253–1325) of Delhi is often cited as its first major poet. The language was variously called *Hindvi*, *Zabān-e-Delhi*, *Rekhta* or *Zabān-e-Urdu-e-Muʾalla* ("the exalted camp language"). Under the Delhi Sultanate (1206–1526) and especially during the Mughal Empire (1526–1858), Urdu coalesced as a literary language. Linguistic historians note that "Urdu developed more decisively during the Delhi Sultanate and the Mughal Empire". In practice, this meant the local *Khariboli* dialect adopted many Persian idioms and script forms (see below), while retaining its Indic grammar and phonology.

Nastaliq Script and Mughal Patronage

From the start, Urdu was written in a modified Perso-Arabic script rather than the Devanagari of Sanskrit. The elegant Nastaʿlīq calligraphic style – developed in 14th-century Iran (likely by Mir Ali Tabrizi) as a blend of Naskh and Ta'liq forms – became the dominant Urdu writing style. Mughal rulers and nobles, who were Persianate in culture, championed Nastaʿlīq. Timurid-Mughal patronage brought it to India, and under Akbar–Jahangir–Shah Jahan it was "the favorite script of the [Mughal] Persian court". By the 17th–18th centuries Nastaʿlīq had become "the common script for writing the Hindustani language, especially *Standard Urdu*". Eminent court calligraphers (e.g. Muhammad Husayn Kashmiri and 'Abd al-Raḥīm under Akbar–Shahjahan) perfected the flowing Nastaʿlīq cursive in Delhi.

- Urdu is thus a modified Perso-Arabic alphabet (right-to-left), written in Nastaʿlīq. Urdu orthography preserves many Perso-Arabic conventions (using *alif*, *hamza*, etc.) and adds letters for sounds not in Persian (e.g. پ *pe*, چ *che*, ژ *zhe*, گ *gaf* for the Indic stops).
- The script inherited the Arabic abjad nature (short vowels unmarked), but Persian influences led to systematic use of certain diacritics. Notably, Urdu retains the Nastaʿlīq style in contrast to Hindi's Devanagari. As one source summarizes: "Urdu uses a modified form of Perso-Arabic script known as Nastaʿlīq".

Under Mughal patronage, Urdu written in Nastaʿlīq flourished alongside Persian. Inscriptions, administrative documents and poetry were often rendered in lavish calligraphy. Delhi remained the imperial literary center; there the "Delhi School" of Urdu poets (Mir Taqi Mir, Ghalib, Zauq) wrote in a style rooted in Mughal sensibilities (melancholy ghazals, elaborate Persianised diction). Meanwhile, the regional style of Nastaʿlīq also varied: e.g. the *Lucknow* (Awadh) aesthetic became associated with its own poetic school under the Nawabs of Awadh. After Delhi's sack in the mid-18th century, many poets (and scribes) migrated to Lucknow. There the

Nawabs (e.g. Asaf-ud-Daulah, Ghazi-ud-Din) under nominal British oversight maintained a cosmopolitan Urdu court. Lucknow enjoyed peace and affluence that "made way for the emergence of court culture and the patronage of poets by the nawabs". Lucknow's school of poets (Nasikh, Aatish, Dagh, Anis, etc.) refined the language into a 'Lakhnawī' style, and local calligraphers brought their own flair to Nastaʿlīq (more ornamental *razm/taʿlīq* ligatures, for example). As one scholar notes, Imam Baksh "Nasīkh… chiselled language to impart it a typical touch of Lucknow's sophisticated culture". In practice, however, Nastaʿlīq remained mutually intelligible across regions – it was essentially the same script system from Delhi to Lucknow – even as dialectal vocabulary and poetic conventions varied.

Colonial India: Bureaucracy, Education and Print

When the British East India Company supplanted the Mughals, Urdu quickly became a vehicle of administration. In 1837 the Company replaced Persian with vernaculars in most civil courts. In the key northern provinces, Hindustani in Perso-Arabic (i.e. Urdu) was chosen over Persian as the official language of courts and government. This decision entrenched Nastaʿlīq Urdu as the official script of many offices: Urdu and English now replaced Persian in the north, while Hindi (Devanagari) or Kaithi replaced Persian in some regions (like Bihar). Henceforth, knowledge of Urdu script was required for office work. Indeed, by 1853 the North-Western Provinces required candidates for government service to be able to *read and write Urdu* in the native *shikasta* (cursive) hand. As one educator reported, "by 1853 onwards, the NWP Government had made the knowledge of Urdu necessary for employment" (applicants had to translate English ⇄ Urdu and write in fast Nastaʿlīq).

The British also instituted vernacular education using Urdu. In the 1840s James Thomason (Lt. Gov. of Agra) founded village "vernacular schools" teaching both Urdu and Hindi side by side. Teachers were expected to know elementary readers in both scripts: e.g. no one could be a schoolmaster unless he "fully understands" basic primers in *both* Oordoo and Hindee. Thus rural education spread literacy in Urdu script across North India. Textbook production flourished – many Urdu primers, grammars and dictionaries were published in the mid-19th century to support these schools. By mid-century, most Muslim and many Hindu students learned Persian-Arabic Urdu as their school language.

Urdu also remained a literary and cultural lingua franca. By the late 19th century the Hindi-Urdu controversy loomed: Sanskrit-leaning Hindus pushed for Devanagari, while Urdu proponents defended Nastaʿlīq. In practice, Urdu retained its status in courts and education in places like the United Provinces. As scholar Sumit Sarkar reports, during the 1880s "Urdu had been the language of polite culture over a big part of North India, for Hindus quite as much as Muslims," and Urdu print output dwarfed that of Hindi. He cites that in 1881–1890 Urdu newspapers had twice the circulation of Hindi newspapers, and 55% more Urdu books were published than Hindi books. (It was also argued that Arabic-script Urdu was "about 25% faster to write" than Nagari in legal contexts.) The British never succeeded in displacing Urdu script until much later.

Print and Journalism

The 19th century saw a boom in Urdu print culture. The first Urdu newspaper, *Jam-i-Jahan-Numa* ("World-Revealing Cup"), was founded in 1822 in Calcutta by Harihar Dutta – a remarkable fact given Calcutta's distance from the Urdu heartland. Its inaugural issue (27 March 1822) made Urdu journalism history. Soon after, Urdu printing presses were established

in Delhi, Lucknow, Allahabad, Lahore and beyond. Nastaʿlīq posed typographic challenges, but by the 1870s sophisticated Urdu typefaces existed. By the 1880s a profusion of Urdu dailies, weeklies and journals addressed politics, literature and religion across British India. The growth of the Urdu press helped standardize spelling and style (printers forced some regularization of letter forms, word breaks and punctuation).

Key Milestones in Print and Bureaucracy:

- *1822: Jam-i-Jahan-Numa* (Calcutta) launched the first Urdu newspaper.
- *1837:* Persian dropped from courts; Urdu (Nastaʿlīq) became official in the North.
- *1850s:* Vernacular schools teaching Urdu proliferated; Urdu literacy became essential for govt. jobs.
- *1880s:* Urdu publications far outnumbered Hindi in circulation (twice as many newspapers, 55% more books).

These shifts made Urdu a literary and educational standard well before the 20th century. By 1900, Urdu in Nastaʿlīq was deeply entrenched in northern India's courts, schools, journalism and literature.

Literary Standardization: Classical Poets and Prose

Urdu's literary norms were forged by its great poets and writers. By the late Mughal period, Delhi poets such as Mir Taqi Mir (1723–1810) had already "given shape to the Urdu language itself". Mir and his contemporaries established the classical ghazal idiom: simple diction with Persian imagery. In the 19th century Mirza Ghalib (1797–1869) became the quintessential literary figure. Ghalib's mastery of Persian and Urdu is legendary, but he is especially famed for transforming Urdu prose. He "was a gifted letter writer" whose correspondence "gave foundation to easy and popular Urdu". Before Ghalib, formal Urdu writing tended to be ornate; he made it more colloquial and expressive. Thus, Ghalib's letters and essays set a modern prose standard that influenced generations.

Other poets and writers also standardized Urdu usage. In Lucknow, Imam Bakhsh Nasikh (1772–1838) exemplified the refined Lucknow style of ghazal and corrected irregularities in colloquial Urdu. (As noted, Nasikh "chiselled language" into Lucknow's high-culture idiom.) Among later figures, Sir Syed Ahmad Khan (1817–1898) and his circle at Aligarh College promoted clear, reformist Urdu prose for education and science. Educational reformers produced new *ilmī* (scientific and moral) textbooks in Urdu and coined standardized terminology. 19th-century lexicographers and grammarians (e.g. Mas'ūd Ḥusayn Khān, Muhammad Husayn) began to compile dictionaries and grammar guides that fixed spellings and grammar.

Key Literary Figures:

- Mir Taqi Mir (1723–1810) – 18th c. Delhi poet, "one of the pioneers who gave shape to the Urdu language itself".
- Mirza Ghalib (1797–1869) – 19th c. Delhi poet; revolutionized Urdu prose with his lively letters ("easy and popular Urdu" style).
- Imam Bakhsh "Nasikh" (1772–1838) – Lucknow poet who refined ghazal diction; made Lucknow's Urdu idiom a literary model.

- Sir Syed Ahmad Khan (1817–1898) – Aligarh educator who translated Western works into Urdu and standardized its prose style for modern education.

Together these writers and educators cemented Urdu's written norms. By 1900, Urdu in Nastaʿlīq was a fully developed literary language with clear orthographic conventions and a rich classical tradition. Its script – the fluid Persianate Nastaʿlīq – remained its defining feature, preserved by the literary elite and institutionalized through print and schooling.

Sources: We have drawn on linguistic histories and contemporary scholarship of Urdu. In particular, scholars note the Mughal-era adoption of Nastaʿlīq, the 1837 language decree replacing Persian with Urdu, and the accounts of education and journalism in British India. Key milestones, dates and figures are documented in these sources.

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Historical Development of Urdu Vocabulary and Style

Urdu evolved from the North Indian vernaculars (Khaṛī Bolī) during the Delhi Sultanate and Mughal periods, under intense influence from Persian (the court language) and Arabic (through Persian and Islam). By the mid-18th century Delhi poets had given Urdu its classical form, calling it *zabān-e urdū-e muʿallā* ("the exalted camp language"). In this pre-colonial era Urdu's high culture was dominated by poetry (ghazals, qasidas, mathnavis) and ornate prose: elaborate metaphors, Persianized syntax and calligraphic style signified refinement. For example, *Fasana-i-Ajaaib* (1824) exemplified the classical, ornate prose of the Lucknow school, laden with poetic imagery, whereas Mir Amman's *Bagh-o-Bahar* (1801) broke with this tradition by using simple, idiomatic Urdu prosedawn.com. (Mir Amman's vernacular storytelling – later used in Fort William College – anticipated modern literary Urdu.)

Under the early Mughals (16th–17th c.) Urdu absorbed many Persian and Arabic loanwords (especially nouns/adjectives). Persian remained the literary model: thousands of words like *dost* (friend), *shahr* (city), *sabzī* (vegetables), *tāzā* (fresh) entered Urdu. Turkic rulers and nobles added words like *khan*, *aghā*, *begum*, *sālār* etc., though these were fewer. (The word "Urdu" itself comes from the Turkish *ordu* "army".) A small core of Sanskrit/Prakrit vocabulary remained (for kinship, nature, everyday life); e.g. *guru*, *karma*, *dharma* appear in poetic contexts. In high culture, Arabic features (from Islam) also persisted, especially religious terms (*ilm*, *kitāb*, *qānūn* etc.). Urdu was written in the Perso-Arabic *nastaliq* script (adapted by adding letters), and Persian poetics (ghazal form, *ʾizāfah* construction, Arabic plurals) heavily shaped its style.

Colonial Era: Modernization and Nationalism

British rule (19th–mid-20th c.) brought major changes. Urdu was initially promoted as an official language (1837: replaced Persian along with English), but soon became contested (the

Hindi–Urdu controversy). Hindu reformers began Sanskritizing *Hindi* in Devanagari, prompting Urdu intellectuals to defend their Persianized vocabulary. Meanwhile the printing press and education expanded Urdu's reach. Fort William College encouraged Urdu prose (Mir Amman's *Bagh-o-Bahar* was a textbook), and Sir Syed Ahmad Khan (Aligarh Movement) championed modern, plain Urdu for reform. Sir Syed's journal *Tehzeeb-ul-Akhlāq* (1871) famously published "alternative Muslim perspectives, written in plain language," making Urdu a vehicle of social reform. Other writers like Altaf Hussain Hali began writing in simpler, clear Urdu to address social issues.

In literature, new genres appeared: the novel (*Mirat-ul-Uroos* 1869), short story (Premchand, Manto), and socially realistic poetry. The Progressive Writers' Movement (from 1936) explicitly rebelled against classical style, insisting on colloquial diction and clear narratives. As one study notes, progressive authors "laid emphasis on the simplicity of language and style" and "used colloquial diction to make [the] common person understand" their messageaijcrnet.com.

Urdu journalism flourished as a public medium. The first Urdu newspaper *Jam-e-Jahan-Numa* appeared in 1822 in Calcutta. After the 1857 revolt, an accessible press grew: Punjabi hubs produced weeklies (Kohinoor, 1850) and dailies (Urdu Guide, 1858). Early journalism imitated ornate prose, but rapidly shifted to plain Urdu. By the late 19th century, journalists "simplified the language, making it a tool for public discourse". Urdu newspapers became a key voice for Indian nationalism: *Paisa Akhbar*, *Zamindar*, *Al-Hilal*, and others stirred mass movements. (Gandhi even had Urdu speeches published to reach both Hindus and Muslims.) This era saw heavy borrowing from English (new technical, political terms) and even Hindi, as papers sought broad readership.

Post-Independence Era

In 1947 Partition, Urdu diverged sharply in India and Pakistan. In Pakistan, Urdu became the national language and symbol of Muslim identity, and government policies encouraged *tahajji* (Persianization). (Scholars note a post-1947 trend of "hyper-Persianisation" of Pakistani Urdu, mirroring Sanskritization in India.) Urdu remained prestigious in education and media, though English continued as co-official. In India, Urdu lost official status except in some states. Urdu journalism suffered: many major journals moved to Pakistan, and Indian Urdu press shrank. As *The Tribune* reports, "Partition in 1947 devastated Urdu journalism" – India's Urdu newspapers relocated or folded and Urdu speakers increasingly shifted to Hindi and English.

Socio-political changes likewise shaped style and vocabulary. In Pakistan, state patronage and Islamic revival (esp. under Zia-ul-Haq) infused Urdu with more Arabic and Persian religious terminology, while in India Urdu often blended more Hindi/Sanskrit lexicon in everyday use. English remained a major influence on modern Urdu vocabulary everywhere (e.g. *bus, office, computer, telephone*). In contemporary media, Urdu journalism tends to use shorter sentences and more colloquial/Hindustani terms to reach broad audiences, contrasting with the classical idioms of earlier literature.

Major Lexical Influences

- Persian: Dominant source of Urdu's literary lexicon. Mughal courts used Persian, so Urdu adopted Persian structures (ezāfat) and thousands of words for friends (*dost*), life

(*zindagī*), subtle states (*khwāb*, *nashā*), etc.. Persian poetry (Rūmī, Hāfez) heavily inspired Urdu poetic forms.

- Arabic: Many Urdu religious, legal, and abstract terms derive from Arabic (often via Persian). Common examples are *'ilm* (knowledge), *kitāb* (book), *qānūn* (law), *dīn* (religion). Arabic plurals (e.g. *kutub*, *ulama*) and syntax also appear in formal Urdu.
- Turkic: Earlier Turkic rulers (Delhi Sultanate, Mughals) contributed words like *khān*, *āghā* (lord), *begum* (lady), *taīfa* (valiant), *patashah* (king). Today these are mostly felt in titles and some idioms.
- Sanskrit/Prakrit: The underlying Indo-Aryan base of Urdu is essentially Sanskrit-descended. Many very common words in colloquial Urdu are cognate with Hindi/Sanskrit (e.g. *āp* (you), *khānā* (eat/food), *bachā* (child)). Formal Urdu generally prefers Persian/Arabic terms, but words like *guru*, *karma*, *dharma*, *mantra* survive in philosophical or borrowed contexts. (In contrast, Hindi actively replaced Persian loans with Sanskrit ones during nationalism.)
- English: Colonial and modern fields introduced English loanwords wholesale. By the 20th century Urdu newspapers and education borrowed words like *bus*, *office*, *computer*, *telephone*, *police*, *rail*, etc.. These often remain unchanged, and some have Urduized forms (e.g. *telaifon*). English has also influenced syntax and idiom in contemporary spoken and journalistic Urdu (e.g. code-switching terms).

Literary vs. Journalistic Urdu

Urdu's classical literary style (poetry and high prose) is ornate and Persianized: it uses Persian/Arabic vocabulary almost exclusively, lengthy compound sentences, elaborate metaphors, and conventional imagery. By contrast, modern journalistic and public Urdu is functional and accessible: it uses simpler grammar, more vernacular (colloquial Hindustani) words, and shorter, clearer sentences. Journalistic Urdu also freely incorporates recent loanwords (English technical terms, everyday Hindi words) to be understood by the mass readeraijcrnet.com. The table below summarizes these differences:

Feature	Classical/High Urdu (Literature)	Modern Urdu (Journalism & Media)
Vocabulary	Heavy Persian-Arabic loans; *īzāfat* phrases	Mix of Hindi/Sanskrit & English loans; common words (e.g. *qalam*/pen, *kitāb*/book replaced by *kalam*, *book*)
Syntax & Style	Complex, flowery syntax; poetic *meshrī* (couplet style); literary allusionsdawn.com	Simple, direct syntax; logical order; plain dictionaijcrnet.com
Sentence Length	Long, winding sentences with subordinate clauses	Shorter sentences, one idea per sentence
Figures of Speech	Rich metaphors, similes, classical tropes (wine, nightingale, rose, etc.)	Minimal metaphor; emphasis on clarity; journalistic idioms
Audience	Educated elite, poetic gatherings (mushā'irās)	General public, newspaper readers
Purpose/Focus	Aesthetic expression, philosophical or romantic themes	Information, current events, political/social issues
Examples	*"Fasana-i-Ajaaib"* style prose (ornate)dawn.com	*"Tehzeeb-ul-Akhlāq"* essays (plain); modern newspaper Urdu

For instance, Dawn newspaper notes that early Urdu news "imitated the ornate Persian style, alienating common readers," so publishers "gradually simplified the language, making it a tool for public discourse.". Similarly, progressive writers explicitly *rejected* classical rhetoric in favor of everyday speechaijcrnet.com. In sum, classical Urdu prized poetic elegance and Persian vocabulary, while contemporary Urdu (especially journalism) privileges accessibility and topical vocabulary.

Socio-Political Influences

Urdu's style and lexicon have continually mirrored social change. Under Mughal decline, Urdu declined as an official language and became more of a cultural one. British policies (switch to English/Hindi) prompted Urduists to argue for their language, affecting vocabulary choices. The Freedom Movement politicized Urdu press, infusing it with nationalist slogans and technology words (rail, telegram). After Partition, language policy diverged: Pakistan promoted Urdu (even as a neutral lingua franca), leading to official coinages of technical terms in Urdu; India relegated Urdu behind Hindi, reducing its public use. Educational reforms also mattered – Urdu-medium schools kept classical Urdu alive in some areas, while elsewhere English/Hindi schooling made modern Urdu more mixed.

In literature, each movement left its mark. The Aligarh school and Reformists introduced rationalist ideas and simpler prose. The Progressive movement of the 1930s–40s responded to poverty and politics by writing in plain Urdu and expanding themes to social realismaijcrnet.com. In Pakistan's decades, Urdu poetry absorbed political, religious currents (from revolutionary to Islamism) and journalism adopted new terms for science and modernization. Today, digital media and globalization continue to inject English and slang (especially Roman Urdu) into everyday usage.

In summary, Urdu's vocabulary has been shaped by a tapestry of influences – Persian and Arabic as the classical core, Turkish and indigenous as historical substrates, and English/Hindi as modern imports – while its style has swung from high poetic register toward broad intelligibility under societal pressuresaijcrnet.com. Key figures from Amir Khusrow and Mir Taqi Mir to Ghalib and Iqbal (classical poets) through Syed Ahmad Khan and Hali (19th-c. reformers) to Faiz, Manto and modern columnists, along with seminal publications (*Bagh-o-Bahar*, *Fasana-i-Ajaaib*, *Tehzeeb-ul-Akhlāq*, *Daily Jang*, etc.), illustrate each phase of Urdu's evolving lexicon and style.

Sources: Linguistic histories and analyses of Urdu developmentaijcrnet.com, plus contemporary commentary on Urdu journalism and language influence studies

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Development of Urdu Scientific Vocabulary

Historical Origins and Key Periods: Urdu's scientific lexicon has roots in pre-colonial Indo-Muslim scholarship (drawing on Arabic and Persian vocabularies) and expanded markedly in the 19th–20th centuries. In the early 1800s *Fort William College* (Calcutta) sponsored Urdu translations of science texts, followed by *Delhi College* (founded 1825) where instructors like Sprenger and Felix Boutros translated a large number of Western scientific works into Urdu. After 1835 Lord Macaulay's English-education policy curtailed such efforts. Rulers of Hyderabad and Awadh also patronized Urdu science: for example, Shams-ul-Umara of Hyderabad (1832–60) published some 30 Urdu works on mathematics, chemistry and medicine, and the Oudh court similarly supported science translations until the 1850s. Mid-century, the Roorkee Engineering College (1844–88) produced Urdu engineering textbooks, and Sir Syed Ahmad Khan's Scientific Society (Aligarh, 1860s) translated technical books into Urdu.

After 1900, *Osmania University* (Hyderabad, est. 1918) was chartered to teach all higher subjects in Urdu, producing thousands of new Urdu technical terms and hundreds of science books (with dedicated scientific dictionaries). In the Indian subcontinent's early decades of independence, Urdu-medium science education continued in institutions like *Usmania College* (Aurangabad) and *Urdu College Karachi* (founded 1949, now FUUAST). The post-1947 Pakistani state then created bodies to expand Urdu science vocabulary: notably, the *Commission on National Education (Sharif Commission)* of 1959 recommended Urdu as a medium of instruction, leading to the Central Urdu Board (Lahore, 1962) which was later renamed the *Urdu Science Board*. These institutions, along with language authorities and universities, drove Urdu terminology development in Pakistan.

Influence of Persian, Arabic and English: Urdu scientific terminology is a hybrid of legacy Persian/Arabic roots and modern English loanwords. Traditionally, Urdu inherited scholarly vocabulary from Persian and Arabic (as Persian was the language of administration and scholarship), so many technical terms were coined from Arabic-Persian morphemes. Proponents in Hyderabad even argued that Urdu's connections to Persian and Arabic made it "ideally suited for science". For instance, early Urdu chemistry texts employed poetic Persianized titles (e.g. *"Carbon ki kahani"* – "Story of Carbon"). However, under British rule and later, English became the primary source of new scientific terms. Many modern concepts were either transliterated (e.g. کمپیوٹر*computer*, ریڈی ایشن*radiation*, etc.) or introduced via English-derived calques. A recent survey notes that Urdu coining often relies on English loans: "redundant… loans from English tarnish the purity of the Urdu language," and that "borrowing, loan translation, hybrid formation, and proper translation" are commonly used methods in creating scientific terms. In practice, then, Urdu science vocabulary blends Arabic/Persian coinages with English borrowings, reflecting both its Islamic literary heritage and Western scientific influence.

Major Institutions and Figures: A number of bodies and individuals have shaped Urdu scientific lexicon. *Anjuman-i Taraqqi-i Urdu* (est. 1903 in British India) was a leading society promoting Urdu literature and terminology; it published lexicons and journals (e.g. Science magazine in Hyderabad) on Urdu science. Key figures include Maulvi Abdul Haq (1870–1961), "Baba-e-Urdu," who after migrating to Pakistan in 1948 led efforts to standardize Urdu for science – he published a 1951 manifesto *"Urdu as the Means of Science Education"* and helped found Urdu-medium institutions. Other notable contributors to scientific Urdu lexicography were Josh

Malihabadi, Farman Fatehpuri, Naseem Amrohvi and Jaun Elia, all editors on the Urdu Lughat (dictionary) project.

Important institutions include: the *Urdu Science Board* (Lahore, est. 1962) for publishing Urdu science textbooks and reference works; the *Urdu Dictionary Board* (1962–97), which produced the 22-volume Urdu Lughat (published 1977–2018); and the *National Language Authority/Promotion Department* (Islamabad, est. 1979) which coordinates Urdu terminology (it has compiled science-glossary dictionaries). The *Federal Urdu University* (est. 2002) and provincial Urdu academies also contribute to curriculum and publishing in Urdu.

Translation Movements: Organized translation drives were crucial. In British India, *translation bureaus* at Delhi College (1820s) and later Osmania University (1920s–40s) systematically rendered European science texts into Urdu. Aligarh's Scientific Society translated dozens of Western books (1864–74), and publishers like Roorkee College issued Urdu primers in engineering. In Hyderabad (Deccan), the Dar-ul-Tarjama (Translation Department) and Urdu monthly *Science* (1928–47) produced original science articles and children's stories about elements to enrich technical vocabulary. After 1947, Pakistan's education ministries and language boards commissioned textbooks and terminological glossaries: e.g. list of scientific terms for the Roorkee College in 1853 was hailed as "a most important desideratum" (reflecting earlier work), and later *Urdu Science Board* translated many high-school science books. Each of these movements generated thousands of Urdu technical terms and set stylistic standards for science writing.

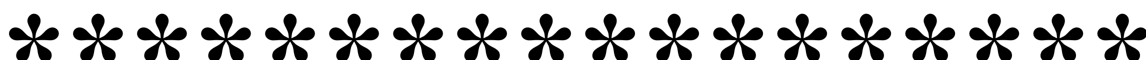
Term-formation Strategies: Urdu coinage of scientific terms has employed various strategies. Direct borrowing (adopting English words in Urdu script) is common for new technology (e.g. کمپیوٹر*computer*, انٹرنیٹ*internet*). Loan translation (calque) is also used – for example, translating "gravity" as جذبہ ثقل(jazb-e saqal) using Arabic/Persian roots. Native neologisms from Persian/Arabic were often preferred by purists: e.g. قلمپن*qalam+pann* for "pen," or معرفت بمعنی علم*ma'rifat bi-ma'ni ilm* for "knowledge of science." Hybrids occur too (combining Urdu with English or Sanskrit elements). A study of ICT terminology notes that Urdu heavily uses loans and translations: "Coinages and loan translations from the root languages are in abundance," but warns that "redundant coining and loans from English tarnish the purity of Urdu". In lexicography, some critics caution against overly "jargonising or inventing an artificial language based on classical roots," noting that many coined technical terms appear only in prescriptive glossaries and lack real currency. In short, Urdu terminology has oscillated between borrowing foreign terms and creating native compounds from Persian/Arabic morphemes, with ongoing debate over which yields clearer, more acceptable usage.

Academic vs. Colloquial Urdu: *Academic Urdu* (used in textbooks and formal writing) is characterized by a precise, Persianized lexicon and complex syntax, while everyday *colloquial Urdu* is simpler, mixing Hindi-origin words and English readily. For example, literary scientific Urdu may use terms like خلیہ*khuliyah* for "cell," words unfamiliar to lay speakers, leading to comprehension problems. An analysis of translated medical leaflets found "confusing or very difficult text in all leaflets", reflecting how literary/academic Urdu often employs rare or classical terms. Likewise, linguists note that many Urdu technical expressions in formal dictionaries "have no currency in modern Urdu usage". Grammatically, formal Urdu prefers elaborate noun compounds (mirroring Persian grammar) and passive constructions, whereas spoken Urdu uses simpler verb forms and frequently code-switches with English. This divergence means that, although academic Urdu aims for terminological consistency, casual speakers might use multiple synonyms or English terms instead. In practice, most Pakistani

students receive science education in a dual system: Urdu-medium schools (mostly public sector) versus English-medium schools (private sector). This bifurcation reinforces the gap – concepts are often learned and expressed in different registers of Urdu and English in academia versus everyday life.

Recent Developments: In the 21st century, Urdu science lexicon has entered the digital age and seen renewed interest. The Urdu Lughat was fully digitized in 2018: President Mamnoon Hussain inaugurated its web edition, putting all 22 volumes (~264,000 entries) online. The Urdu Science Board remains active (publishing dozens of new books annually and even launching an "Urdu Science Award"). Popular science outreach in Urdu has also grown: for example, *Urdu Science Monthly* (India) – "the first and only popular science and environment monthly in Urdu" – has published uninterrupted since 1994, evidencing demand for Urdu science journalism. In education, Pakistan's Supreme Court in 2014 directed the government to implement Urdu as an official language, spurring calls for more Urdu-medium science curricula, though English still dominates at higher levels. Meanwhile, mobile apps, online courses, and initiatives like Urdu Wikipedia are gradually expanding scientific content in Urdu. Together, these developments – digitized lexicons, curricular efforts, and Urdu-language publications – continue the long process of enriching Urdu's scientific vocabulary for modern academia and the public.

Sources: This analysis draws on historical studies and reports of Urdu terminology (including the work of Rauf Parekh and research on colonial education), published accounts of Pakistani language institutions, and linguistic analyses of Urdu technical lexicons. These sources document the influence of Persian/Arabic, English, and institutional policy on Urdu science vocabulary, as well as comparisons of formal versus colloquial registers.



Gujarati people

The historical course of the development of the Gujarati language from the beginning to the early 1900s

Indo-Aryan Origins and Apabhraṃśa Precursors

Gujarati is an Indo-Aryan language ultimately descended from Vedic and Classical Sanskrit. By the late first millennium CE, regional Prakrits (Middle Indic) had diversified into vernacular *apabhraṃśa* ("corrupted" or late-Prakrit) dialects. In Western India these included Gurjar Apabhraṃśa, which by the 8th–12th centuries gave rise to Old Gujarati (also called *Maru-Gurjarī* or Old Western Rājasthāni). Apabhraṃśa itself was used as a literary language by Jain scholars and poets. Notably, 12th-century Jain scholar Acharya Hemacandra (1089–1172) of Patan (capital of the Chaulukya Solanki dynasty) wrote the *Siddha-haima-śabda-nuśasana* (a Prakrit/Apabhraṃśa grammar) under King Jayasimha Siddharaja, codifying many linguistic features of the western apabhraṃśa varieties. Hemacandra's work "formed the cornerstone of Apabhraṃśa grammar in the Gujarati language", establishing grammatical rules that would carry over into Old Gujarati.

Old Gujarati (c. 1100–1500)

By the early 12th century, a distinct Old Gujarati form emerged under the Chaulukya (Solanki) kings of Anhilvāḍa-Pāṭan (now Patan, Gujarat). Old Gujarati (Jūnī Gujarātī) had descended from the regional Prakrit/Apabhraṃśa and was the ancestor of modern Gujarati (and closely related Rajasthani). Its literary use began by the 12th century, with texts showing features like direct/oblique noun forms, enclitic postpositions, and auxiliary verbs – all characteristic of Gujarati's grammar. Like modern Gujarati, it preserved three grammatical genders (masculine/feminine/neuter) and by 1300 CE a fairly standardized written form existed.

Religion and Literature: In this period Jain monks and scholars dominated literary activity. They composed long vernacular narrative poems called *rāsa*s (heroic/romantic epics) and *phāgu*s (spring-festival poems). For example, Jain poet Śālibhadra Sūri wrote the *Bharateśvarabāhubalī* rāsa (1185 CE), and Vinayaprabha composed the *Gautama Svāmi Rāsa* (1356 CE). These works often celebrated nature, mythology, and Jain Tīrthaṅkaras. An early prose example is Taruṇaprabha's *Balavābodha* (c.1355 CE), a religious instructional text. Theatre also began: *Bhavai* folk plays were introduced by Asait Thakar (15th c.), and in 15th c. the first known Muslim-authored Gujarati work, Sandēśakarāś by Abdur Raheman, was composed.

Court and Patronage: Old Gujarati flourished under Chaulukya and later Vaghela patronage. King Jayasimha Siddharaja (r.1094–1143) and successors supported scholars like Hemacandra. The era's manuscripts (often in Nagari or local scripts) and inscriptions attest to a high literary culture. After 1300, Gujarat entered a period of political fragmentation, but the language continued to evolve in state courts and Jain communities.

Gujarat Sultanate and Middle Gujarati (1400–1800)

In 1407 CE the Gujarat Sultanate was founded by Zafar Khan under the Delhi Sultanate, marking the start of Muslim rule. During the 15th–16th centuries (notably under Sultan Mahmud Begada, r.1458–1511), Persian became the court and official language. However, Gujarati remained the vernacular of Hindus, Jains, and many Muslims. The Sultanate period introduced numerous Persian and Arabic loanwords into the vocabulary, as well as some Turkic terms, especially in administration and military life.

After 1573 CE Gujarat came under Mughal suzerainty; Persian influence continued but Gujarati authors still produced poetry and prose. In the late medieval era (15th–18th centuries), Gujarati moved from verse to more prose forms and further Bhakti influence. Notably, Narsiṃh Mehta (c.1414–1480) – a Vaisnavite saint-poet – composed devotional songs (dāśabhakti poems) such as *"Vaishnava Gāthā"* that became hugely popular. Narsiṃh is regarded as the *father of Gujarati devotional poetry*, and his work inspired a stream of Bhakti poetry in Gujarati. Other 16th–17th c. poets (Hindu and Jain) continued writing *akhyāna*s (devotional narratives) and *bhāṣā*s (vernacular tales).

Linguistic Changes: The transition from Old to Middle Gujarati involved sound shifts and new grammar. For example, the new phonemes [ɛ] and [ɔ] (originally *äi, äu*) appeared, and auxiliary *ch-* and possessive *-n* markers developed. By 1800, many colloquial features of modern Gujarati were in place.

British Colonial Era and Modernization (1800–1900)

The 19th century brought British rule (through the Bombay Presidency) and the spread of Western education. English influence and printing technology transformed Gujarati. Gujarati's traditional script (see below) was increasingly used in print by the 1810s: in 1815 Parsi printer Fardunji Marzban published the Gujarati *Dabistān-e Mazāhib* in Bombay (see Figure). Throughout the 1800s, periodicals and newspapers appeared (e.g. *Budh Prakāś* magazine), and Western grammar and lexicography began.

In literature, the mid-19th century saw a shift from mainly poetry to prose and secular themes. Reformers and writers like Dalpatram (1820–1898) and Narmadāshankar "Narmad" Dvivedi (1833–1886) pioneered modern Gujarati. Dalpatram's work (plays, essays and poetry) and Narmad's essays, autobiography *Mari Hakikat*, and first Gujarati dictionary (published 1876) set new standards. In 1866, Nandshankar Mehta wrote *Karan Ghelo*, the first original Gujarati novel. By late 19th c., novels and histories (e.g. Govardhanram Tripathi's *Saraswatīchandra*, 1887–1901) became prominent.

Language Reform: Scholars sought to standardize grammar and spelling. William St. C. Tisdall (a British linguist) published a Gujarati grammar (1892) and collected dialect data. In 1903–08 G.A. Grierson's *Linguistic Survey of India* cataloged Gujarati dialects. By century's end, Gujarati had a relatively fixed vocabulary of Sanskrit-derived (*tadbhav*) and loanwords, and a

writing style influenced by British schooling. (A new plural marker *-o* and loss of final *-ə* were phonological innovations of this era.)

Gujarati Script and Orthography

The modern Gujarati script is an abugida descended from Nagari. Unlike Devanagari it omits the top horizontal line (śirorekhā). The script evolved in three phases. In the earliest phase (10th–15th c.), Prakrit and Apabhraṃśa texts were often written in local Nagari forms. In the second phase (15th–17th c.) an Old Gujarati cursive script was in common use. The oldest surviving document in this script is a hand-copied *Mahābhārata* (Adi Parva) dated 1591–92. Printing in Gujarati began in 1797, and by the 1800s Gujarati type was cast in Bombay.

In the third phase (17th–19th c.), Gujarātī script became more streamlined for rapid writing by merchants. Scribes dropped the śirorekhā entirely (hence the modern look). This "banker's" or *mahājani* style was used in letters and accounts, while scholars still often wrote in Nagari. The Jain community also popularized Gujarati script for copying religious texts. By the late 19th century the Gujarati (and Kutchi) script was firmly established for printing and education.

Dialects of Gujarati

Gujarati encompasses many regional and social dialects. A broad urban Standard Gujarati (centered on Ahmedabad) emerged in the late 19th century as a literary norm. Beyond that, major dialect groups include: *Kathīyāwārī* (Kathiawar peninsula, with Sindhi influence), *Saurāshṭrī* (spoken by Saurashtrians, a Lata-dialects community now in southern India), *Āmdavādī/Suratī* (Ahmedabad/Surat and nearby), *Varanasiya* (Vadodara/Baroda area), etc. Distinct community dialects are spoken by Parsi-Zoroastrians (Parsi Gujarati, with Avestan/Persian loanwords) and by Bohra Muslims (*Lisan ud-Dawat*, written in Arabic script). Kutchi and Memoni are related but often classed separately. In fact, the *Linguistic Survey of India* (1903) identified nearly two dozen named Gujarati dialects. (A summary of the major varieties is given in Table 1.)

Dialect/Variety	Region/Community	Notes
Standard (Shuddh)	Gujarat (e.g. Ahmedabad)	Urban/formal standard (news, education). Includes Bombay Gujarati, Nagari sub-variety.
Kathīyāwārī	Kathiawar peninsula	Rural peninsula dialect, influenced by Sindhi; subtypes: Bhavnagarī, Gohilwādī, Halari, Jhalawādī, Sorathī.
Surti	Surat region	Urban Surat dialect (often called "Surati"), used also in Bharuch.
Saurāshṭrī	Saurashtra (Gujarat) diaspora	Spoken by Saurashtrian Gujaratis (many migrated to southern India); closely related to Gujarati/Sindhi dialects.
Parsi Gujarati	Parsi-Zoroastrian community	Heavy use of Persian/Avestan loanwords; distinctive accent.
Lisan ud-Dawat	Dawoodi Bohra Muslims	Gujarati with Arabic-Persian influence; written in Arabic script.

Others	Various (Kutchi, Memoni, East African, etc.)	Kutchi (Kutch) and Memoni (Sindhi-Gujarati blend) are related languages/dialects; diaspora communities in East Africa and the UK have local influences.

Table 1. Selected Gujarati dialects and varieties (compiled from).

Major Literary Figures

Over centuries Gujarati literature flourished under religious and secular themes. Early medieval scholars like Hemachandra Sūri (1089–1172) codified grammar (see above) and authored Sanskrit/Prakrit poetry. In the 12th–14th c., Jain poets such as Śālibhadra Sūri and Vinayaprabha (Phāgu and Rāsa poets) were prominent. The 15th–16th c. Narsiṃh Mehta (c.1414–1480) stands out as the foremost Bhakti poet; he is *"traditionally viewed as the father of modern Gujarati poetry"*, his devotional songs still sung today. Asait Thakar (c.15th c.) innovated Bhavai folk theatre.

In the modernizing 19th century, Dalpatram (1820–1898) and Narmadāshankar "Narmad" Dvivedi (1833–1886) led the "reformist" movement. Dalpatram's witty plays and poetry and Narmad's essays and autobiography shaped contemporary styles. Narmad published the first Gujarati dictionary (1876) and was instrumental in literary reform. In the late 19th c., Govardhanram Tripathi (1855–1907) wrote the classic novel *Sarasvatīchandra* (1887–1901), further demonstrating Gujarati's maturity as a medium for prose fiction.

Other noted figures include Navalram Pandya (poet and journalist), Dayaram (bhakti poet, late 18th c.), and various Vaishnava scholars who translated Sanskrit epics. (See Table 2 for a summary of some key figures.)

Literary Figure	Dates	Contribution / Notable Works
Acharya Hemachandra Sūri	1089–1172	Jain scholar of the Solanki court; wrote *Siddha-haima-śabdanushasana* (Prakrit/Apabhraṃśa grammar).
Śālibhadra Sūri	fl. late 1100s	Jain poet; composed the epic *Bharateśvarabāhubalī Rāsa* (1185).
Vinayaprabha	fl. mid-1300s	Jain poet; wrote *Gautama Svāmi Rāsa* (1356) and other *rāsa*s.
Narsiṃh Mehta	c.1414–1480	Bhakti saint-poet; composed devotional poetry (e.g. *"Vishnubhakti"*); called "father of Gujarati poetry".
Dalpatram	1820–1898	19th c. poet/playwright; co-founder of modern Gujarati literature. (Wrote *Venacharitra*, etc.)
Narmadāshankar Dvivedi (Narmad)	1833–1886	Essayist, poet and reformer; first autobiography (*Mari Hakikat*) and first Gujarati dictionary (1876).
Govardhanram Tripathi	1855–1907	Novelist; author of *Sarasvatīchandra* (1887–1901), a classic of Gujarati prose.

Table 2. Selected key figures in Gujarati literary history (dates and contributions, with sources).

Each of the above played a role in evolving and standardizing Gujarati: Hemachandra in grammar, medieval poets in enriching the literary language, and 19th-century authors in modernizing vocabulary and style.

Sources: Historical and linguistic information above is drawn from scholarly summaries of Gujarati's evolution, and from histories of Gujarati literature. This report integrates these sources to trace Gujarati's development through the Solanki (Chaulukya) era, Sultanate period, and colonial times.

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Origins of Gujarati (Sanskrit → Prakrit → Apabhramsha)

Gujarati is an Indo-Aryan language descended from the Sanskrit-Prakrit continuum. Like other New Indo-Aryan tongues, it arose from Prakrit (the vernacular form of Middle Indo-Aryan) and its late form Apabhramsha. By the 6th–7th centuries CE Apabhramsha dialects were developing into early New Indo-Aryan languages. In Gujarat this process was marked by the work of the 12th-century Jain scholar Hemachandra Suri, who authored a Prakrit grammar (the *Siddha-Hema-Śabdanuśāśana*) and explicitly described western ("Gurjar") Apabhramsha forms. Hemachandra's grammar treats Apabhramsha at length, suggesting that by the 1100s the ancestors of Gujarati were well enough developed to be analyzed grammatically. By c.1200–1300 the distinct Old Gujarati stage (and closely related Old Rajasthani) had emerged, with features like direct/oblique noun cases, postpositions, and auxiliary verbs (retaining three genders). In summary, Gujarati evolved through Old Indo-Aryan (Sanskrit) → Middle Indo-Aryan (Prakrit) → Late Middle Indo-Aryan (Apabhramsha) → Old Gujarati.

Old Gujarati (12th–15th century): Grammar and Jain Literature

In the Old Gujarati period (circa 1200–1500 AD), Gujarati developed its own literary presence. Jain monks were among the first Gujarati authors, composing narrative poems (*rāsās*) and lyrical songs (*phāgūs*) often on Jaina themes. For example, Hemachandra's *Bharateshvara Rasa* (1185) and later works such as *Revantagiri-rasa* (1235) and *Gautama Svāmi rasa* (1356) depict Jain mythology and moral stories. The *phāgūs* (spring festival songs) also flourished, e.g. Neminātha-phagu (1344) and *Vasantavilāsa* (1350). Even secular narratives appear (e.g. *Kanhadade Prabandha*, 1456). This corpus was written in a form of Gurjar Apabhramsha/Old Gujarati, bridging Prakrit and later Gujarati. Jain influence persisted in early prose as well: the mid-1300s saw the first Gujarati prose works in religion and didacticism (e.g. *Balavabodha*, 1355).

Phonologically and grammatically, Old Gujarati retained many inherited features. By ~1300 a fairly standardized register is evident in inscriptions. For example, Old Gujarati still had three genders and was beginning to shift more case endings into postpositions. Over the next centuries it evolved into Middle Gujarati (circa 1500–1800), which developed new vowels (e.g. *i, u* → *ə* in open syllables) and diphthongs (e.g. *əi, əu* → *ɛ, ɔ* in initial syllables). These changes leveled many case inflections (by merging the instrumental/locative and nominative endings). By the 19th century the final schwa (*ə*) was dropping, yielding modern Gujarati's consonant-final words, and a new plural suffix -*o* stabilized.

The Gujarati Script

Gujarati is written in its own Gujarati script, an *abugida* derived from Nagari (Devanagari). Early on (c.10th–15th c.) writers used variants of Nagari for Prakrit/Apabhramsha texts. Around the 15th–17th century, Old Gujarati script emerged, exemplified by manuscripts like the *Adi Parva* (dated 1591–92). This script gradually lost the Devanagari "śirorekhā" (top line); by the 17th–18th centuries the cursive "merchant's script" (śarāfī or mahājānī) without a head-stroke became common for rapid writing. In practice, until the 1800s letters and accounts were kept in the cursive script while scholarly literature often continued in full Nagari. By the 19th century the no-headline Gujarati script was firmly established as the literary orthography. (The script has one-to-one phonemic correspondence except for the silent *-a*, and eventually new symbols were added for English sounds.) In sum, Gujarati script evolved from Devanagari by dropping the top bar and altering a few letters; it developed in three phases (10th–15th c. Nagari use, 15th–17th c. Old Gujarati form, 17th–19th c. cursive sans-Śirorekhā).

Bhakti and Medieval Gujarati Literature (15th–18th centuries)

From the 15th century onward, Gujarati literature was dominated by the Bhakti movement. The most celebrated figure is Narsinh Mehta (c.1414–1488), a Krishna-devotee poet-saint honored as the *Adi Kavi* ("first poet") of Gujarati. Narsinh composed many devotional songs (bhajans) like *Govind Gaman* and *Surat Sangram* in a highly lyrical style. (His bhajan "Vaishnav Jana To" later became famous as Mahatma Gandhi's favorite.) Under Narsinh's influence, Jain and Hindu poets produced abundant vernacular liturature to inspire devotion. Notably, sacred Sanskrit texts were rendered in Gujarati – translations of the *Rāmāyaṇa*, *Bhagavad Gītā*, *Yogavaśiṣṭha* and *Pañcatantra* all appeared in this era.

Two devotional traditions emerged. In the saguṇa Bhakti (God-with-form) tradition, poets worshiped deities like Rama and Krishna in human form. Besides Narsinh and the Gujarati *Meera-bai*, this tradition includes Bhalan (1434–1514) who versified Banabhatta's *Kādambarī* as the *Hamsāyana*, plus other epics (Dasham Skandha, Nala-Khyaṇ, etc.) in the *akhyāna* narrative style. Later Saguna poets include Premānand Bhatt (1649–1714), who composed dozens of devotional lyrics on Krishna and the *Bhāgavata Purāṇa* (e.g. *Okhā Harana*, *Nala-Khyan*, *Sudāma Charitra*), and Śamal Bhatt (1694–1769) known for epic poems like *Padmāvatī* and *Sinhaśān Bātarīsī* that often featured strong heroines. Dayārām (1777–1853), also a Krishna devotee, penned hundreds of *garbīs* (devotional dance-songs) – his collections *Bhakti Poṣaṇ*, *Rasik Vallabh* and *Ajāmilākhyān* capped the pre-modern Bhakti era. (In fact, Dayaram's death in 1852 is often seen as the end of classical medieval Gujarati poetry.)

Alongside the Sagun poets, a nirguṇa (formless) Bhakti tradition existed (poets like Akho, who wrote devotional verses without imagery). Jain literati remained active too, but over time Hindu Bhakti poets became the dominant literary force. Overall, the 15th–18th centuries saw Gujarati fully mature as a literary language of devotion and lore, with a vast corpus of poetry, kavyas and narrative works.

Colonial and Early Modern Gujarati (19th century)

Under British influence from the early 19th century, Gujarati underwent further change. The printing press appeared early: *Bombay Samachar*, the first Gujarati newspaper, was launched in 1822 by a Parsi priest (Fardunjee Marzban). The first Gujarati printed book was also Marzban's 1815 translation of the Dabestān-e Mazāheb (a Persian compendium of religions).

English education and missionary efforts brought grammars and dictionaries (e.g. W. S. Tisdall's 1892 Grammar of Gujarati) and encouraged a Sanskritized standard. Indeed, Christian missionary Joseph van S. Taylor famously called Gujarati "the accomplished daughter of Sanskrit," and Brahmin reformers promoted a 'pure' Gujarati aligned with Sanskrit norms.

This period saw the rise of modern prose and nationalist literature. Reformist poets Dalpatram (1820–1898) and Narmadashankar "Narmad" Dave (1833–1886) pioneered new themes. Dalpatram, a Brahmin Sanskritist, became a champion of social reform; under the mentorship of British administrator A. K. Forbes he learned to write in Gujarati (earlier he wrote in Brajbhasha) and helped found the Gujarat Vernacular Society in 1848, which launched the journal *Buddhiprakāś* (1850). He addressed social issues (opposing casteism, child marriage and championing widow remarriage) in plays and poems; he was even titled *Mahākavi* ("Great Poet") by the Swaminarayan sect. Narmad, often called the *founder of modern Gujarati literature*, introduced essay-writing, lexicography and autobiography to Gujarati letters. His *Mari Hākiqat* (1866) was the first Gujarati autobiography, and his patriotic poem *"Jai Jai Garavi Gujarat"* (1858) became an enduring anthem. Both men published influential works in the Gujarati script and helped standardize orthography; notably, Dalpatram edited *Buddhiprakāś* (1850–78) and Narmad wrote the first Gujarati dictionary (1860s).

The late 19th century produced the first great Gujarati novels and short stories. Govardhanram Madhavram Tripathi (1855–1907) wrote the epic four-volume novel *Saraswatīchandra* (1887–1901), depicting 19th-century Gujarati society, which is hailed as a masterpiece of Gujarati fiction. Other notable writers included Narmad's student Navalram Laxmiram and Dalpatram's son Nanalal. By 1900 urban Gujaratis had a thriving print culture: daily newspapers (e.g. *Gujaratmitra* and *Mumbai Samachar*), reform journals, and the first women's magazine (*Strībodh*, 1857) circulated widely.

Foreign Influences (Persian/Arabic, English, etc.)

Gujarati's vocabulary expanded under foreign influence. During centuries of Muslim rule (Delhi Sultanate, Mughal, etc.), Persian and Arabic entered the lexicon on a large scale. Sultanate-era Gujarat (and cosmopolitan ports like Surat) often spoke Persian as the lingua franca, and many administrative and commercial terms passed into Gujarati. Historians note dozens of Arabic/Persian loanwords adopted by Gujaratis – for example *kʰaṣbāzār* (market), *masāla* (torch), *dukkān* (shop), *nākad* (cash) and *jahāj* (ship) – reflecting the influence of Surat's Muslim trading community. In the 19th century, Brahmin reformers actively de-Persianized the language (equating Gujarati with "pure" Sanskritic forms), but in practice many Persian constructions became thoroughly indigenized (e.g. *fāydo* "benefit" and *ḍāvo* "claim" take Gujarati gender endings). (Zoroastrian Parsis who adopted Gujarati speak a highly "Persianized" dialect, as noted in linguistic studies.)

Under British rule, English emerged as another major source of loanwords. With the expansion of English-medium education and administration, Gujarati began absorbing Anglicisms for technology, law, and modern life. As one analysis notes: "English became the current foreign source of new vocabulary… first introduced directly through British colonial rule, and then streaming in on the basis of continued Anglophone dominance". New terms like *ṭābal* (table), *kāmpyūṭar* (computer), or *batkī* (bottle) entered Gujarati (often suffixed with *-o* or *-ī* to fit Gujarati phonology). (Earlier, Portuguese seafarers also left a few words in Gujarati – e.g. *sābu* "soap" from Portuguese *sabão* – but these are minor compared to Persian and English.) By

1900 the Gujarati vocabulary was a blend of tatsama (“Sanskrit” words), tadbhava (inherited) and vivid strata of Perso-Arabic and English loans.

Religious and Social Factors in Standardization

Religion shaped Gujarati’s literature and status. Jainism provided much of the early written tradition: Jain monks not only composed seminal works but also patronized vernacular learning. For example, Hemachandra’s grammar was supported by the Solanki king Jayasimha (12th c.), reflecting royal-Jain support. Hindu bhakti movements (Vaishnavism and Shaivism) then popularized Gujarati as the vehicle of devotion. Temples and sects (e.g. Vaishnava Pushtimarg, later the Swaminarayan Sampraday) encouraged vernacular hymn-writing. By the 19th century, colonial educators and caste elites often claimed Gujarati’s purity lay in its Sanskritic elements. Missionaries and administrators compiled textbooks and grammars (e.g. N. B. Divetia’s *Gujarati Grammar*, 1895) to teach Gujarati to both Gujaratis and foreigners. Social reformers like Dalpatram and Narmad pushed Gujarati from a “low” colloquial to a respectable literary medium: Dalpatram taught the language to his British friend Forbes, leading to the founding of vernacular schools and publications.

Education, Print, and Nationalism (19th century)

British colonial policies had mixed effects on Gujarati’s prestige. Early on, Persian and Urdu were used administratively, but local vernacular education expanded after 1830. Printers set up Gujarati presses (the Bombay Samachar Press, Buddhiprakash Press, etc.) and literacy grew. The Bombay Samachar (started 1822) and Surat Samachar (1850) were among the first Gujarati dailies. The Ahmedabad-based Gujarat Vernacular Society (founded 1848 by A. K. Forbes) promoted Gujarati by publishing journals (*Vartamān*, *Buddhiprakāś*) and textbooks. By late 19th century, the Gujarati press was vibrant, and literacy was rising among urban Gujaratis.

At the same time, a Gujarati cultural identity began to crystallize. Writers like Narmadashankar celebrated Gujarat in verse (“Garavi Gujarat”), and by the century’s end a new generation saw Gujarati as a vehicle of reform and regional pride. The first Gujarati Sahitya Parishad (Literary Council) was founded in 1905 (just beyond our cutoff), reflecting these trends. Notably, Mahatma Gandhi (born 1869) would soon champion Gujarati for mass education; he helped standardize spelling conventions in the 1930s. In sum, the rise of printing, vernacular schools, and social reform movements all helped elevate Gujarati from a medieval bhakti tongue to a modern literary and colloquial standard.

Sources: Authoritative histories of Gujarati language and literature, literary anthologies and biographies, and specialized studies on language contact

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History of the Gujarati Writing System

Origins and Early Influences: Like all North Indian scripts, Gujarati ultimately derives from the ancient Brahmi alphabet via the Gupta and Nāgarī lines. Early forms of writing in western India would have been Brahmi-based (e.g. Gupta/Nāgarī) just as in other Sanskritic traditions. Gujarati evolved as a western variant of Devanagari (Nāgarī), adapting Sanskrit characters with some modifications. Notably, Gujarati letters keep the basic Brahmic shapes (consonant+inherent-vowel and vowel diacritics) but omit the continuous horizontal headline (śirorekhā) that Devanagari and related scripts carry. (Scholars explain that medieval Gujarati bookkeepers and merchants deliberately *abandoned the headline* to write faster.) Other changes from Devanagari include reshaping several consonants and creating distinct Gujarati–style numerals. Thus Gujarati is an abugida ("Guṇaṣṭaka") like Devanagari, but with its own distinctive letterforms.

Phases of Development: Scholars divide Gujarati script history into three phases:

- 10th–15th centuries (Apabhraṃśa/Old Gujarati): Early Gujarati (then still a Prakrit/Apabhraṃśa language) appears in Jain and bardic records. Writers used Nagari/Devanagari or related scripts, essentially retaining the headline. By the late 1300s–1500s, a localized Old Gujarati script had taken shape (still Nagari-like). The first dated evidence is from around 1591–92: a Gujarati manuscript of the Mahābhārata's Aadi Parva written in the Old Gujarati script. These manuscripts show many letters similar to Devanagari (with a head-line) but already reflecting Gujarati pronunciation.
- 16th–17th centuries: From roughly the 1500s, Gujarati-language poetry, hagiographies and translations (including Jain and Hindu religious works) were increasingly written in this Old Gujarati script. Letterforms continued to simplify, but the system still looked like Devanagari with a top bar. By the 17th century, however, scribes – especially mercantile scribes – began writing without the head-line, altering shapes for speed.
- 17th–19th centuries (Merchant/Modern Gujarati): In the 1600s–1800s, the fully topline-less Gujarati script became dominant for Gujarati. Accountants and merchants standardized the "bankers'/traders' script" (called *śarāphī*, *vāṇīāśāī* or *mahājanī* script) for everyday writing. By the early 1800s this script was widely used in western India for correspondence, records and literature in Gujarati. It had distinct, more cursive letter shapes (for example Gujarati "જ" versus Devanagari "ज") and its own numerals. Through the 18th–19th centuries the Gujarati script was formally separated from Devanagari: Devanagari stayed with Sanskrit/Hindi and formal Sanskrit learning, while Gujarati used its headless script for its language. In short, by the 1700s Gujarati had its own standardized alphabet, based on older Nāgarī but lacking the headline.

Distinctive Features of Gujarati Script: The Gujarati writing system retains all the hallmarks of an Indic abugida: every consonant carries an inherent "a" vowel (default) and other vowels are written with attached diacritics. But compared to Devanagari (and other North Indian scripts), Gujarati is set apart by no horizontal top-line and by certain modified letter shapes. For instance, Gujarati ક, ખ, ગ, etc., look similar to Devanagari क, ख, ग but often with slightly altered strokes. The digits (0–9) are also distinct Gujarati forms. Importantly, the removal of the shirorekhā (for faster writing) became the hallmark of Gujarati text. (The 19th-century scholar Jamaspji

Ardeshir Parthun-Roy even noted that the top line was the "most outstanding" difference from Sanskrit-based scripts.) As an abugida, Gujarati uses ligatures (conjuncts) for consonant clusters and written forms for independent vowels, just like other Brahmi scripts.

Usage in Society: Before 19th century printing, Gujarati script was largely used in informal and community contexts. Businessmen and local officials used it for contracts, letters and accounts (the mercantile *mahājanī* ledger books used Gujarati letters). As one report notes, accountants "abandoned the top line" to write quickly in their daily bookkeeping. In contrast, Persian or Devanagari prevailed in imperial courts, formal literature and Sanskrit scholarship. Nevertheless, Gujarati script *was* used in religious and literary works. Jain temples and merchant families often commissioned Gujarati manuscripts of sacred texts, so that lay worshippers could read them. Likewise, Vaishnava and bhakti poets composed Gujarati poems (e.g. Narsinh Mehta, 15th c.) that were copied in this script. By the 17th–18th centuries, Gujarati itself became a literary language: for example, in 1912 Narsinhrao Divetia's *Kusumamala* – a popular Gujarati poetry collection – was published using the modern Gujarati alphabet.

Figure: Title page of Kusumamala (4th ed., 1912) by Narsinhrao Divetia (first Gujarati poetry anthology). By the early 20th century, books like this were routinely printed in standardized Gujarati script.

Printing and Standardization (19th Century): The arrival of printing in the 1800s greatly accelerated standardization of Gujarati writing. The Parsi community in Bombay was instrumental: in 1812 Zoroastrian printer Fardunjee Marzban set up the first Indian-run press and cast Gujarati typefaces. He published almanacs and a Gujarati newspaper (*Bombay Samachar*, founded 1822) – all in Gujarati script. As presses multiplied, the need for fixed type forced a consistent alphabet and orthography. Typefounders (including Marathi-trained designers) created high-contrast Gujarati fonts, which printers used across western India. The pressure to print books and newspapers led to regularized spelling, punctuation (introduction of Western punctuation marks), and grammar in written Gujarati. By the late 19th century, Gujarati had a standardized print form taught in schools and used in administration. In sum, 19th-century publishing helped lock in the "headless" Gujarati letter shapes and spread literacy in the language.

Summary: From its Brahmi and Nāgarī roots, Gujarati script emerged over several centuries into a distinctive alphabet. By the early 1900s it was firmly established as the official Gujarati writing system, shaped by merchant scribes and standardized by print. Its key innovations – notably the absence of the top line and the attendant new letter forms – had crystallized by the 18th–19th centuries, influenced by local linguistic needs and technological changes. Throughout, Gujarati script served the region's religious communities (Jains, Hindus, Parsis), its burgeoning vernacular literature, and its mercantile bureaucracy, reflecting both cultural and economic histories in its evolving form.

Sources: Historical studies of Gujarati paleography and modern analyses of its script development. These include linguistic surveys, academic histories of Indian scripts, and contemporary accounts of Gujarati printing and manuscripts.

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The historical development of the academic scientific vocabulary of the Gujarati language and its tighter logic compared to everyday language

Historical Timeline of Development

Precolonial era: Gujarati evolved from Sanskrit and Apabhrāṃśa, with its vocabulary long borrowing from Sanskrit for literary and technical needs. From the medieval period onward it also absorbed many Persian and Arabic terms – a legacy of the Sultanate and Mughal rule in Gujarat. However, before British rule there was relatively little formal scientific terminology in Gujarati; older Sanskrit-derived or Persianate words were used informally, and scientific discourse (e.g. in astronomy or medicine) often employed Sanskrit or Persian vocabulary.

Colonial period (mid-1800s–1947): Under British rule, vernacular education expanded and concerted translation efforts began. In the 1820s–30s the Bombay Presidency appointed Gujarati translators to render basic arithmetic, geometry and geography texts into Gujarati. For example, Lieut. Col. Pasley's *Practical Geometry* was published as *Kartavya Bhumiti* (Duty Geometry) in 1826, and *Dialogues on Geography and Astronomy* appeared as *Bhugola ane Khagola* (Earth and Heavens) in 1833. Through the late 19th century, additional Primer-series science textbooks (on physics, chemistry, botany, etc.) were issued in Gujarati, often using a mix of transliterated English terms and coined Gujarati equivalents. At the same time, Gujarati literary reformers (led by leaders like Mahatma Gandhi) began standardizing the language. In 1929 Gandhi's Gujarat Vidyapith published the first edition of the *Sarth Gujarati Jodani Kosh* – a comprehensive Gujarati dictionary that sought to modernize the lexicon.

Post-independence era: After 1947, Gujarat's formation as a separate state (1960) made Gujarati the official medium of instruction. State boards and universities developed Gujarati curricula and science textbooks, gradually coining or approving terms. In recent decades the push for mother-tongue education has intensified. Under the National Education Policy (2020) Gujarat institutions are translating more technical texts into Gujarati: e.g. in 2022 Gujarat Technological University (GTU) announced translating engineering textbooks and has already rendered ~50,000 technical terms (via expert committees including Sanskrit scholars). Similar efforts are underway for medicine and other fields. Central bodies like the Commission for Scientific & Technical Terminology also collate Gujarati glossaries to support this standardization.

Influence of Sanskrit, Persian-Arabic, English, and Dialects

- Sanskrit: Classical and Paurāṇic Sanskrit is the deepest source of Gujarati's academic vocabulary. Gujarati "tatsam" words (essentially unchanged Sanskrit loans) form much of the formal and scientific terminology. For instance, many technical terms in science are tatsam (e.g. "આવર્તક" *āvartak* for "periodic" in *āvartak koṣṭak* – periodic table).

Gujarati also often compounds Sanskrit roots to coin new words (see below). In general, Gujarati speakers note that the spoken language "must borrow largely from Sanskrit to express abstruse … scientific disquisitions".

- Persian/Arabic: Due to centuries of Persianate rule, Gujarati absorbed many Persian and Arabic loanwords. These older loans (videśī) are widespread in everyday Gujarati, though they are less common in purely technical registers. Many common abstract or administrative terms in Gujarati come from Persian (e.g. *fadilo* for benefit, *natījo* for result). Some dialects preserve even more such words: for example, the Bohra Muslim community's dialect (*Lisan ud-Dawat*) is heavily Persian-Arabic-influenced. However, in recent decades educated writers and teachers often prefer Sanskritic tatsam equivalents for technical precision.
- English: English has increasingly supplied modern scientific and academic terms. Under colonial and post-colonial influence, many English science words are either transliterated (e.g. "ફોન" *phon* for "phone") or given Gujarati equivalents. Pressing modern vocabulary (computer, electron, UV ray, etc.) often enters Gujarati directly (e.g. *કમ્પ્યુટર* computer, *ઇલેક્ટ્રોન* electron) or via Calqued compounds (see below). As noted in a recent dictionary review, English-origin words now constitute a major fraction of modern Gujarati lexicon in science and technology. (For example, the GTU translation committee found engineering texts to contain ~3 lakh technical terms, of which many are originally English, and they have Sanskrit scholars coining Gujarati replacements where possible.)
- Regional dialects: Gujarat has several regional dialects (Surti, Kathiawadi, Kachchi, etc.) and community languages (Gujarati-Parsi, Lisan ud-Dawat, etc.). These differ mainly in colloquial vocabulary and phonetics, rather than core scientific terminology. However, dialectal or foreign minority vocabularies have influenced Gujarati: e.g. Parsis in Gujarat used many Persian terms in their Gujarati literature. In academic language today, a relatively uniform "Standard Gujarati" (based on Ahmedabad/Mumbai usage) is used in education and media.

Educational Policy, Curriculum, and Translation Efforts

Educational policies have strongly shaped Gujarati scientific vocabulary. In the colonial era the Macaulay Minutes (1835) favored English-medium education, but local educators still produced vernacular textbooks under the public instruction system. For example, as early as 1855 the Bombay Government appointed Surendramohan, the "Gujarati Translator," to Gujarati-ize math texts. After Independence, Gujarat state's language policy emphasized Gujarati-medium instruction at primary and secondary levels. State boards (GCERT) adopt Gujarati science curricula, necessitating standardized terms. National policies (e.g. the 3-language formula, NEP) also encourage mother-tongue education: under NEP 2020 Gujarat schools and universities are expanding Gujarati-medium content. In practice, this means expert committees work on coining and approving terminology: the 2022 GTU example shows a 22-member committee (including Sanskrit scholars) mapping tens of thousands of English engineering terms to Gujarati. Likewise, government initiatives like the Commission for Scientific & Technical Terminology (CSTT) produce Gujarati glossaries and encourage universities to translate textbooks. Textbook boards and universities (e.g. Gujarat University) have published Gujarati science textbooks and dictionaries to implement these policies.

Institutions and Key Figures

Several institutions and individuals have been instrumental in shaping academic Gujarati:

- Gujarat University (Ahmedabad): Established 1949, with a Department of Gujarati Language that researches terminology and publishes texts. Its *Granth Nirman Board* (University Publication Board) has produced major technical glossaries (e.g. the 1988 *English–Gujarati Dictionary of Technical Terms in Science*, 997 pages).
- Gujarat Vidyapith (Ahmedabad): Founded by Mahatma Gandhi (1920), this Gandhian academy prioritized Gujarati-medium education. It published the influential *Sarth Gujarati Jodani Kosh* (1933–37 editions) – the first comprehensive modern Gujarati dictionary with thousands of entries. Gandhi insisted on Sanskrit-derived Gujarati spellings and forms, and Vidyapith continued to impact terminology standards.
- Gujarati Sahitya Parishad/Sahitya Akademi: The Gujarat Sahitya Parishad (founded 1905) and the Gujarat Sahitya Academy (state-run, est. 1958) promote Gujarati literature and language planning. They have sponsored encyclopedias (e.g. *Gujarati Vishwakosh*, the Gujarati Encyclopedia) which include scientific entries. Their academies and conferences help vet official usage of new terms.
- Scholars and Compilers: Notable figures include T.K. Gajjar (Baroda chemist) who, c.1900, attempted a vernacular thesaurus of Gujarati and Marathi technical terms, and many translation pioneers like Mahipatram and Sto. Others (often educators or scientists) compiled field-specific glossaries or translated textbooks. Today, committees often include Sanskrit scholars, linguists and subject experts to advise on terminology.

Lexicographic and Terminological Efforts

Building a standardized scientific lexicon has involved many dictionaries, glossaries and textbooks:

- Specialized glossaries/dictionaries: Early efforts include P.G. Shah's 1937 *English–Gujarati Glossary of Scientific Terms* (in Devanagari script). More systematically, the Gujarat University Granth Board published the *English-Gujarati Dictionary of Technical Terms in Science* (1988). State and national agencies (CSTT) maintain multilingual glossaries (general, departmental, etc.) that include Gujarati. Private and academic presses also compile bilingual and monolingual science dictionaries for schools and colleges.
- School/college textbooks: Gujarati-medium science textbooks (from NCERT, GCERT, and universities) co-determine terminology. Over time, terms coined in these books become standard. For instance, Gujarat Board textbooks use terms like "આવર્તક કોષ્ટક" for "periodic table" and "તત્વ" for "element", cementing these compounds in academic usage.
- Encyclopedias and Reference Works: Projects like the *Gujarati Vishwakosh* provide encyclopedic articles (e.g. in chemistry, physics) written in Gujarati scientific language, demonstrating and reinforcing standardized terms. These are created by academic trusts with editorial boards, further entrenching certain vocabulary.
- Translation Projects: Recent initiatives translate entire textbooks. GTU's ongoing engineering text translations explicitly generate approved Gujarati equivalents for thousands of terms. Similar projects (often in medical, law, and technical education) publish glossaries as appendices.

Academic Gujarati vs. Everyday Gujarati

Academic or formal Gujarati differs noticeably from colloquial speech. It tends to use "Standard Gujarati" – a more Sanskritized, formal register used in education, administration and media. In linguist's terms, academic Gujarati is rich in tatsam (unmodified Sanskrit) vocabulary, while everyday speech relies more on tadbhav (evolved Sanskrit words) and foreign loans. For example, the encyclopedia notes that *tatsam* words "enrich Gujarati … in its formal, technical … vocabulary", whereas *tadbhav* words "tend to be non-technical, everyday" vocabulary. In practice, academic texts and lectures often prefer longer compound words and precise grammar, while spoken Gujarati uses simpler phrases and more casual syntax. Scientific Gujarati typically avoids ambiguous idioms and strives for logical structure; it often assigns gender and case in technical terminology quite systematically.

For instance, a layperson might say "high blood pressure" using a loan or colloquial phrase, but in a textbook it might be rendered "ઊંચુ રક્તચાપ" (*ūnchu raktacāp*) – a literal compound of Sanskritic stems for "high" and "blood-pressure". In contrast, everyday speech might use a shorter phrase or even switch to English loan ("હાય બ્લડ પ્રેશર" *hai blood pressure*) for convenience.

The Wikipedia grammar notes highlight this: "Standard Gujarati" is the norm in news, education and government, implying that academic texts adhere to stricter norms than casual dialects. The tatsam vs. tadbhav distinction underscores that technical contexts systematically draw on Sanskritic forms.

Examples of Compound Formation, Calques and Neologisms

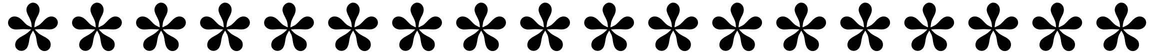
Gujarati scientific language often forms compound words and calques from Sanskrit elements to express precise meanings. Notable examples include:

- Compound calques: Many terms are literal translations of technical concepts. For example, the English *telephone* ("far-sound") was calqued into Gujarati as "દુરભાષ" (*durbhāṣ*, from Sanskrit *dūra* "far" + *bhāṣ* "speech"). Similarly, *Periodic Table* is expressed as "આવર્તક કોષ્ટક" (*āvartak koṣṭak*), literally "the cyclic table" (from *āvarta* "cycle" + *koṣṭaka* "table"). These compounds align the term closely with its conceptual roots. (In science texts, *Periodic Table* appears in context such as "આવર્તક કોષ્ટકના 1 સમૂહનાં રસાયણિક તત્વો…".)
- Sanskrit-derived neologisms: Some modern devices or concepts receive entirely new Gujarati names. The encyclopedic entry notes the example of telephone (*દુરભાષ* above) and explains that many such "neo-Sanskrit" terms are coined, though their uptake varies. Newspapers and magazines may introduce and test new words (e.g. *સૂક્ષ્માણુ sūkṣmāṇu* for "electron" in some texts, or *વિશ્વજાળ viśvajaḷ* for "World Wide Web" in occasional usage), often built from Sanskrit roots.
- Hybrid compounds: When no ready translation exists, Gujarati sometimes forms a hybrid by combining Indian and foreign elements. For instance, while *alkali* is often kept as the English "અલ્કલી" (*alkalī*), chemistry texts describe "alkali metals" as "આલ્કલી ધાતુઓ" (*alkalī dhātu-o*), simply appending the Gujarati word for "metals". In effect, the English term remains but is integrated into Gujarati grammar.
- Precision and logical structure: Academic Gujarati typically marks case and number clearly in compounds. For example, the Sanskrit-derived term "તત્વ" (*tattva*, "element" or "principle") uses the neuter ending *-u* consistently for all chemical element names

(e.g. *સોલ્ફર તત્વ* "sulfur element"). Such consistency contrasts with colloquial nouns which may vary or use different markers. Complex compound nouns (sandhi) are common: e.g. ગુણાંગ્રફી (*guṇāṅgrafī*) as a calque of "histogram" (gun + number-graph).

These strategies – forming tight compounds, using sanskritic calques, and coining new terms – give scientific Gujarati a very logical and semantically dense character compared to casual speech. The result is a specialized vocabulary that, while sometimes unfamiliar to lay listeners, conveys scientific meanings very systematically.

Sources: Scholarly studies of Gujarati linguistic history and translation attest to these trends. Gujarati technical glossaries and encyclopedias exemplify the vocabulary (e.g. *Periodic Table* "આવર્તક કોષ્ટક" and *telephone* "દુરભાષ"). Gujarati linguists note the clear divide between formal (tatsam) scientific language and everyday speech, and recent articles on language policy record modern terminology projects under state and university auspices. These sources illustrate how Gujarat's language planners and scholars have built up a coherent scientific lexicon over time.



Kannada people

Historical Development of Kannada Language

Kannada is one of the four major literary Dravidian languages (along with Telugu, Tamil and Malayalam). Linguists reconstruct Proto-Dravidian as the common ancestor of Dravidian tongues, with Kannada arising from the South Dravidian (Tamil-Kannada) branch. Early evidence suggests a distinct Kannada dialect existed by the early centuries CE: Greek geographer Ptolemy (2nd century AD) records Kannada-origin place-names in Karnataka (e.g. Kalgeris/Kalkeri, Modogoulla/Mudugal, Badamios/Badami). The 5th-century Kadamba king Mayurasharma's *Halmidi* inscription (c.450 CE) is the oldest known written Kannada, implying the language was already "fully developed" by the 5th–6th century. The Kadambas (c. 345–525 CE) were the first dynasty to use Kannada administratively: coins and inscriptions from Banavasi and Talagunda show Kannada legends and boundary-clauses as early as 450 CE. By this time Kannada had clearly diverged from Proto-Dravidian models, adopting many characteristic Dravidian innovations and a growing vocabulary (including Prakrit/Sanskrit loans).

Old Kannada Period (c.450–1200 CE)

Dynasties and Language Use

During 6th–12th centuries AD, Kannada flourished under native Karnataka dynasties. The Badami Chalukyas (6th–8th c.) continued Sanskrit for formal verses but increasingly inscribed royal grants in Kannada. Inscriptions show a rising use of Kannada: by the later Western Chalukyas (Kalyani Chalukyas, c. 10th–12th c.), roughly 90% of royal inscriptions were in Kannada. The Rashtrakutas (8th–10th c.) proclaimed their state a *Karnataka* or "Kannada empire" – King Amoghavarsha I (c.800s) even co-authored the early Kannada classic *Kavirajamarga* (c. 850). Amoghavarsha's reign (879–921) marks a high point: he patronized Kannada poets and scholars, promoting Kannada alongside Sanskrit. Thereafter the Western Gangas (4th–10th c.) and later Hoysalas (12th–14th c.) continued to support Kannada as an administrative and literary language.

Throughout this era, Jainism and Veerashaivism played key cultural roles. Jain scholars, versed in Prakrit and Sanskrit, were prolific Kannada authors. They appropriated literary techniques from Prakrit poetics, adapting grammar, metrics and themes to Kannada. Historian R. S. Mugali notes that Jain writers "appropriated grammar, lexicon, metrics and theme from Prakrit and localized" them in Kannada works. Thus by 10th century Kannada had the full capability for

sophisticated literature. (Veerashaiva/Lingayat authors emerge a bit later, in the 12th century, discussed below.)

Kannada Script Evolution

The Kannada script evolved from the Brahmi family. The Kadamba script (c.5th century) – seen in the *Halmidi* and other early inscriptions – is essentially the earliest form of Kannada writing. This script descended from Southern Brahmi, just as Tamil-Brahmi evolved into the Grantha alphabet. Under the Badami Chalukyas and Rashtrakutas (6th–10th c.), Kannada and Telugu used a common "Kannada–Telugu" script. Only around the 13th–14th centuries did Kannada and Telugu scripts fully diverge. By the Hoysala period (12th–13th c.), the alphabet had developed the rounded, decorative style we recognize today. In fact, modern Kannada letters closely resemble the Kalyana-Chalukya/Hoysala forms: "the present-day Kannada script almost resembles [the] scripts used in Kalyana Chalukya and Hoysala" times. (Mysore's later *Modi* script and English-derived orthography only come into play much later.)

Grammar and Sound Changes

Old Kannada had a mature grammar by the 9th–10th centuries. The *Kavirajamarga* (c.850) – authored by Rashtrakuta king Amoghavarsha I and poet Sri Vijaya – is the oldest extant Kannada book on poetics and grammar. It standardizes earlier literary forms and mentions even older Kannada poets and meters, indicating a rich tradition already in place. Old Kannada shows typical Dravidian phonology: for example, Proto-Dravidian *p* became *h* at the beginning of words in Kannada. (Compare Old Kannada *pāl* with Modern Kannada *hāl(u)* "milk".) Suffixing and agglutinative case endings were fully functional.

Medieval grammarians codified these patterns. Nagavarma II (c.1050 CE) wrote the *Śabdasmṛti* (the first formal Kannada grammar) and *Karṇāṭaka-Bhāṣābhūṣaṇa* (a comprehensive grammar in Sanskrit style). In 1260 CE Kesiraja produced *Śabdamaṇidarpaṇa*, the most celebrated Kannada grammar of the period. (Kesiraja's work, in Kannada itself, became the standard reference for centuries.) Bhattakalanka's *Śabdānuśāsana* (17th century) and other works also circulated, though by then written in Sanskrit. By the 18th–19th centuries, Europeans (missionaries and scholars) began authoring new Kannada grammars and dictionaries in English, marking the transition toward Modern Kannada grammar studies.

Major Literature (Jain "Golden Age")

The Old Kannada era is renowned for its Jain authors. The 10th–12th centuries are sometimes called the *Jaina Aviragini*, an "Augustan age" of Kannada literature. The *"three gems"* of this age were Adikavi Pampa, Sri Ponna, and Ranna. Pampa (c.941) authored two epics: the *Vikramarjuna Vijaya* (a Mahabharata retelling) and the *Adipurana* (life of Jain Tirthankara Rishabha). Ponna (c.950) wrote the *Santipurana* on the 16th Jain Tirthankara. Ranna (c.982) wrote the *Sahasabhimavijaya* (Gadayuddha), celebrating Bhima's victory in the Mahabharata, and the *Ajita Purana* (Jain epic). These works, written in highly literary (champu) Kannada, set stylistic standards. Other Jain classics include Nagachandra's *Ramachandra-charitapurana* (1105, a Jain Ramayana) and Shivakotiacharya's *Vaddarādhane* (c.900, the earliest extant Kannada prose). Notably, Jain scholars produced the only known Kannada versions of both the Ramayana and Mahabharata epics (the Jain *Vikramarjuna Vijaya* and *Ramachandra Puraṇa*), a distinctive literary achievement. Inscriptions and literature show that Kannada maintained a

strong Dravidian base but absorbed extensive Sanskrit/Pali vocabulary, especially for religious and courtly themes.

Middle Kannada Period (c.1200–1700 CE)

With the arrival of the Hoysala and Vijayanagara dynasties, Kannada transitioned to the Middle stage (*Nāḍugannada*). Under the Hoysalas (1100–1340 CE), Kannada remained a court and temple language. King Vishnuvardhana (c.1110–1152) and his successors patronized literature in Kannada (e.g. Harihara's *Girijakalyana* in champu style) and accommodated evolving script forms. The Vijayanagara Empire (1336–1565) further spread Kannada use across South India; in the Deccan, members of the Kannada-speaking Wodeyar and Arasu dynasties used Kannada alongside Sanskrit.

Veerashaiva (Lingayat) literature: In the 12th–13th centuries the Veerashaiva (Lingayat) bhakti movement produced a powerful vernacular literature. Saints like Basavanna, Akka Mahadevi and Allama Prabhu composed terse vachanas – one-verse devotional poems in colloquial Kannada – preaching social reform and personal devotion. Over 200 *Vachanakara* (vachana poets) are known from this period. These writings broke away from Sanskritic style, using plain syntax and native idioms. Later Veerashaiva teachers and poets (Chennabasava, Prabhudeva, Siddharama, etc.) continued the tradition. (Though these works are key to Kannada heritage, they were transmitted orally and only printed in the modern period.)

Haridasa literature: Beginning in the 14th century, the Vaishnava *Haridasa* movement arose under Madhvacharya's Dvaita philosophy. Haridasa saints (Purandara Dasa, Kanaka Dasa, Vyasatirtha, etc.) wrote thousands of Kannada devotional songs (keertanas, ugabhogas, etc.) praising Vishnu/Krishna. This *dasakuta* literature further shaped Kannada, blending Sanskrit vocabulary with colloquial Kannada grammar. For example, Purandara Dasa (c.1480–1564) compiled *padas* and established Carnatic music pedagogy. Kanaka Dasa (c.1509–1609) composed moral poetry and an early Ramayana. Their language helped standardize a pan-Kannada devotional style still sung today.

Literary epics and prosody: In Vijayanagara's royal courts (14th–15th c.), poets also adapted Sanskrit epics. The most celebrated is Kumara Vyasa (Naranappa, c.1465), who composed the *Karnata Bharata Kathamanjari* (the first ten cantos of the Mahabharata) for King Deva Raya II. (A disciple later completed the rest as *Krishnaraya Bharata*.) Around the same time Narahari wrote the *Torave Ramayana* in Kannada (and in Maharashtra). These works made high Sanskrit literature accessible to Kannada audiences, enriching vocabulary and idiom.

Meanwhile, scholarly works continued: Kesiraja's *Śabdamaṇidarpaṇa* (1260) remained authoritative; Bhattakalanka's *Śabdānuśāsana* (17th c.) and numerous commentaries dealt with grammar and prosody. Notably, in the 13th century Mallinatha's commentary on Raghavanka's *Harishchandra Kavya* set new standards. Andayya's *Kabbigara Kava* (c.1220) is famous for using only native Kannada and naturalized words, deliberately avoiding Sanskrit tatsamas. This period solidified the core grammar of Kannada while expanding its lexicon through religion, trade and administration.

Modern Kannada (c.1700–Early 1900s)

By the 18th century, Kannada had firmly entered *Hosadkannaḍa* ("New Kannada") phase. Under Mysore's Wodeyar kings (17th–18th c.) and Keladi Nayakas, Kannada continued in state

and temple use, though Persian and Urdu influences appeared in administration under Hyder Ali and Tipu Sultan. After 1799 the British took indirect control, founding modern education. As literacy spread, printing and publishing became crucial in shaping the language.

The Basel Mission Press in Mangalore (founded 1841 by German missionary Gottfried Weigle) pioneered Kannada printing and journalism. In July 1841 it issued Mangalur Samachara, the first Kannada newspaper, edited by Hermann Mögling. Earlier in the century, English-speaking missionaries had already produced the first printed Kannada grammars and dictionaries: William Carey's *A Grammar of the Kurnata Language* (1817) and John Maccarell's *Grammar of Carnataka* (1820), followed by William Reeve's 1824 dictionary. By 1827 John Hands established a press at Bellary (initially using Telugu types, later importing Kannada typefaces). In the 1840s–1860s the Wesleyan and Basel missions set up presses in Bangalore and Mangalore, continually improving Kannada type and standardizing orthography.

These printing efforts had immense literary impact. Missionaries and scholars edited and published old Kannada manuscripts. Notably, the Basel Mission's *Bibliotheca Carnatica* series (1848–1860) brought many medieval classics into print. For example, Mögling published Lakshmisha's *Jaimini Bharata* (Kannada Mahabharata) in 1848, the *Toruve Ramayana* in 1849, and collections of 16th-century Haridasa poems and Basava Purana by 1850. Nagavarma's *Karnataka Bhasha Bhushana* (oldest extant Kannada grammar, 10th c.) was edited and printed (by Kittel) in 1875, and Kesiraja's *Shabdamanidarpana* was published in 1868. In short, once oral/manuscript works were in print they became part of the standard literary heritage, labeled as *Kannada* rather than sectarian texts.

By the late 19th century Kannada had a modern literary economy. Missionary scholars like Ferdinand Kittel compiled major resources: Kittel's *Kannada–English Dictionary* (1894) and grammar (1883) were benchmarks. Indigenous presses proliferated in all Kannada regions (Mysore, Bombay Presidency, Madras Presidency); by 1900 even small towns had printing presses. The language, meanwhile, absorbed English and Marathi loanwords (e.g. in administration, education) while codifying its syntax through new textbooks. Grammar instruction in schools still followed Sanskrit traditions, but textbooks now used Kannada examples. This period set the stage for 20th-century Kannada renaissance: by 1900 the language had an unbroken literary tradition of ~1200 years, a standardized script, and modern literary conventions, ready to enter the modern era.

Key dynasties and periods: For clarity, Kannada history is often divided into Old Kannada (c.450–1200), Middle Kannada (c.1200–1700), and Modern Kannada (c.1700–present) stages. The chart below summarizes major eras:

Period	Dates (approx.)	Dynasties & Events	Language Developments	Notable Literature
Prehistory to 5th c CE	–450 CE	Proto-Dravidian → Proto-South-Dravidian	Early speech forms diverge; Brahmi-derived scripts appear in South	(No extant texts)
Old Kannada	450–1200 CE	Kadamba, Ganga, Badami & Western Chalukya,	Kannada becomes court/inscriptional language; script from Kadamba→Telugu–Kannada	*Kavirajamarga* (9th c. poetics) Jain epics: Pampa (Adipurana), Ranna (Gadayuddha) etc.

		Rashtrakuta, Western Chalukya		
Middle Kannada	1200–1700 CE	Hoysala, Vijayanagara, Nayakas (Keladi)	Script evolves (cursive Hoysala style); vernacular literature flourishes	Veerashaiva *vachanas* (Basava, etc.); Haridasa bhakti songs (Purandara, Kanaka); Kumaravyasa's Mahabharata (15th c.)
Modern Kannada	1700–1900s	Mysore Wodeyars, British colonial	Missionary printing press era; Kannada grammars, dictionaries (Carey, Kittel); newspapers (e.g. *Mangalur Samachara* 1841). Standardization of orthography.	Printing of classical texts (*Bibliotheca Carnatica*); rise of modern prose and journalism.

Each era built on the last. The old Kannada period laid the grammatical and literary foundations (with Jain and early Shaiva authors), while middle Kannada saw devotional and epic expansions (Lingayat and Vaishnava movements) and a more polished script. In modern times, missionary-driven printing, Western scholarship and colonial education fused Kannada's classical heritage with modern forms. Together, dynastic patronage, religious movements (Jain, Lingayat, Haridasa) and new technology (print) shaped Kannada from its ancient roots through the early 20th century.

Sources: Authoritative histories and linguistic studies of Kannada. These include academic overviews and contemporary research news, as well as published inscriptions and grammars. Each major point above is documented in the cited literature.

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The historical development of the Kannada writing system from its beginnings to the early 1900s

Origins and Kadamba Roots (up to 5th century CE)

Kannada writing evolved from the southern Brahmi scripts. Early inscriptions in Karnataka (like Ashokan edicts) were written in Prakrit with Brahmi characters, but already contained Kannada names, indicating Kannada speech in the region. By the 4th–5th centuries CE a distinct "Kadamba script" emerged from Brahmi. This "Pre-Old Kannada" script (also called Kannada–Kadamba) shows shorter, rounded letterforms compared to Northern Brahmi. It is recognized as the first script devised specifically for Kannada. By about 450 CE the Telugu–Kannada alphabet had crystallized from the Kadamba form. The Kadamba script and its variants gave rise to the Telugu–Kannada script during the early Chalukya period.

Figure: The Halmidi inscription (c.450 CE), the earliest known Kannada inscription. The text is carved in an early Kadamba-style script.

For example, the Halmidi inscription (dated c.450 CE) – a 16-line grant on a stone pillar – is written in the Kadamba script and Kannada language. Its letters are short and curved, lacking any distinction between certain vowels (e.g. the early script did not distinguish short versus long 'e' and 'o'). Similarly, the Talagunda pillar (455–470 CE) contains an invocation in Sanskrit written in this early Kannada script. Modern studies note that the Talagunda text is "classical Sanskrit" in content but the script is Kannada (floral box-type). These Kadamba-era inscriptions show the script's Brahmi origins and its early development: distinct symbols for retroflex sounds (ಱ, ೞ, ಳ) appear by the 5th century, but the overall form is still very similar to southern Brahmi. To accommodate writing on palm leaves (for manuscripts) scripts were drawn in smooth, curving lines (avoiding straight strokes that tear leaves), whereas stone inscriptions retain a somewhat angular "chiselled" quality. In short, the Kadamba script represents the bridge from Brahmi to Old Kannada: a locally adapted Brahmi with new curved shapes suited to Dravidian phonetics.

Early Kannada and Dynastic Periods (6th–10th centuries)

From the 6th century onward, Kannada script continued to evolve under successive dynasties. The early Western Gangas (c.350–1000) and Badami Chalukyas (543–753) carved numerous inscriptions in granite and sandstone. Badami Chalukya inscriptions are often in Sanskrit verse, but written in Kannada script. Their letters remain rounded but begin to show distinctive regional style. For example, a Badami cave inscription of King Mangalesha (578 CE) contains Kannada names and verses in Kannada characters. Chalukya stone-cutters prized the available red sandstone, but still inscribed in Kannada (and sometimes Sanskrit) script. Notably, the Pattadakal pillar (c.670) is bilingual: one column in Kannada script (Sanskrit language) and another in Nagari (Sanskrit), reflecting northern influence on the region.

The Rashtrakutas (8th–10th c.) continued and expanded these traditions. They used a softer "block" stone for elaborate temple inscriptions. Rashtrakuta inscriptions are celebrated for long, ornate Sanskrit praises, often 9–10 lines or more, with introduced numeral dates and complex ligatures. Under King Krishna III (r.939–968) Kannada-language inscriptions spread even beyond Karnataka (e.g. a Kannada record at Khajuraho in Madhya Pradesh), indicating imperial patronage of Kannada script. Throughout the 6th–10th centuries, the Telugu–Kannada alphabet stabilized; letters became more curvilinear and joined (ottakshara forms), adapting to temple architecture and palm-leaf manuscripts. Scribes often wrote in Sanskrit or Marathi with Kannada letters, and Kannada itself was sometimes described as a kind of Prakrit in inscriptions. By the late 9th century, the script was mature enough to support formal literature: the Rashtrakuta King Amoghavarsha I even composed *Kavirajamarga* (c.850 CE), the earliest extant Kannada grammar/poetics text.

Later Medieval Period (Western Chalukya, Hoysala, Vijayanagara: 10th–16th centuries)

In the 10th–12th centuries the Western (Kalyani) Chalukyas and their feudatories produced a golden age of Kannada epigraphy. Inscriptional plates and temple carvings from Tailapa II (r.975–997) through Vikramaditya VI (r.1076–1126) use a highly polished Kannada script. The Chalukyas employed schist stone which allowed very fine carving. Inscriptions from this era are extremely lengthy (often 150+ lines) and top-decorated, with flourished Kannada letters. Court poets like Ranna and Janna even authored inscriptional panegyrics in Kannada. The "box-

type" script had by now acquired more straight strokes and distinctive loops, yet remained legible and rhythmic. This period also saw the Telugu–Kannada script (shared with Telugu) reach peak stability.

The Hoysalas (12th–14th c.) used similarly hard stone (schist) for their temples. Their royal grants and temple inscriptions are noted for *very* stylized, ornate Kannada letters. For example, Hoysala king Vishnuvardhana's 1113 CE record at Doddagaddavalli shows angular curves and decorative swirls in each akshara. By the end of Hoysala rule, the script had evolved noticeably: certain ligatures and vowel signs resemble modern shapes. (One 1220 CE Hoysala inscription at Arasikere, for instance, already looks much like later medieval script.)

In the Vijayanagara Empire (14th–16th c.), Kannada inscriptional style shifted again. Rulers built in granite and placed short Kannada texts on wall plaques. Vijayanagara inscriptions tend to have large letters and briefer prose (often a few lines of Kannada text, rather than long Sanskrit stanzas). The composition changed from poetic meter to straight narrative. This brevity and the hardness of granite meant letters grew blockier. Still, local Kannada dialects were encouraged (the classic *Kannada Purana* chronicles and administrative documents appear). In sum, by the late medieval period the Kannada script had coalesced into forms very close to its modern lineage, even as stylistic flourishes varied by dynasty.

Script Changes, Calligraphy, and Media

Over time Kannada akshara (syllabic letters) underwent gradual graphic change. Inscriptions on stone remained relatively rigid and monumental, whereas palm-leaf manuscripts fostered cursiveness. Because palm leaves tear on straight strokes, Kannada cursive forms became rounder. Conversely, stone chiseling tended to produce more angular cuts. For example, very early letters (Kadamba script) are largely curved (as in Halmidi), while later medieval inscription-letters sometimes have sharp corners. Another orthographic change was the introduction of new symbols: by the 5th c. Kannada script had distinct signs for retroflex /ɻ/ (ೞ), retroflex /ɭ/ (ಳ), and the lateral /ḻ/ (ಱ). Conversely, the script *did not* originally differentiate short versus long "e" and "o" – that distinction came later. Over the centuries, diacritics like the anusvara (◌ಂ) and visarga (◌ಃ) were used mainly to represent Sanskritic sounds (for example, the visarga appears only in Sanskrit loans in Kannada). By the 19th century the script was fully alpha-syllabic: each consonant carried an inherent "a", with diacritic marks for other vowels. The set of 49 basic aksharas (vowels and consonants) used in modern Kannada can already be seen in early 19th-century inscriptions (for example, Wodeyar coin inscriptions show the full vowel set).

Sanskrit and Prakrit Influences

Throughout its history, Kannada writing was heavily influenced by Sanskrit and Prakrit. Many classical inscriptions were composed in Sanskrit or Maharashtri Prakrit but carved in Kannada characters. For instance, the Kadamba Talagunda inscription is Sanskrit text ("classical Sanskrit (Paninian)") in Kannada script. In fact, one Chalukya-era Kannada record explicitly describes the Kannada language as a form of "Prakrit" (vernacular). Linguistically, Kannada absorbed a vast Sanskrit vocabulary and even followed Sanskrit poetic meters; grammatically it was influenced by Paninian and other Sanskrit traditions. Orthographically, this meant Kannada script needed extra signs for Sanskrit sounds (e.g. additional aspirated consonants, the visarga sign, etc.). Early on, Jain and Shaiva authors often wrote Kannada in a highly Sanskritized style.

In short, the intertwining of Kannada with Sanskrit/Prakrit is evident both in content and in how the script accommodated foreign sounds.

Key Epigraphic and Manuscript Milestones

- Halmidi (c.450 CE): The oldest known Kannada inscription. Carved on a pillar, it is written in early Kannada (Kadamba) script.
- Talagunda (455–470 CE): Kadamba dynasty Sanskrit inscription on a temple pillar. Though the language is Sanskrit, it is explicitly written “in Kannada script” (floral box style).
- Kappe Arabhatta (c.700 CE): A Kannada verse inscription from Badami in tripadi metre. Its ten lines are in Kannada script; one stanza even contains a full Sanskrit śloka. This is the earliest example of metrical Kannada poetry on stone.
- Other medieval inscriptions: Many subsequent temple and grant inscriptions record Kannada (often alongside Sanskrit) in evolving scripts. Examples include the Chavundaraya inscription at Shravanabelagola (c.983), the Atakur inscription (c.949), and numerous Hoysala and Vijayanagara records. Each reflects incremental changes in letter-shapes and orthography.
- Kavirajamarga (c.850 CE): The earliest extant Kannada literary work (treatise on poetics and grammar). Though a manuscript text, its existence shows the script was fully functional for literature by the 9th century.

These epigraphic and literary pieces provide snapshots of the script at each era. For example, inscriptions show how Kannada script was used for official and religious purposes, while surviving manuscripts (palm-leaf copies of literary and scholarly works from the medieval period) reveal handwriting styles and orthography in circulation. Together, they mark the script’s stages from “proto-Kannada” to Old Kannada (ಹಳೆಯಗನ್ನಡ) to Medieval (ನಡುವುಗನ್ನಡ) and into Modern Kannada (ಹೊಸಗನ್ನಡ).

Cultural and Political Context

Political dynasties and cultural trends shaped the script’s usage. Dynastic patronage determined whether inscriptions were in Kannada versus Sanskrit. The Kadambas and Gangas regularly inscribed land grants in Kannada; the Chalukyas and Rashtrakutas often used Sanskrit eulogies (but in Kannada script). Royal support gave Kannada writing prestige: for example, the Rashtrakutas welcomed Kannada and Sanskrit scholars alike, while Western Ganga and later Hoysala rulers had Kannada poets compose inscriptional verses.

The arrival of foreign powers also impacted script use. Chola conquest (c.1004 CE) introduced granite temple inscriptions in Karnataka with Tamil influence, leading to some stylistic shifts (granite carving favored simpler forms). In Vijayanagara times, stability allowed large-scale temple-building and many Kannada inscriptions. Conversely, the breakup of Vijayanagara and rise of the Bahmanis (Persianate sultanate) led to a decline in Kannada stone inscriptions (Persian and Arabic took over administration). Under the Mysore Kingdom (17th–19th c.), Kannada regained official status; Wodeyar kings used Kannada script on coins and documents. Finally, British colonial rule brought the printing press: the first Kannada grammar was printed in 1817 (Carey’s *Canarese Grammar*) and the first Kannada Bible in 1820, permanently shifting writing to paper and movable type. These political and cultural shifts influenced which variant of the script became standard. By the early 20th century, with schools and presses using

a common orthography, the Karnataka government had effectively standardized modern Kannada writing.

Transition to Modern Kannada (19th–early 20th century)

By the 1800s, Kannada script had settled into its modern form (Hosagaṇṇaḍa). The Mysore Wodeyar period provides examples: their 19th-century coins and grants use a script recognizably identical to today's Kannada. The alphabet by this time had all 13 vowels and 36 consonants (plus semivowels) used in contemporary writing. Print technology helped unify forms: once carved wooden or metal type for Kannada letters was created (first in Serampore and Madras presses), regional variations diminished. By 1900, education in Karnataka taught a standard script largely derived from the medieval Telugu–Kannada model but pruned of archaic ligatures. In summary, from its roots in Brahmi through the Kadamba and Chalukya eras, Kannada writing gradually morphed into the elegant, mostly-curved alphabet we see today – a transformation documented in stone pillars, temple walls, palm-leaf manuscripts, and ultimately printed books.

Sources: Authoritative histories and epigraphic studies of Kannada script development, along with archaeological evidence (noted inscriptions) and modern scholarship on orthography. Each quoted claim above is supported by the indicated reference.

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Historical Evolution of Kannada Vocabulary and Style

Kannada is a Dravidian language with an unbroken literary tradition spanning over a millennium. Early Kannada retained its native Dravidian core while absorbing many foreign elements. Inscriptions and literary works reveal that Sanskrit and Prakrit heavily influenced Kannada from ancient times. For example, old inscriptions (Ashokan edicts, Halmidi pillar c.450 CE) already contain Kannada words, showing a rich spoken tradition by the 3rd century BCE. Over centuries, Kannada incorporated thousands of tatsama (unchanged Sanskrit) and tadbhava (adapted Sanskrit) words – e.g. *dina* "day", *sūrya* "sun", *mukha* "face" – as well as Prakrit derivatives (e.g. *baṇṇa* from *vaṇṇa* "colour"). Early Kannada also exchanged ideas with neighboring languages (e.g. Tamil) while "imbibing…the richness of Sanskrit".

Ancient Kannada (to 10th century). The earliest full Kannada inscription is the Halmidi pillar (c.450 CE), showing Kannada used in administration. However, almost no secular texts survive before the 6th century. Kannada literature begins to appear by the 8th–9th centuries. The *Kavirajamarga* (c.850 CE) – a royal treatise attributed to King Amoghavarsha I – is the earliest extant Kannada work, discussing metrics and grammar. By the 9th–10th centuries, Jain authors composed epic and prosimetric (champu) works rich in Sanskrit-derived vocabulary, such as Pampa's Adipurana (941 CE) and Vikramarjuna Vijaya (c.941). Vachana-like prosody (gadyakāvyas) also emerged in these early years. Throughout this period, formal Kannada was highly Sanskritized in vocabulary and style, often far from the spoken dialect. As one scholar notes, Old Kannada literature ("the Jaina period") used complex forms unreadable to modern

readers without training; only after the 12th century did grammar stabilize so that later texts could be understood by native speakers.

Medieval Kannada (10th–18th centuries)

Under the Chalukya, Hoysala and Vijayanagara empires, Kannada literature flourished. The Jaina classical age (10th–11th c.) produced the "three gems" – Pampa, Ranna and Sri Ponna – whose champu epics (on Jain legends and adapted Mahabharata/Ramayana) set high literary standards. These works maintained heavy Sanskrit influence in vocabulary and verse form, though they also retained native Kannada meters (e.g. *bedande*, *chattana*, *gaḍya* rhythms noted in Kavirajamarga). Grammarians like Nagavarma II (12th c.) and Keshiraja (13th c.) wrote standard Kannada grammars (*Karnataka Bhashabhushana*, *Shabdamanidarpana*) codifying this Sanskritic literary language.

From the 12th century, the Virashaiva (Lingayat) movement shifted style and vocabulary. Mystics Basava, Allama, Akka Mahadevi and others composed *vachanas* – short, free-verse utterances in plain Kannada that often directly address common life and devotion. These works employed a more colloquial register and reduced Sanskritism, marking a dramatic stylistic break from the ornate champu tradition. Simultaneously, *padas* and *kirtanas* (devotional songs in Kannada) began to flourish.

In later medieval times (14th–18th c.), literature became more diverse. Secular and devotional poets like Harihara (Basavapurana, 1378) and Purandara Dasa or Kanaka Dasa (15th–16th c. Haridasa composers) continued rich Sanskritic traditions but also used native devotional forms. The Vijayanagara court poet Kumaravyasa (c.15th c.) recast the Mahabharata in mixed verse-prose. During this period, Kannada also borrowed vocabulary from Persian and Arabic as Muslim dynasties ruled parts of Karnataka. Researchers note that "a large number of Arabic/Persian words" entered Kannada over centuries of Muslim rule. In fact, modern scholars estimate *thousands* of Persian-origin terms are in Kannada (e.g. *sarkār* "government", *kitāb* "book"). Meanwhile, Sanskrit and Prakrit loans continued to enrich the lexicon, maintaining a clear diglossia: the literary standard remained conservative and high-style, while spoken Kannada (reflected in folk and devotional genres) grew more idiomatic.

Key works and authors: Ancient classics (Kavirajamarga, Vaddaradhane) gave way to 10th–11th c. epics by Pampa (*Adipurana*, *Vikramarjuna Vijaya*), Ranna (*Gadhayuddha*), Ponna (*Shantipurana*). The 12th c. Vachana poets (Basava, Akka Mahadevi, Allama Prabhu) authored accessible prose-poems. From 14th c. onward, poems like Harihara's *Basavapurana*, Kumaravyasa's *Gadugina Bharata* and the Haridasa padas blended folk idiom with classical content. Grammar and lexicon were advanced by Keshiraja, Nagavarma II, and later by early modern lexicographers.

Colonial Kannada (18th–20th centuries)

The British colonial period (and the enlightened Mysore court) brought dramatic changes. Western printing technology, introduced in the early 19th century, allowed Kannada books and newspapers to be mass-produced. In 1843 Hermann Mögling (a Basel missionary) published *Mangaluru Samachara*, the first Kannada newspaper. Missionaries and British scholars translated Kannada works into European languages and compiled grammars/dictionaries (e.g. Ferdinand Kittel's 1894 Kannada–English dictionary). The Mysore Raja Krishnaraja Wodeyar III also patronized Kannada prose; his court poets shifted from champu to modern prose

renderings of Sanskrit epics. Kempu Narayana's *Mudramanjusha* (1823) is often cited as the first Kannada novel.

Late 19th-century writers embraced Western literary forms. For example, Lakshman Gadagkar's *Suryakantha* (1892) and Gulvadi Venkata Rao's *Indira Bai* (1899) adopted realistic prose, signaling "the move away from the highly stylised…aesthetics of prior Kannada works" toward modern narrative style. Newspapers and journals multiplied (e.g. *Mysuru Vrittanta Bodhini*), featuring local news, government notices, folklore, and even fiction. These publications generally used a simpler, more colloquial Kannada than classical literature. As one 19th-century editor remarked, a newspaper would "open the windows" of isolated locals by presenting world news in the vernacular. Thus journalistic Kannada began to diverge from bookish literary Kannada, favoring clarity and everyday vocabulary (though still constrained by grammar).

Vocabulary and style: Under colonial influence, English also seeded new terms (for technology, administration, education), many later Sanskritized (e.g. *parivāra* for "family", *parisarā* for "environment"). High literature retained classical elements, but the Navodaya (lit. "new rise", early 20th c.) movement led by B. M. Srikantaiah called for writing in "modern Kannada" and moved away from archaic forms. B. M. Sri and contemporaries promoted a standardized modern literary idiom (sometimes via translations from English) to bridge the gap between learned and spoken language.

Modern Kannada (20th century–present)

After Indian independence, Kannada rapidly modernized. It became the official language of Karnataka, and new generations of writers explored contemporary themes. The Navya (modernist) and later Pragatisheela (progressive) movements experimented with lyrical and realist styles. Authors like Kuvempu, U. R. Ananthamurthy, Masti Venkatesh Iyengar and Girish Karnad won national awards (Jnanpith, Booker) for works that, while formally sophisticated, often employed more conversational language and novelistic forms.

On the vocabulary front, English influence is now pervasive, especially for science, technology, and popular culture terms. Many English loanwords are used as-is or with Kannada suffixes (e.g. *modarn* "modern", *baskattu* "basket"), though there have been conscious efforts at pure Kannada neologisms. Conversely, Kannada literature still draws on its Sanskrit heritage – for example, modern poets often use tatsama Sanskrit vocabulary for literary effect. Kannada also continues to absorb some Hindi, Urdu and other regional words via media and migration, but Sanskrit and English remain the major contributors.

Formal vs. informal style: Kannada remains diglossic. Formal literary and official Kannada tends to use more conservative grammar and Sanskrit-derived vocabulary, whereas everyday speech (and thus newspapers, radio, TV) uses simpler syntax and colloquial words. In recent decades, Kannada newspapers and television news use a standard register that, while grammatically correct, resembles spoken Kannada. For instance, the popular daily *Prajavani* wrote its articles in a plain style accessible to non-scholars. Classical literature is still read in its own high-register style, but many modern writers and journalists purposely blur the line. As cited in a linguistic survey, "strong diglossia distinctions have…created stark historical differences between its colloquial and literary forms", although contemporary authors often strive to reduce this gap.

Kannada in Print, Journalism, and Media

Kannada rapidly adapted to each new medium. The lithographic press of the 1840s (Basel Mission) evolved into modern printing presses by the early 1900s, enabling widespread publishing. Newspapers (starting with *Mangaluru Samachara*) and periodicals became vehicles of the modern language; for example, Kannada journalism originally included local news, government announcements and cultural content with minimal religious trappings. The 1915 founding of the Kannada Sahitya Parishat helped standardize spellings and vocabulary across publications.

The broadcast era (radio and TV) further popularized spoken Kannada. All India Radio began Kannada programs in the mid-20th century, and Doordarshan broadcasts from 1984 onward carried news and education in Kannada to all homes. These channels used plain Kannada to reach broad audiences. Similarly, the flourishing Kannada film industry (Sandalawood) uses regional dialects and popular idioms, feeding informal expressions back into the language.

Throughout, high-culture literature and mass media have influenced each other. Many literary figures wrote columns or scripts for radio/TV, bringing literary prose into media contexts. Conversely, vocabulary coined in journalism and science (e.g. *jaṭi* for "race", *dōṣa* for "fault") often entered literary and academic usage. Today's Kannada enjoys a rich continuum: formal compositions (epics, poetry, philosophy) coexist with a vibrant journalistic and digital Kannada that speaks to the public in familiar terms. This interplay – from the merchant's courtyard to the novelist's study – has continually reshaped Kannada's style and vocabulary, making it both a language of high culture and a living tongue of the people.

Sources: This overview draws on linguistic and historical sources tracing Kannada's development, including scholarly histories and language surveys. These detail the evolving influence of Sanskrit, Prakrit, Persian and English, stylistic shifts (champu → vachana → modern prose), and the role of printing and media in standardizing and spreading Kannada. All cited references are from academic or reputable sources of Kannada literary history.

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Historical Development of Scientific Vocabulary in Kannada

The Kannada language, with an unbroken literary history of over a millennium, has continuously expanded its technical and academic lexicon through successive eras. In the ancient and medieval period, Kannada already served as a language of science. By the 11th century, scholars were composing "worldly sciences" texts in *New Kannada*, translating Sanskrit works on everyday life and epistemology. Throughout the Vijayanagar and later medieval eras, Sanskritic influence was pervasive: abstract, philosophical and scientific terms were often borrowed directly from Sanskrit (tatsama loans) or formed as compounds with Sanskrit roots. Simultaneously, contact with Persian and Arabic introduced terms in administration and astrology; for example, a 10th–11th century Kannada dictionary (Mangaraja Nighantu, c. 1398 AD) already shows Arabic loanwords. Notably, research shows that even

before colonialism "vernaculars such as *New Kannada* served as languages of science in premodern South Asia, despite the presumed hegemony of Sanskrit".

Colonial Era (18th–mid-20th century)

With the arrival of British rule and missionaries, Kannada encountered English and Western science directly. Missionary linguists produced the first modern grammars and Kannada–English dictionaries (e.g. Reeve 1832, Kittel 1894). English-language education introduced new scientific concepts and terminology. The colonial administration translated laws and technical texts into Kannada, while university education (Mysore University, 1916 onward) began to train Kannada-speaking scientists. As one study notes, most technical literature of this era remained *translation-oriented*, reflecting English models. At the same time, scholars drew on earlier Kannada traditions: for example, medieval Kannada treatises on mathematics, medicine and astronomy were used as points of reference, and in some cases Tamil cognates were borrowed to coin new terms when Sanskrit was insufficient.

Post-Independence (1950s–1990s)

After 1947 and especially after Karnataka's formation in 1956, Kannada underwent planned development as an academic language. The *Karnataka Official Language Act* (1963) and Official Language Resolution (1968) mandated Kannada in administration and education. In 1960 the Government of India established the Council for Scientific and Technical Terminology (CSTT) to standardize terms in all Indian languages. Karnataka launched workshops and committees: e.g. in 1971 and 1975 Mysore University held *Viijñāna Saahitya Nirmaana* and *Saastra Saahitya Nirmaana* to train authors to write science textbooks in Kannada. These efforts confronted the "major problem… of *technical terms*". It was acknowledged that many technical concepts had no ready Kannada word, so committees balanced coining new tatsama terms with borrowing from English where sensible. For instance, workshop reports advised that about 80% of English technical terms might simply be adopted into Kannada, with appropriate inflection.

In practice, Kannada technologists debated term-coinage vigorously. A famous example is the word *fossil*: one group suggested *ಫಾಸಿಲು* (*faasilu*) (a direct colloquial borrowing), while others proposed *ಜೀವ ಅವಶೇಷ* (*jīva avaśeṣa*, "living remnant"). Scientists ultimately used both approaches, retaining some English-root forms (often shortened) and Sanskrit-based neologisms in parallel. By 1987, approximately 785 Kannada science books (593 original, 192 translations) had been produced in Karnataka, reflecting a mature scientific register. Modern Kannada now routinely includes standardized terms in physics (e.g. *ಗುರುತ್ವಾಕರ್ಷಣೆ* gurutva-akarṣaṇe for gravity), chemistry, biology (e.g. *ದ್ಯುತಿ-ಸಂಶ್ಲೇಷಣೆ* dhyuti-saṁślēṣaṇe for photosynthesis) and other fields, paralleling developments in other Indian languages.

Modern Digital Era (2000s–present)

The late 20th and early 21st century brought Kannada into the digital domain. Kannada Unicode was adopted (based on ISCII) and computing tools (spell-checkers, keyboards, fonts) were developed for the script. The rise of the Internet and social media expanded Kannada's scientific lexicon: e.g. the Kannada Wikipedia (launched 2003) now has ~34,000 articles, many on science and technology topics, which has both spread existing terminology and prompted new coinages. Government programs (e.g. Kannada language technology cells) and machine translation projects also propagate scientific Kannada. In parallel, international science terms

(especially in IT and medicine) are increasingly used in English form or as shallow loanwords. The net effect is a rich modern register where new knowledge is articulated in Kannada across print, broadcast and online media.

Sources and Influences on Terminology

Kannada scientific vocabulary draws chiefly on Sanskrit-derived roots, English, and other Dravidian sources. Historically, most Kannada abstract and scientific concepts came via Sanskrit (or Prakrit) terms. In modernizing sciences, English provided both direct borrowings and templates for calques (e.g. electrical terms, chemical nomenclature). Sometimes Tamil or Telugu cognates informed choices: e.g. experts have noted that early terminology commissions even consulted Tamil equivalents to find suitable words when Sanskrit names were lacking. Arabic and Persian influence is mostly historical (administrative vocabulary under Muslim rule), though a few modern technical terms (e.g. ਅਲਜੈਬਰ for algebra in Urdu, not in Kannada) were borrowed indirectly. In sum, Kannada scientific terms today are often tatsama (unchanged Sanskrit, e.g. ವಿದ್ಯುತ್ for electricity, from Sanskrit *vidyut*), occasionally tadbhava (inherited forms), or English loans adapted to Kannada phonology.

Standardization Efforts by Scholars and Institutions

A number of scholars and bodies have worked to codify Kannada scientific lexicon. The Commission for Scientific & Technical Terminology (CSTT) at the national level publishes glossaries in disciplines (science, engineering, social science) including Kannada and cross-language equivalents. At the state level, the Kannada Sahitya Parishat (literary council) and Kannada Development Authority organized workshops (e.g. 1977 "blueprint" for science writing). The University of Mysore's language institutes produced glossaries; Kannada University (Hampi, est. 1992) and other universities also launched projects to compile standardized terms. Influential lexicographers contributed key references: e.g. Rev. Ferdinand Kittel's 1894 Kannada–English dictionary of ~70,000 entries, and G. Venkatasubbaiah's modern 9-volume Kannada–Kannada dictionary (1970s). Many academic books and school textbooks began including glossaries of technical terms. In practice, committees often published parallel lists of new terms, sometimes in verse or prose, to educate students and writers.

Examples from Specific Disciplines

- Physics/Astronomy: Classical Kannada texts (and later scholars) used Sanskritic terms for cosmic concepts (e.g. ಕೇಂದ್ರ *kendrad* "center", ಗುರುತ್ವ *gurutva* "weight" for gravity). Modern textbooks say ಗುರುತ್ವಾಕರ್ಷಣೆ (*gurutva-akarṣaṇe*) for "gravitation". ಚುಂಬಕ (*chumbaka*) is the common word for "magnet", while the formal term is ಆಯಸ್ಕಾಂತ (*āyaskānta*, literally "iron-venter").
- Biology/Chemistry: In botany, photosynthesis is called ಧ್ಯುತಿ ಸಂಶ್ಲೇಷಣೆ (*dhyuti-saṁślēṣaṇe*, "light-synthesis"). Everyday speech might describe it in plain Kannada, but technical writing uses this compound term. Similarly, cells (ಕೋಶ, *kōśa* from Sanskrit) and genes (ವಂಶಶಾಖೆ, *vaṁśa-śākhe*) appear in scientific Kannada, whereas folk terms for "body part" or "offspring-line" would be more circumlocutory.
- Mathematics: Kannada mathematical heritage includes original works (e.g. by Mahāvīrācārya and others) with native terminology. Modern academic Kannada uses tatsama terms: e.g. ಗಣಿತ (*gaṇita*) for mathematics, ವರ್ಗ (*varga*) for square, ಶೂನ್ಯ

(*śūnya*) for zero. In contrast, colloquial Kannada may use simpler words or loaned English (e.g. saying "ನಂಬರ್" for a digit).

- Philosophy: Traditional schools of Indian philosophy (dārśana) contributed terms like ಪ್ರವೃತ್ತಿ (*pravṛtti*, action) or ತುಲ್ಯತೆ (*tulyate*, equality), which are also used in modern academic contexts (e.g. in logic or ethics discussions). Thus many philosophical and scientific Kannada terms have deep roots, reified through centuries of scholarly literature.

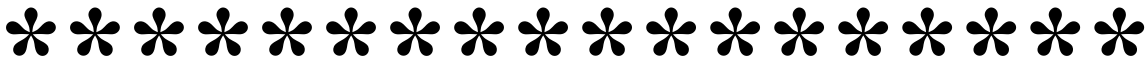
Structure and Semantics: Technical vs Colloquial Kannada

Academic Kannada writing tends to be more formal and precision-oriented than everyday speech. Technical prose typically uses complete compound words and explicit case markers, mirroring Sanskrit's analytic style. For example, scientific nouns often carry affixes consistently (e.g. ವಿದ್ಯುತ್ಪೀಡ *vidyut-pīḍa* for "electric pressure"/voltage) even when colloquial speech would shorten or simplify them. Terminology in science is defined rigidly – as one study notes, "scientific and technical terms need definitions and they stand and represent only that", whereas ordinary vocabulary is more flexible and context-dependent. Colloquial Kannada freely drops particles, uses local idioms or English insertions, and may conflate concepts (e.g. using a single word for both "plant" and "vegetable"), but academic Kannada avoids ambiguity. In summary, the scientific register in Kannada reflects greater syntactic discipline and semantic clarity – often employing long tatsama compounds and neoclassical formations – whereas everyday speech prioritizes ease and economy of expression.

English Term	Kannada (colloquial)	Kannada (technical)
Fossil	ಫಾಸಿಲು (*faasilu*)	ಜೀವ ಅವಶೇಷ (*jīva avaśeṣa*)
Magnet	ಚುಂಬಕ (*chumbaka*)	ಆಯಸ್ಕಾಂತ (*āyaskānta*)
Photosynthesis	[explained colloquially]	ದ್ಯುತಿಸಂಶ್ಲೇಷಣೆ (*dhyuti-saṁślēṣaṇe*)

Each entry above illustrates how scientific Kannada often opts for Sanskritic or coined terms (right column) while everyday usage may rely on borrowings or descriptive phrases (left column).

Sources: Historical overviews and linguistic analyses; detailed Kannada lexica and glossaries; Kannada language planning studies.



Odia people

Historical Development of the Odia Language

Linguistic Roots and Script Evolution: Odia is an Eastern Indo-Aryan language descended from Magadhi Prakrit via a local *Odra* Prakrit. It shares a common origin with Bengali and Assamese, as indicated by the Buddhist Charyā-Gāna manuscripts (8th–12th c.), which show early eastern Indo-Aryan features. Throughout its evolution Odia retained core Indo-Aryan phonology (retroflex consonants, aspidated stops, etc.) but also absorbed significant Dravidian and Munda influences through contact with tribal languages. Recognized as a “Classical” language of India, Odia’s phonology and morphology preserve many archaic features of Prakrit even as vowel and consonant changes (e.g. *d, dh → r, ṛh*, nasalization of vowels) and grammatical simplifications set it apart from Sanskrit and Hindi. The Odia script evolved directly from ancient Kalinga Brahmi: early inscriptions (Ashokan edicts at Dhauli/Jaugada, 3rd c. BCE) use Brahmi-derived characters, and Kharavela’s Hathigumpha inscription (1st c. BCE) already shows Aryan speech distinct from Pāli. Scholars note that Odia began diverging from its neighbors by the early medieval period, with its own distinctive rounded script emerging by the 10th–12th centuries. Inscriptions and manuscripts reveal a transitional “Proto-Odia” stage (7th–10th c. CE), after which Old Odia (10th–13th c.) took a more standardized form, culminating by the 14th century.

Early Inscriptions (up to 13th c.): The earliest attestations of Odia are bilingual or Sanskritized inscriptions from Eastern Ganga and Bhauma-Kara rulers. A landmark is the 1051 CE Udaipur (Urajam) inscription of King Anantavarman Chodaganga (Eastern Gangas), which is the first complete inscription written in Odia language and script. It records the grant in a southern Odia dialect (with Dravidian influences) using a Nagari-style script. Other 11th–13th c. inscriptions at temple sites in Bhubaneswar and elsewhere show the gradual evolution of Odia orthography. Notably, the Odisha Review notes that *“by the 14th century Odia language perhaps received its final shape”*, evidenced in early literary works. For example, chronicles and tantras of the 12th–14th c. (the *Madala Panji* of Jagannath Temple, *Sisu Beda*, *Saptanga*, etc.) survive in Old Odia. These records preserve characteristic Odia vocabulary and grammar (postpositions, verb forms, case endings) that mark a clear break from Sanskritic forms. By the 13th century the script had acquired the rounded “palm-leaf” shapes that distinguish modern Odia, and the language was steadily becoming the medium of regional administration and literature.

Medieval Odia Literature (14th–17th Centuries)

Dynastic Patronage and Vaishnavite Influence: Under the Eastern Ganga (11th–15th c.) and Gajapati (15th–16th c.) dynasties, Odia flourished as a literary language. The great Jagannath temple at Puri was a center of learning and devotional culture: the cult of Jagannath and the

spread of Śaiva, Śākta, and especially Vaiṣṇava ideas fueled composition. In 1509 Śrī Chaitanya Mahaprabhu's visit to Odisha invigorated Vaishnavism, and local *Utkaliya Vaiṣṇavism* (centered on Jagannath as Pūrṇa-Brahma) became prominent. A remarkable literary development was the Pañcaśākha ("Five Friends") movement of saint-poets (15th–16th c.), who translated Sanskrit scriptures and Puranas into Odia for lay devotees. For example, Sarala Dāsa (mid-15th c.) rendered the *Mahābhārata* into *Odia Mahābhārata* and composed the *Candī Purāṇa* (based on the *Markandeya Purāṇa*), reinterpreting them through rural Odia imagery. His contemporary Balarāma Dāsa authored the *Jagamohana Rāmāyaṇa* in Odia, and Jagannātha Dāsa popularized the *Śrīmad-Bhāgavatam* (Bhāgavata Purāṇa) in verse, while Acyutananda Dāsa composed works like the *Hari-bhakti-śāmāvali* and *Harivamśa*. These translations (including *Harivamśa*, *Viṣṇu-sāhasranāma*, etc.) made complex Sanskrit lore accessible to common people. The Pañcaśākha poets' emphasis on devotion (bhakti) and social egalitarianism (they challenged caste hierarchies) set a religious and social tone for Odia literature.

Classical Poetry and Kavya Style: Alongside devotional literature, a rich secular poetic tradition developed at princely courts. From the 16th century onward, Odia poets composed *kavya* (elegant verse) on themes from epics and puranas. The 17th–18th centuries in particular saw the Utkaliya Kāvya style of ornate poetry: e.g. Kabi Samrāṭ (Emperor) Upendra Bhanja of Ghumusar wrote celebrated *kavyas* like *Baidehīśa Bilāsa*, *Labanyābatī*, and *Koti Brahmaṇḍa Sundarī*, which are famed for their sophisticated literary style (Yasna, Shikharini meters) and lyrical ingenuity. Other notable works include Dinakruṣṇa Dāsa's *Rāsakallola* and Abhimanyu Sāmanta Sinhāra's *Bidagdha Chintāmaṇi*. This period also produced saint-poets like Baladeb Ratha (the *Andhā Kabi*) whose devotional songs (bāgeṭī) remain popular. In all, the medieval age established Odia's high literary culture: translations, epics, and lyrical *kāvya* in Odia were comparable in vigor to Sanskrit or Bengali literature of the time. (As noted in Odisha Review, Odia's *"rich and continuous literary tradition"* began even with early *Charyā-gītikā* and matured under these poet-saints.)

Late Pre-Modern Period (18th–19th Centuries)

By the 18th century Odia courts continued to patronize poets, and the language was used in letters and chronicles of minor states (Ganjam, Sambalpur, Balasore, etc.). However, political turmoil – Maratha raids and finally British conquest (1803) – disrupted royal patronage. The later 18th–19th centuries saw Odia literature gradually shift from classical meters to more colloquial forms. The devout tradition persisted (e.g. Bhakti songs by poets like Bhima Bhoi of Daspalla), but secular themes (love, ethics, reform) became common. Importantly, this era saw the emergence of Odia prose. Men like Raja Rammohan Ray (a Bengali-born editor in Cuttack) and later Fakir Mohan Senapati began writing Odia novels, essays and stories. Upendra Bhanja's successors (the last great *kabi samrāṭ* Brajanātha Badajena of Parikud, c. 18th c.) closed the chapter on the ornate style, and poets like Gokula Charana Dāsa and Madhusūdana Ratha turned to a simpler lyrical idiom suitable for modern themes. These developments set the stage for the upcoming language renaissance under British rule.

Colonial Era and Modern Odia Renaissance (19th–early 20th Centuries)

Colonial Linguistic Policies: Under the British Raj, Odisha was initially annexed to the Bengal Presidency. Many colonial officials and missionaries promoted Odia literacy, but others lobbied to replace Odia with Bengali in schools. A major turning point was the *Oriya language movement* of the 1860s: when Bengal's Director of Public Instruction tried to impose Bengali,

leading Odia thinkers (including Gauri Shankar Ray, T.E. Ravenshaw and John Beames) protested. In November 1869 the Lieutenant-Governor decreed that Odia would be the medium of instruction in Odisha's primary schools, with Odia taught as an optional subject in high schools. This "Language Controversy" galvanized Odia elites to standardize the language and literature. Missionaries played a key role in early printing and education: the first Odia printing press (Odisha Mission Press) was set up by Christian missionaries at Cuttack in 1837, and grammar books and dictionaries began to appear.

Print Culture and Journalism: The colonial period saw a boom in Odia periodicals. In 1866, Bichitrananda Das – with support from Commissioner Ravenshaw – established the Cuttack Printing Company and launched *Utkal Deepika*, the first Odia newspaper, which championed Odia interests. Other presses followed: Bhakti Pradāyīni (Puri, 1874), Arunodaya (Bhubaneswar, 1893), Roy Press (Cuttack, 1894) and Utkal Sahitya Press (Cuttack) were founded, along with dozens of journals (for example, Fakir Mohan Senapati's *Sambad Vāhika* in Balasore, 1868). Fakir Mohan himself set up the Utkal Printing Company in 1868 and edited a weekly, while Baikuntha Nath De published *Utkal Darpan* from Balasore in 1873. These publications were vehicles for modern ideas and for arguing Odia linguistic rights. Over 20 Odia newspapers and magazines were circulating by the early 20th century.

Literary and Social Reformers: The late 19th century was the age of the modern Odia novel and poetry. Radhanāth Ray (1848–1908) and Madhusūdana Ratha (1853–1912) introduced new poetic styles and European literary forms. Fakir Mohan Senapati (1843–1918) – a feudal administrator turned writer – became *the father of modern Odia literature*. According to Odisha Review, Fakir Mohan is "widely regarded as the father of modern Odia prose literature" and devoted his life to the language's advancement. He wrote Odia's first novels (most famously *Chha Mana Atha Gūnṭhā*, 1902–03) and satirical short stories drawn from rural society. His works and Radhanāth's introduced colloquial Odia into literature, replacing much of the Sanskrit vocabulary of older writing. (It is noteworthy that Fakir Mohan translated the *Ramayana* and *Mahabharata* into Odia from Sanskrit, earning him the title *Vyāsa Kavi*.)

Education and Identity Movements: Under colonial rule new schools and colleges taught Odia alongside English. Textbooks in Odia began to be written (e.g. Pyarimohan Acharya's *Odisha Itihasa*, serialized in Utkal Deepika and included in curricula). The demand for a separate Odia-speaking province grew with the language agitation. Voluntary associations formed across Odisha (Rice-boat Club 1866 in Cuttack, *Utkal Vidhyāyarati Sabha* in Balasore, etc.) to defend Odia interests. In 1877 Madhusudan Das (a prominent advocate) and Gauri Shankar Ray founded the *Utkal Sabha* to lobby for Odia unity. In 1903 the *Utkal Sammilani* was established under Madhusudan Das to press the case for a separate Oriya province. These civic and literary efforts forged a modern Odia identity: by linking language to regional pride, they ultimately led to the formation of Odisha province in 1936 (just after our period).

Throughout this span, Odia became a key marker of cultural and national identity. Scholars note that *"the language controversy awakened the Odia elite"* and prompted improvements in literature and press. By the early 20th century Odia had a standardized orthography and grammar taught in schools, a rich corpus of classic and modern works, and a reputation as one of India's ancient literary tongues. In summary, from its Indo-Aryan Prakrit origins to the rise of modern Odia prose, the language's evolution was shaped by inscriptional evidence, devotional and courtly patronage, and later by print culture and nationalist activism, all of which are documented by historians and linguists.

Period/Year	Milestone / Event
3rd c. BCE	Ashokan Brahmi inscriptions at Dhauli/Jaugada and King Kharavela's Hathigumpha (1st c. BCE) show early Indo-Aryan language in Odisha.
1051 CE	Urajam (Udayagiri) rock inscription of King Anantavarman (Eastern Ganga) – first complete Odia inscription; language is Old Odia in Nagari script.
12th c.	*Madala Panji* (Puri Temple chronicle) and early temple records represent some of the first Odia prose.
14th c.	Odia assumed near-modern form; extant works include Sarala Dasa's *Mahabharata* and *Candī Purāṇa* and Nath-sannyasi texts (*Sisu Veda*, *Saptanga*).
15th–16th c.	Śākta and Vaiṣṇava renaissance: Sarala Dasa and the Panchasakha poets translate Sanskrit epics (Mahabharata, Rāmāyaṇa, Bhāgavata, Hari-vaṃśa) into Odia.
18th c.	Flourishing of Odia lyrical poetry (e.g. Kabi Samrāṭ Upendra Bhanja's *Baidehiśa Bilāsa*, etc.) in princely courts; vernacular *bāgeṭī* songs continue.
1837	Odisha Mission Press (a printing press) established by missionaries at Cuttack.
1866	Cuttack Printing Co. formed; *Utkal Deepika* (Odisha's first newspaper) founded by Bichitrananda Das.
1869	British agree to make Odia the medium of instruction in Odisha's primary schools.
1868–73	Fakir Mohan Senapati founds Utkal Printing Co. (Balasore) and publishes *Sambad Vāhika*; Baikuntha Nath De launches *Utkal Darpan* (1873).
Late 19th c.	Modern Odia literature emerges: novelists and poets Radhanāth Ray, Madhusūdana Rāy and Fakir Mohan introduce new genres and a modern idiom.
1903	Utkal Sammilani formed under Madhusudan Das to unite Odia-speaking regions – a prelude to Odisha's statehood movement.

Sources: Scholarly studies and historical surveys of Odia language and literature. These sources document Odia's Indo-Aryan lineage, phonological character, script evolution, literary milestones (Sarala Dāsa, Panchasākha, etc.), and colonial-era developments.

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Early Brahmi Origins and the Kalinga Script

The writing of Odia traces back to ancient Brāhmī. In Odisha (ancient Kalinga) the 3rd–1st century BCE rock inscriptions (e.g. Hāthigumpha of Kharavela) are deep-carved Brāhmī. Over centuries this Brāhmī evolved regionally into the Kalinga script (a Southern Nāgarī variety) under dynasties like the Somavaṃśī and Eastern Gaṅga. By the 12th century, after the unification under Anantavarman Chodaganga, the local Kalinga script gave way to a new Odia prototype derived from the Siddhamātṛkā style. Thus, the Proto-Odia alphabet developed directly from Brāhmī via the Kalinga script.

Figure: Inscription at Urjam (1051 CE) in an archaic Odia script (courtesy Wikimedia).

Proto-Odia Inscriptions (7th–12th centuries)

The earliest epigraphic Odia is seen around the 11th century. One of the first Odia-language inscriptions appears in the *Odia (Kalinga) script* from Urjam village (1051 CE). This copper-plate charter (gift of a temple pavilion) is almost entirely Odia in language and script – showing that by 1051 CE the spoken dialect was recorded in writing. Other 11th–12th century inscriptions (e.g. Gumsūr and Nārasiṃha copper-plates) likewise mix Odia with Sanskrit in Kalinga script. These early records retain straight strokes and some angularity, gradually giving way to the later cursive form. (see figure).

In southern Odisha, contemporaneous stone inscriptions (e.g. at Potteśvara temple, Ganjam) use a *Telugu-Kannada*–style script, reflecting exchange with Telugu regions. In western Orissa, by contrast, inscriptions of the Yāśovarmadeva era (mid-12th CE) show influence from northern Nāgarī shapes. Thus three archaic forms coexisted: a round 'Proto-Gaudi' form in the old Utkala (north), a Telugu-influenced cursive in south (Kāṅkhaṇḍa), and a Nāgarī-like style in the west. All these were regional stages before a single "Odia script" crystallized.

Influence of Neighboring Scripts

Odia script features owe much to its environment. Unlike Devanāgarī's straight headline, Odia letters developed a distinctive *curved top (umbrella-shaped)* form, a change attributed to writing on palm-leaf (where horizontal strokes catch); this contrasts with Telugu's "check-mark" style.. The script is closely linked to the eastern alphabets: scholars note that Odia preserved many old *Proto-Bengali* letter shapes discarded in later Bengali. Proto-Gaudi forms (from 9th–12th c.) contributed the basic shapes of many consonants, while the "top-mitre" or head-mark of Siddhamātṛkā evolved into Odia's curved top line. Thus Odia script lies midway between the eastern (Bengali-Assamese) tradition and the southern (Telugu-Kannada) style, borrowing and blending features regionally.

Dynastic Patronage and Literary Context (10th–15th c.)

Rulers and religious institutions greatly aided the script's spread. Eastern Gaṅga and later Gajapati dynasties patronized Odia epigraphy and literature. Temples like Lingarāja (Bhuvaneshvar) and Jagannātha (Puri) bear numerous stone inscriptions in this evolving Odia script. Inscriptions from Bhauma-kāra, Somavamśī, Bhanja and Eastern Gaṅga eras collectively show all stages of Odia's formation. Notably, 15th century reliquaries (e.g. Jagannātha temple pillars) record devotional texts and land grants in roughly the modern script.

By the late medieval period Odia literature flourished. The great Sarala Mahābhārata (the Odia Mahābhārata, begun under Kapilendra Deva c. 1440–1470) and Jagannātha Das's *Bhāgavat Gītā* were composed in Odia, and were copied on palm-leaf (see below). This marks the "full flowering" of Odia language and script. (The 15th c. also saw Jayadeva's *Gītagovinda* translated and widespread recitation of the *Bhāgavata* in villages.) Monasteries (mathas) and temple schools used these scripts for Sanskrit and Odia teaching. Overall, Odia script served

both the Sanskritic culture of the Gaṅgas and the emerging vernacular literature of the Oriya-speaking populace.

Figure: A stack of Odia palm-leaf manuscripts (photo, Odisha). These fragile leaves were the primary writing medium for centuries.

Palm-Leaf Manuscripts

Long after stone and metal, Odia was chiefly written on palm leaves. Temple and cave art in Odisha depicts styluses and palm-leaf bundles (7th–13th c.), and a Sailoḍbhava copper-plate explicitly states that its text was first written on leaf then copied. Indeed, by the 6th century palm-leaf writing was well established in Odisha. Scribes inscribed text with an iron stylus on treated leaves (tied in bundles), producing manuscripts in syllabic Odia characters. By the 15th–16th centuries this tradition reached high refinement: the earliest surviving dated Odia palm-leaf is a *Gītagovinda* copy of 1494 AD (dedicated to King Purushottama Deva). These leaves contain the script's characteristic rounded tops and fluid ligatures. Collections of 19th-century palm-leaf books (Bhagavata, Sarala Mahābhārata, etc.) show the script almost in its modern form. In sum, palm-leaf codices were the main vehicle for Odia writing and helped cement the script's curved style.

Printing Press and Modern Standardization (19th–early 20th c.)

In the 19th century, print technology transformed Odia literacy. Christian missionaries brought a printing press to Cuttack in 1838. The *Orissa Mission Press* began publishing Odia grammars, dictionaries and Bible translations in Odia script. The first Odia newspaper Utkal Dīpikā (4 August 1866) was edited by Gauri Śankar Ray, who also helped establish the lithographic Cuttack Printing Press with official support. By the 1870s–90s numerous Odia journals and books appeared (e.g. *Balāśore Sambād*, *Utkal Prakāśa* etc). Typefaces were cut to match traditional handwritten forms, standardizing orthography (for example, separate letters and diacritics were fixed). Printing enabled wider dissemination of the language: primers and newspapers spread the script to education and administration. By the early 20th century, Odia had a fully developed cursive alphabet recognizable today (used for both Odia and Sanskrit), and institutions like the Utkal Sahitya Samiti (founded 1903) promoted a unified Odia literary standard.

Sources: Authoritative studies of Indic palaeography and epigraphy, specialized histories of Odia script, and Odisha government histories and reviews (summarizing primary inscriptional and manuscript evidence). These sources document the script's evolution from ancient Brahmi through medieval inscriptions and palm-leaf manuscripts to modern printed form.

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Historical Development of Odia Vocabulary and Style

Early Period (up to 1500 CE): Odia evolved from Eastern Magadhi Prakrit (Bibhasha) into distinct Old Odia by the 10th–13th centuries. Inscriptions like the 1051 CE Urajam copper-plate show an emerging Odia script and language. Sanskrit heavily shaped early Odia: most grammatical forms and core vocabulary come from Sanskrit, while Persian/Arabic influence was minimal. (Tributary and Dravidian languages also left a substrate imprint.) Early texts include collections of verses and rituals (e.g. *Sisu Beda*, *Amara Kosha*, *Kalasa Chautisa*) and temple chronicles. The 14th–15th centuries saw works like Sarala Das's *Sarala Mahabharata* and *Chandi Purana*, which "standardized" literary Odia. Poetry of this era generally used Sanskritic metrical forms (śloka, chhanda) and devotional diction. (Later bhakti poets would elaborate these forms.)

- Origins and Script: Proto-Odia (Odra Prakrit) inscriptions appear from the 9th century onward, evolving into Old Odia by the 11th–13th c.. The modern Odia script began to develop under the Eastern Gangas (first full inscription in 1051 CE).
- Lexicon: A large portion of early Odia vocabulary is inherited (tadbhava) from Prakrit/Sanskrit, with many tatsama (direct Sanskrit) loans even in everyday speech. For example, terms like *bhakti*, *dharma*, *mandir*, *pinda*, etc., come unchanged from Sanskrit. Persian/Arabic borrowings are scarce in this period.
- Literary Works: Pre-Sarala religious and didactic poems (e.g. *Sisu Veda*, *Rudrasudh*, *Kalasa Chautisa*) used simple, alliterative verse. Sarala Das's 14th-c. Mahabharata in Odia ("Vyasa of Odisha") was not a mere translation but an original epic in polished Odia, using the bhakti-epic style.

Medieval Period (1500–1800 CE): The *Bhakti* movement brought a flowering of Odia literature. Five Vaishnava poets ("Pancha Sakha": Balarama Dasa, Jagannatha Dasa, Ananta, Yasovanta, Achyutananda) produced vernacular versions of Sanskrit epics and Puranas – for example, Jagannatha Dasa's *Odia Bhagabata*, Balarama's *Jagamohana Ramayana*, Lakshmi Purana, Haribansa, etc.. Their style was devotional and lyrical: they wrote in straightforward vernacular mixed with Sanskritic honorifics. Poetry was often sung, using traditional meters and ragas. For instance, Kabisurjya Baladeba Ratha's *Kishore Chandrananda Champu* is half Sanskrit, half Odia, and his songs follow strict acrostic and alliterative patterns. In the *Riti Yuga* (17th–18th c.) poetic style became highly ornate. Kavi Samrat Upendra Bhanja (c.1700) exemplifies this: his long works (e.g. *Baidehisa Bilasa*) invent new metres and use intricate word-play and alliteration – for example, each verse in one canto begins with the letter "ba" and he even arranged the number of stanzas to fit that alliteration pattern. Peasants' bards like Dinakrushna Dasa and Banamali Dasa, however, wrote simpler *bhakti* lyrics (in Odissi musical form) full of spontaneous alliteration and rhythm. In sum, medieval Odia saw a mix of devotional simplicity and courtly complexity: meters and end-rhymes from Sanskrit prosody were common, as was anuprāsa (alliteration), while content centered on Krishna and Jagannath lore.

- Bhakti Poets: Sarala Das initiated the trend (14th–15th c.), but 16th–17th c. poets (Pancha Sakha) translated/adapted Sanskrit into Odia. Their language emphasizes *bhakti* vocabulary (hari, bhakta, nitya, etc.) in quatrains and songs.
- Champu and Alliteration: Kabisurjya Baladeba Ratha (17th c.) wrote *champu* poetry mixing Odia and Sanskrit. His and others' verses often use alliteration — e.g. every line in a song begins with the same letter, creating a musical effect.

- Upendra Bhanja's Style: Late in this period, Upendra's *Ketana* (rītikāvya) became famous for verbal ingenuity. He innovated numerous meters and feats of word play – such as his Ramayana composed in 12 cantos, each with a different meter, and using "ba-" alliteration in the title *Baidehisha Bilasa* (literally "Delight of King Virabahu", each element starting with ba).
- Devotional Folk Song: By the late 1700s, a reaction against formality emerged. Poet-saints like Bhaktacharan (his *Mathura Mangala*) and Gopalakrishna Pattanayaka wrote direct, simple verses on Krishna. For example, Gopalakrishna's lyrics are praised as achieving "depths of pure, etherealized love" akin to Vidyapati or Chandidas, sung to traditional ragas.

Colonial Period (1800–1947): British rule and modernization profoundly changed Odia. Printing presses and English education introduced new forms and vocabulary. In 1836 Christian missionaries cast the first Odia typeface, and Amos Sutton produced major publications (Odia Bible 1840, Oriya Dictionary 1841–43, grammar 1844). Modern periodicals began: *Bodha Dayini* (first Odia magazine, 1861) and especially the *Utkala Deepika* weekly (founded 1866 by Gourishankar Ray) pressed for Odia unification and reform. Within a few years many vernacular dailies appeared. Literati such as Fakir Mohan Senapati, Madhusudan Das and poet Radhanath Ray joined the language reform movement. Unlike earlier classical poets, Fakir Mohan wrote in the spoken dialect of rural Odisha – "the language spoken by the toiling millions" – pioneering realistic prose and satire. Nationalist themes entered literature and journalism (e.g. Gopabandhu Das later used newspapers to mobilize for Odia identity). English (and to some extent Hindi) loanwords also began to enter Odia, especially for modern concepts, administration and technology.

- Publishing & Press: The English-educated middle class gave rise to novel and essay writing. As one scholar notes, contact with English literature "gave a veritable new birth to the Indian languages" – poetry took on new genres, prose "was practically born", and magazines/journals spread contemporary ideas.
- First Newspapers: *Utkala Deepika* (1866) is generally cited as the first Odia newspaper. Others soon followed (Utkal Patra, Utkal Hiteisini, etc). These press organs covered famines, unification of Odia tracts, and reforms, and deployed a mix of lofty and popular language.
- Literary Figures: Fakir Mohan Senapati's novels (e.g. *Chha Mana Atha Guntha*) used colloquial speech, capturing folk idioms with "perfume of the soil". Poet Radhanath Ray wrote in a romantic style influenced by Byron/Scott but rooted in Odisha's landscapes. Both helped orient Odia literature toward realism and social issues. Importantly, leaders of the Utkal Sammilani (like Madhusudan Das) often wrote in Odia to inspire regional pride. As one historian notes, writers like Fakir Mohan, Radhanath and Madhusudan "not only saved Oriya language from extermination, but left it healthier and more beautiful in new garments".
- Language Issues: During this period Bengali officials repeatedly questioned Oriya's distinctiveness, sparking defense of Odia. Many authors responded by emphasizing native vocabulary. Indeed, Fakir Mohan's deliberate use of local idioms made Odia prose accessible to common readers. At the same time, formal registers (poetry, ceremony) remained highly Sanskritized, continuing a long-standing tension.

Post-Independence to Present (1947–Today): In independent India, Odia was affirmed as Odisha's official language and (in 2014) earned classical-language status. Education and media have standardized the language: universities and Sahitya Academy established departments of

Odia, and lexicographers codified usage. A monumental achievement was Praharaj's *Purnachandra Odia Bhashakosha* (1931–40) – a seven-volume lexicon of ~9,500 pages – which recorded Odia words in four scripts and purposely included both the literary vocabulary and spoken dialects. Mass media (All India Radio Cuttack from 1948; Doordarshan-Odisha TV from 1974; numerous Odia newspapers and magazines; Odia film) have disseminated a more standardized Bhāṣā (formal Odia), often Sanskrit-heavy in style. Meanwhile Odia fiction and popular journalism frequently use simpler, colloquial speech. As Praharaj noted of modern prose, writers freely mix Odisha colloquialisms with loanwords from Hindustani, Persian and English. Thus, two registers coexist: a formal register rich in Sanskrit tatsamas (used in academia, temple literature, and many government publications) and an informal register closer to everyday speech (used in newspapers, stories, songs). This stylistic split is an ongoing debate – each side arguing for either "pure" Oriya or for keeping pace with changing usage.

- Mass Media & Institutions: Post-1947 Odia achieved widespread media presence. Radio and television broadcasts in Odia, the Odia press and later internet channels have spread a common standard. Academic and literary institutions (Odia departments, Sahitya Akademi awards) have promoted a uniform grammar and style, while also studying dialects.
- Vocabulary Expansion: Technical and global terminology increasingly enters Odia. Many English and Hindi words are borrowed (e.g. *computer/କମ୍ପ୍ୟୁଟର*, *doctor/ଡକ୍ଟର*, *party/ପାର୍ଟି*), even as scholars coin Sanskritized equivalents (*saṅkhyāna*, *chikitsak*, *dal*). Writers like Praharaj long ago showed this openness: his essays freely used Oriya colloquialisms along with *Hindustani, Parsi, English, Sanskrit and folk* terms.
- Literary Style: Contemporary Odia literature and journalism range from highly Sanskritized prose to very colloquial dialogue. For example, news anchors or official documents may use formal dictions heavy in tatsamas, whereas modern novelists and lyricists prefer everyday grammar and desi (indigenous) words. This mirrors trends in other Indo-Aryan languages, where educated registers remain archaic and learned, while popular writing strives for naturalism.

Key Examples (by era): Early medieval texts like *Kalasa Chautisa* or temple *Mangala Kavyas* (e.g. *Gundicha Muhurta* by Sarala) established poetic norms. The Panchasakha poets gave Odia its first *Bhakti* vocabulary (e.g. *bhakta*, *divya*, *sakala*). Upendra Bhanja's works introduced extreme alliteration ("ba–ba"), self-invented meters and erotic diction. Fakir Mohan Senapati's novels (late 19th c.) exemplify the new colloquial prose: he even avoided English loanwords to keep the speech "pure Odia". In the modern period, newspapers like *Sambad* and *Dharitri* use a semiformal Odia, while popular writers (like Jagadguru Radhanath Sahu, 20th c.) write in village dialects.

References: Most of the above is drawn from historical and linguistic studies of Odia. In particular, surveys note Odia's lineage from Magadhi Prakrit and its Sanskrit basis, the development of medieval Odia poetry, the rise of the Odia press and modern prose, and the continued coexistence of Sanskritized and colloquial registers. All specific details and quotes above are cited to the sources.

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Historical Development of Odia Scientific Vocabulary

The Odia language, one of India's classical tongues, saw its first systematic scientific lexicon emerge under British colonial influence. In 1811 Mohunpersaud Thakoor compiled the first printed Odia–English vocabulary by subject. The missionary Amos Sutton, working in Odisha, authored *Padarthābidyā Sāra* ("Essence of Physical Science") in 1832 – cited as the first Odia science textbook. In the mid-19th century Odia journals began carrying science articles: *Prabodha Chandrika* and Viswanath Kar's *Utkal Sahitya* regularly published popular science content, and even a dedicated science magazine (*Bigyan Darpan*, Kolkata) circulated in the region. These early efforts relied on missionaries and pioneering local scholars, who often coined new terms or adapted Sanskrit roots to render Western concepts.

Institutionalization and Growth (20th Century)

With the formation of Orissa province (1936) and later the state of Odisha, Odia's academic vocabulary was formalized by governmental bodies. The Government of India's Commission for Scientific & Technical Terminology (CSTT, 1961) began standardizing terms for Indian languages. In Odisha, the Sahitya Akademi (est. 1957) and State Textbook Bureau drove terminological development. Notably, in 1970 the Orissa State Bureau of Textbook Preparation and Production (OSTB) was founded to produce school textbooks in Odia; it translated numerous science and engineering works. In 1976 Prof. Kulamani Samal compiled *Paṛartha-Bijñāna Abhidhanā* (412 pages) – recognized as the first Odia dictionary of scientific terms. Such institutional support accelerated the coining and adoption of technical vocabulary in Odia.

Key Contributors: Early individual scholars included Amos Sutton (first grammar and dictionary author), Fakir Mohan Senapati (who translated scientific biographies in 1860s), and Viswanath Kar (journal editor). Later figures like Jagannath Tripathy critiqued and expanded scientific parlance (e.g. a 1909 essay *Baigyanika Paribhasha* on Odia science terminology). The Odisha Bigyan Academy (est. 1981) and Odisha Sahitya Akademi also encouraged science writing in Odia. Private publishers (e.g. Cuttack Trading Co.) issued popular science translations alongside state efforts.

Influence of Other Languages

Odia scientific vocabulary draws heavily from *Sanskrit* and other Indo-Aryan sources. Scholars note that Sanskrit has profoundly shaped Odia's grammar and lexicon, especially for technical terms. For example, many compound terms simply carry over or translate Sanskrit roots. English influence became prominent from the colonial period: many modern concepts (e.g. *computer*, *engine*) were initially borrowed or transliterated, though scholars often created descriptive calques in Odia. Regional interactions (with Bengali, Hindi, etc.) also contributed some terminology, but Odia development largely paralleled pan-Indian trends in Sanskritizing scientific language.

Precision and Logical Structure in Scientific Odia

Scientific Odia tends to use tightly constructed compounds and unambiguous terms, often more formal than everyday speech. For instance, the official CSTT glossaries render "physics" as

ମୌଳିକ କଣିକା ବିଜ୍ଞାନ (literally "science of fundamental particles"), and "solid state physics" as ଘନାବସ୍ଥା ବିଜ୍ଞାନ ("science of solids"). These precise compounds contrast with ordinary usage, which might simply borrow "physics" or use broader terms. Scientific writing also consistently employs one standard term for each concept (often a Sanskrit-derived compound), reducing the synonymy or ambiguity found in colloquial Odia. Such systematic term formation reflects the analytic structure of academic Odia.

Tables: Key Milestones and Examples

Year	Milestone
1811	Mohunpersaud Thakoor publishes *A Vocabulary of Oriya and English* (Odisha), an ōdia–English dictionary arranged by subject.
1832	Amos Sutton's *Padarthābidyā Sāra*, the first Odia textbook on natural science, is published.
1957	Odisha Sahitya Akademi established (mandated to encourage translation into Odia).
1970	Orissa State Bureau of Textbook Preparation & Production (OSTB) set up to prepare Odia textbooks, including many science texts.
1976	Prof. Kulamani Samal's *Paṛartha-Bijñāna Abhidhanā*, the first Odia science dictionary (physical science terms), is published.
2022	Launch of Odia-language engineering textbooks (AICTE) and an official Odia glossary of technical terms by CSTT.
2024	Odisha government forms an Odia lexicon committee to update terminology and pledges to promote science/technical education in Odia.

Examples of Technical vs. Everyday Terms: In standard Odia glossaries one finds precise compounds: e.g., ଘନାବସ୍ଥା ବିଜ୍ଞାନ ("solid-state physics") and ବୈଜ୍ଞାନିକ ପରିଭାଷା ("scientific terminology"). By contrast, everyday Odia might use general words (or English borrowings) to describe the same ideas. (Exact parallel everyday synonyms are not always attested, but the technical terms are notable for their specificity.)

Challenges and Innovations in Translation

Translating modern science into Odia has long been challenging. New concepts (e.g. *quantum*, *cytogenetics*) have required coinage of entirely new terms or consensus on loanwords. Early translators often created lengthy descriptive phrases, which later standardized into concise technical vocabulary. The establishment of bodies like the CSTT and Odisha's new lexicon committee reflects ongoing innovation in coining terms. Digital projects (e.g. the *Odia Bibhāba* digitization) and translation portals aid the process. Nonetheless, ensuring that advanced scientific material is available and comprehensible in Odia remains work in progress, given the pace of new discoveries and the dominance of English in science.

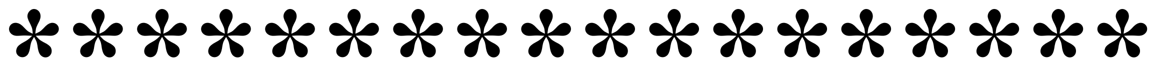
Odia in Education, Media and Publications

Odia serves as the medium of instruction and publication in much of Odisha's primary and secondary education. State boards produce school science textbooks in Odia (via OSTB) across subjects. Odisha Bigyan Academy publishes *Bigyan Diganta*, a monthly Odia science magazine for students and the general public. (Its sister journal *Science Horizon* is in English.) Regional newspapers and TV/radio often carry science columns in Odia. Recently, the Indian

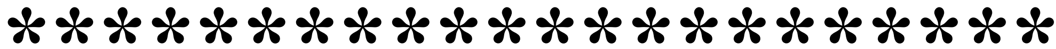
government's policy emphasis on mother-tongue education has increased support: for example, Odisha launched college-level engineering textbooks in Odia. Such measures aim to boost science learning by leveraging Odia's rich technical vocabulary and making science accessible to all students.

Overall, Odia's scientific lexicon has grown from scattered early efforts to a fairly robust standardized vocabulary, thanks to missionary scholars, national and state institutions, and language academies. Throughout, Sanskritic roots have underpinned many terms while English and other languages introduced new ideas. Today Odia scientists and educators continue to refine and expand this vocabulary, striving to balance precision and clarity in teaching science in the mother tongue.

Sources: Historical surveys and institutional histories of Odia translation and lexicography (NTM journal, academic studies, and Odisha government publications).



Punjabi people



Historical Development of the Punjabi Language

Punjabi is an Indo-Aryan language of the Punjab region, ultimately descended from Proto-Indo-European through Indo-Iranian branches. In ancient times the region's vernaculars evolved from Vedic and Classical Sanskrit into Middle Indo-Aryan Prakrits (chiefly Shauraseni or Paishachi Prakrit in the north) and then into their *Apabhraṃśa* ("corrupted speech") descendents. Around the 7th century AD, a dialect of Apabhraṃśa had crystallized into early Punjabi, and by the 10th century it was a stable language with native literature. As one summary notes, "Punjabi emerged as an Apabhramsha, a degenerated form of Prakrit, in the 7th century AD and became stable by the 10th century". The earliest known Punjabi compositions date from roughly the 9th–14th centuries (many linked to the *Nath* yogi tradition). By the 14th century, chroniclers like Amir Khusrau even recognized a local speech – he composed a *war var* ("ballad") in the language of Punjab. Scholars conventionally label the period up to the 16th century as *Old Punjabi* and 16th–19th centuries as *Medieval Punjabi*.

Phonology, Morphology, and Syntax

Punjabi's sound system underwent notable shifts from its Sanskritic origins. It retained certain archaic features and developed others uniquely. For example, Punjabi preserved *geminate* (doubled) consonants from Middle Indo-Aryan: Sanskrit *akṣi* "eye" became Punjabi *akkẖ* (accented) versus Hindi *āṅkh*. More strikingly, Punjabi is tonal – a rare trait in Indo-Aryan languages. Historical voiced aspirates (e.g. *gh*, *dh*, *bh*) became phonemic tones. As one source explains, "the most prominent distinctive feature of standard Punjabi is the realization of historical voiced aspiration as tones" (for example, Hindi *ghorā* "horse" corresponds to Punjabi *k'òrā* with a glottal constriction and low-rising tone). Linguists note that Punjabi's lexical tone system arose through regular sound change, not borrowing. (Old Punjabi itself was non-tonal; the tones developed more recently from these consonant shifts.) By modern times Punjabi typically distinguishes three tones (high, mid, low) as a result. In terms of consonants and vowels, Punjabi also adopted new sounds via contact: for example, phonemes like /z ɣ q ʃ x f/ in Punjabi come from Persian/Arabic borrowings.

Grammatically, Punjabi remained broadly Indo-Aryan but with simplifications. It has two genders, two numbers, and an agglutinative inflectional morphology (combining stems with suffixes) like its relatives. Nouns inflect for gender and number and a reduced case system. Modern Punjabi has about five case forms (nominative/direct, oblique, vocative, plus largely vestigial ablative and locative/instrumental cases). (In practice the ablative and locative are now marginal.) Verbs agree with subjects (and in some tense/aspect contexts with objects, reflecting a split-ergative pattern), and the language uses postpositions rather than Sanskrit's case endings.

Syntax is typically SOV (Subject–Object–Verb) with postpositional phrases, as in other Indo-Aryan languages. Over time Punjabi lost most of Sanskrit's inflectional endings, developing auxiliaries and clitics. In summary, Punjabi grammar grew simpler: it abandoned Sanskrit's elaborate case inflections and moved toward reliance on particles and fixed word order for grammatical relations.

Islamic and Persian Influence (12th–18th Centuries)

From the late 10th–12th centuries onward, Muslim conquests introduced Persian and Arabic elements into Punjab's culture and language. The Ghaznavid, Ghurid, and later Delhi Sultanate and Mughal administrations used Persian (and Arabic) as the courts' and officials' languages. Local Punjabis continued speaking their mother tongue, but many new words entered it. As Britannica notes, "Arabic and Persian influence in the historical Punjab region began with the late first millennium Muslim conquests". Consequently, Punjabi absorbed large numbers of Persian-derived terms (e.g. *zamīn* "land,*, *mīr* "chief", etc.) and, via Persian, Arabic borrowings (e.g. *dukkān* "shop", *ghazal* "ode"). Turkic loanwords (e.g. *qainchi* "scissors") also entered this milieu. These layers enriched Punjabi vocabulary, especially for administrative, cultural, and abstract concepts.

Under the Delhi Sultanate (13th–16th c.), Persian was fully institutionalized, but a Punjabi literary culture also existed. Sufi saints and local poets used the vernacular extensively. For example, the 12th–13th century Sufi saint Baba Farīd wrote Punjabi couplets (dohras) that later became part of the Sikh scripture. The Mughal era (16th–18th c.) similarly privileged Persian in court, yet Punjabi remained the language of everyday life and of devotional poetry. Sikhism emerged under Mughal rule: Guru Nanak (1469–1539) composed religious verses in the vernacular. Many of his early hymns straddle Punjabi and related dialects (sometimes labeled Old Hindi), but the Sikh Gurus increasingly used Punjabi for the community's teachings. By 1604 Guru Arjan compiled the Adi Granth, collecting Guru Nanak's and later Gurus' poems (predominantly in Punjabi and Punjabi-Khāṭṭī dialects) into a scripture. Thus, while Sanskrit and Persian dominated high culture, Punjabi was thriving in religion and folk literature.

Sikhism, the Sikh Empire, and Gurmukhi (16th–19th Centuries)

Sikhism had profound effects on Punjabi. The Gurmukhī script was formalized by Guru Angad (second Sikh Guru) in the early 16th century to write Punjabi religious texts. By 1604 Gurmukhī was used to compile the Adi Granth (the early Guru Granth Sahib). Britannica notes, "the Gurmukhi script was first used to record the Sikh scriptures…the Adi Granth, in 1604". Thereafter Gurmukhi became closely identified with Sikh and later Hindu Punjabis in India, whereas Punjabi Muslims (and later the Sikh Empire's bureaucracy) continued to use the Perso-Arabic (Shahmukhī) script. (In fact, the Muslim elite largely read Punjabi in the Urdu script by the 18th–19th c. This dual-script situation was notable even then.)

Culturally, many of Punjabi's greatest literary works come from this period. The Sikh Gurus' hymns (combined in the Granth Sahib) are cornerstones of Punjabi literature. In parallel, Sufi poetry flourished: saints like Shah Hussain (1538–1599), Bābā Satīnāma (Satgur Nūr of 16th c), and later Sultan Bahū (1628–1691) and Bulleh Shah (1680–1757) composed devout verses (*kafīs*, *qawwālīs*) in Punjabi. As Britannica summarizes, Sufi Islam "can be said to have been the main stimulus to Punjabi literature in the medieval period," with poets Baba Farid (d.1266), Shah Hussain, Sultan Bahu, Shah Sharaf, Ali Haidar and especially Bulleh Shah writing in Punjabi. Their pious poetry and Punjabi Punjabi folklore (romantic qissas like Waris Shah's

Heer Ranjha (1766–1767) and Hashīm's *Sassi-Sohni* (late 1700s)) became enduring classics. Guru Gobind Singh (1666–1708) also patronized Punjabi literary activity (his followers wrote *Bāṇī* and histories in Punjabi). Under the Sikh Empire (1799–1849), regional pride in Punjabi grew, even though Persian remained the regime's administrative language.

British Colonial Period (19th–Early 20th Century)

When the British annexed Punjab in 1849, they continued to favor Urdu (and English) for official domains. Muslims and Hindus in Punjab were administratively grouped with North India, and as Tariq Rahman observes, "the languages of power were not people's mother-tongues, being Sanskrit, Persian and English or Urdu". In 1880 the colonial government even introduced Urdu (in Persian script) as the official vernacular of Punjab, despite most locals speaking Punjabi. According to Rahman, Urdu was declared the province's administrative language "when it was proclaimed as a parlance for conducting administrative business," displacing Punjabi, which was "flung to the margins". As a result, Punjabi had almost no official status under the British; courts and schools used Urdu or English. This policy slowed the development of Punjabi formal literature and standardization. Nonetheless, the 19th century saw new efforts to codify Punjabi: Christian missionaries and Sikh scholars published Gurmukhī grammars, dictionaries and periodicals. By the late 1800s a Punjabi-language press and modern education (in both Shahmukhī and Gurmukhī) were beginning to emerge among Sindhi and Sikh communities. Key modern Punjabi poets and novelists (such as Bhai Vir Singh, born 1872, and Nanak Singh, born 1897) would soon draw on this foundation, but most had their literary careers after 1900.

Scripts and Orthography

Punjabi's dual-script tradition is a hallmark of its history. In Indian Punjab, the Gurmukhī abugidā (an Indic script descended from Brahmi) became dominant, especially among Sikhs and Hindus. In Pakistani Punjab, the Perso-Arabic *Shahmukhī* script (essentially the same letters as Urdu) is used by Punjabi Muslims. Britannica notes that "Punjabi is thus today one of the very few languages in the world to be written in two quite different and mutually unintelligible scripts". Indeed, Gurmukhī (left-to-right) was especially tied to Sikh identity: it first appeared in print for the Sikh scripture (Adi Granth) in 1604 and later became the standard for Punjabi education in India. Muslims in Punjab, by contrast, learned to read Punjabi in Shahmukhī (right-to-left) or simply use Urdu for formal contexts. (Some Punjabi-speaking Hindus in neighboring regions occasionally used Devanagari script, but this was never widespread.)

This digraphic situation slowed a single standardized Punjabi. As Britannica observes, standardization was "inhibited by… the different cultural preferences of the three main local religious communities". Each community cultivated its own script and literary norms (Persian/Urdu for Muslims, Hindi/Devanagari for Hindus, and Gurmukhī for Sikhs) up to the 20th century. It was only in the mid-20th century that an official Punjabi standard (in Gurmukhī) was finally established in India.

Dialects of Punjabi

Punjabi has long existed as a continuum of regional dialects across the Punjab. The Majhī dialect (around Amritsar–Lahore) has historically been the prestige form and forms the basis of the modern standard. Other eastern Punjabi dialects include Malwā́ī (south-central Punjab, e.g. Ludhiana, Patiala) and Doābī (between the Beas and Sutlej rivers). Puādhī (around eastern

Rupnagar) is another eastern variety. In western and northern Punjab (today's Pakistan), dialects like Shahpurī (central Punjab), Jhangochī/Rachnāwī (the "Bar" area), and Pothohārī/Hindko (north of the Jehlum) are spoken. The Lahnda group or "Western Punjabi" cluster – especially Siraikī (Multani) in the southwest – is often treated by linguists as separate languages, though they share many features with Punjabi proper. Over the 19th–20th centuries, the Majhī dialect was adopted for schooling and print, but local speech varieties remain very diverse.

Punjabi Literature and Notable Authors (to Early 20th C)

Punjabi's literary tradition, though late to standardize, has deep roots. In religious literature, Guru Nanak's life-story (*Janam-sākhī*, 16th century) was among the first texts clearly in Punjabi vernacular. The 1604 Adi Granth (later Guru Granth Sahib) collected hymns of the Sikh Gurus – mostly in Punjabi and regional idioms – and is the most important medieval Punjabi text. In Islamic devotional literature, the 12th–13th century Sufi Baba Farīd composed Punjabi couplets (incorporated into Sikh scripture), and later *Bulleh Shah* and others wrote Punjabi *kafīs* and ghazals. Scholar sources emphasize that "Sufi Islam… was the main stimulus to Punjabi literature in the medieval period," with poets like Farid, Shah Hussain, Sultan Bahu, and Bulleh Shah contributing richly to Punjabi mystical poetry.

Beyond religious poetry, the Punjabi qissa or folk-romance was a major genre. The 18th century saw the creation of legendary epics: *Heer Ranjha* by Waris Shah (1706–1798) is often called the "crown jewel" of Punjabi literature, and Hashīm's *Sassi Punnun* (mid-1700s) is another classic. (Other oral romances like *Mirza Sahiban* and *Sohni Mahiwal* circulated in verse form as well.) These works, written in rich verse and folklore style, remain foundational.

By the late 19th century a modern literary renaissance began. Around 1860, Punjabi prose and poetry in print emerged. Early modern poets included *Bhāī Vir Singh* (1872–1957), who published his first works in the 1890s, and *Puran Singh* (1881–1931). Britannica notes that "modern Punjabi literature began about 1860," and lists Bhai Vir Singh as the key 19th-century poet. Other early writers (novelists, playwrights and poets) appeared around 1900 in both Gurmukhi and Shahmukhi scripts. Folk scholars and columnists also started documenting Punjabi songs and folklore. In all, by the early 1900s Punjabi had accumulated a varied corpus: from sacred hymns and Sufi verses to folk ballads and new newspapers – laying the groundwork for the language's full literary flowering in the 20th century.

Sources: Historical and linguistic analyses from language surveys and encyclopedias; academic studies of Punjabi under colonial rule; and authoritative overviews of Punjabi language and literature. All information is drawn from referenced scholarly sources.

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Writing Systems of the Punjabi Language (Beginnings – Early 1900s)

Punjabi was written in various scripts over the centuries, reflecting the region's changing cultures and communities. The earliest writing in the Punjab area appears on Indus Valley seals (3rd millennium BCE), but since the Indus script remains undeciphered, our account effectively begins with historic scripts. Ashokan edicts (3rd century BCE) in the northern subcontinent used Brahmi or Kharosthi scripts, indicating the arrival of written Prakrit language in Punjab. By the early medieval period, the Śāradā script – an abugida used in Kashmir and the northwest (8th–12th centuries) – had spread into Punjab. Regional varieties of Śāradā arose by the 10th–14th centuries, gradually evolving shapes that resemble later Punjabi scripts.

Laṇḍā Scripts (Mercantile Shorthand)

By the 10th century, the Laṇḍā scripts (a term literally meaning "without a tail" in Punjabi) had developed from the Śāradā family. Laṇḍā was widely used across the Punjab and Sindh regions for mercantile bookkeeping and correspondence. As a shorthand, it often omitted full vowel notation and used simplified consonants, making it efficient for scribes but prone to ambiguity for outsiders. In fact, Laṇḍā scripts "often lacked the full set of vowel sounds" and were mainly understood by their original writers. Notable Laṇḍā variants in Punjab included the *Mahajani* and *Multani* scripts for accountants, and a *Gurmukhī Landa* used by scribes. Significantly, the Sikh Gurmukhi alphabet itself is a descendant of a Punjabi Laṇḍā variant (ultimately from Śāradā). In summary:

- Origins: Evolved from Śāradā in ~10th century.
- Use: Mercantile shorthand for Punjabi, Sindhi, and other regional languages.
- Features: Generally omitted diacritic vowels ("without tails"), consonant-heavy; various local forms (e.g. Mahajani, Multani, Khojki).

As a result of later standardization efforts, only Gurmukhi (Sikh scripture) survived in modern use, while other Landa scripts fell out of general use by the early 20th century.

Gurmukhi Script

Gurmukhī (ਗੁਰਮੁਖੀ, "from the Guru's mouth") is the script standardized by the Sikh Gurus for Punjabi. It is a Brahmic abugida, written left-to-right, with a characteristic horizontal headline on letters. The script has 35 base letters (akkhara) – three vowel carriers (for the independent vowels) and 32 consonants – arranged in a grid (paṭī). Each consonant has an inherent schwa vowel /ə/, and dependent vowel signs (mātrā) are used to indicate other vowels. Gurmukhi also employs diacritics for nasalization (tippi, bindī) and for doubling consonants (adhak), and has "pairī" (subjoined) forms for consonant clusters. Over time it was extended with extra letters (using a ṅuk̄tā or dot) to represent Persian/Sanskrit sounds (e.g. ਖ਼ kh̲a, ਗ਼ g̲ha). Its alphabet (the paiti-aṅk) follows the traditional Brahmic order from vowels to semi-vowels and stops.

Figure: A 19th-century Punjabi manuscript page in Gurmukhi script (courtesy Wikimedia). The Gurmukhi letters are connected by a top-line and show the rounded yet distinct shapes inherited from Landa/Śāradā. Gurus and Sikh scribes used Gurmukhi to write religious texts (notably the

Adi Granth), fostering its association with Sikhism. In Sikh tradition, Guru Angad Dev (1504–1552) is credited with formalizing the script around 1530–1535. Scholars note that while Gurmukhi characters predated Sikhism, Guru Angad standardized their use to record the Guru's teachings in Punjabi. Early Sikh literature – from the *Adigranth* (first edition 1604) onward – was composed in Gurmukhi, and the script became revered by Sikhs.

Under the Sikh Empire (18th–mid-19th centuries), Gurmukhi flourished. It was used not only for scripture and poetry but also for administration by Sikh rulers. By the early 1800s, even scientific and scholarly works (in Braj or Sanskritized Punjabi) were being written in Gurmukhi. Gurdwaras traditionally ran village schools (paṭhaśālā) where Punjabi was taught in Gurmukhi, making it the primary medium of literacy in Sikh areas. For example, by the late 1800s Sikh reform movements (the Singh Sabha) "formalized … compulsory learning of Gurmukhī and Punjabi in Khalsa schools," helping establish Gurmukhi as the common script for Sikhs.

Structurally, Gurmukhi remained close to its Śāradā/Landa roots. It preserved the original *akṣara* names (kakkā, khakkhā, etc.) and ordering, and unlike Nāgarī scripts it largely avoided complex conjuncts. As Laṇḍā lacked full vowel marks, Gurmukhi introduced explicit vowel signs (vowel phonemes) and developed the pairī letters for final consonants. Thus, Gurmukhi has become a highly phonetic script well-suited to Punjabi's sounds. Its letters are taught today in a fixed order (the "ਪੈਂਤੀ ਅੱਖਰਾਂ" or thirty-five akkhars), reflecting the traditional varṇamālā.

Shahmukhi Script

Shahmukhī (ਸ਼ਾਹਮੁਖੀ, "from the King's mouth" or "from the royal/the Shah's mouth") is the Perso-Arabic script used for Punjabi in western Punjab (now Pakistani Punjab). It is an abjad (consonant-oriented alphabet) adapted from the Nastaʿlīq form of the Perso-Arabic script, essentially identical to the Urdu alphabet but with additional letters for Punjabi sounds. Shahmukhi is written right-to-left. It developed organically among Punjabi Muslim writers and scholars from about the 12th century onward. Early usage is attested in Sufi poetry: in fact, "the Shahmukhī alphabet was first used by Muslim Sufi poets in Punjab in the 12th century". These mystic poets adopted the Persian script to write Punjabi verse, using Persian orthography (with diacritic marks for short vowels as in Urdu) to approximate Punjabi pronunciation.

By the late Mughal period (17th century), using the Persian script for Punjabi had become widespread. One educational practice of the Mughal era was to teach Punjabi Muslims Persian by having them read Punjabi written in Persian characters – an early attempt at standardizing Punjabi in writing. It was noted by historians that *"prior to this, Punjabi was primarily a spoken language"*, so these learning practices inadvertently formalized Punjabi's orthography. However, Shahmukhi remained largely associated with Muslims. British ethnographers like C.A. Shackle later observed that Punjabi Muslims generally "did not prefer" the Gurmukhi script "because it was symbolic of the Sikh religion". Thus by the 19th century there was a strong communal division in script usage: Sikhs and Hindus used Gurmukhi, while Muslims used Shahmukhi (Punjabi in Perso-Arabic).

Structurally, Shahmukhi follows the Perso-Arabic model. It uses the standard Arabic consonant letters (with four main forms each), plus Persian additions (پ(p), چ(ch), ژ(zh), گ(g)), and a few characters specific to Punjabi (e.g. ڑ, ٹ, ڳ, or ڈ) to represent implosive and retroflex sounds. Short vowels are indicated by optional diacritics (zabar, zer, pesh, etc.), much like Urdu or Persian. In practice, readers infer vowels from context, as in other abjads. Shahmukhi's

calligraphy style is Nastaʿlīq, giving it a flowing, connected appearance, in contrast to Gurmukhi's block letters. (See figure below for the same Punjabi word in both scripts.)

Figure: The Punjabi word "Punjabi" written in both Shahmukhi (top, right-to-left) and Gurmukhi (bottom, left-to-right). This comparison highlights the scripts' differences. The Shahmukhi rendering shows the Perso-Arabic character forms and ligatures, whereas Gurmukhi displays distinct Brahmic characters. Note that despite these differences, both systems convey the same Punjabi sounds for the word ਪੰਜਾਬੀ/Punjabi.

Socio-Political Context and Script Use

The choice of script in Punjab was deeply tied to religion and politics. Under Sikh rule (late 18th–mid-19th century), Gurmukhi was patronized by the state and used in Sikh institutions. Maharaja Ranjit Singh's court (early 19th century) supported Punjabi and Persian literature alike, but Gurmukhi had special prestige for writing *gurbāṇī* (Sikh scriptures). After the British annexation of Punjab (1849), the colonial government adopted Urdu (in Arabic script) as the official language for administration across North-Western Provinces (which included Punjab). Officials saw Urdu as a neutral lingua franca, and in letters the revival of Gurmukhi was deemed politically unwise: the British Deputy Commissioner of Delhi warned in 1862 that "any measure which would revive the Gurmukhee, which is the written Punjabi tongue, would be a political error". In practice, this meant government schools taught Urdu or Persian, not Punjabi in Gurmukhi, despite local demand.

Culturally, Punjabi Hindus in eastern Punjab often read religious Punjabi texts in Gurmukhi (by the late 19th century, Gurmukhi had become common among Hindus in India). By contrast, Punjabi Muslims continued using Shahmukhi (or Urdu script) for Punjabi and religious literature. These alignments hardened over time: one colonial survey noted that Muslim Punjabis tended to avoid Gurmukhi "because of the script's Sikh connotations", and that word *Shahmukhi* itself was coined only in the 20th century by analogy with *Gurmukhi*.

Printing, Education, and Standardization

The late 19th century saw key developments in Punjabi print and education. Missionary and Sikh reformers established the first Punjabi printing presses using Gurmukhi type. Notably, a Christian mission in Ludhiana set up the first Gurmukhi-printing press in 1835, and the first Punjabi dictionary (in Gurmukhi) was published by Rev. J. Newton in 1854. After mid-century, Punjabi (especially Gurmukhi) publications proliferated: by the 1860s Punjabi grammars were appearing (the first native grammars in the 1860s), and by the 1880s Punjabi newspapers were founded. The *Khalsa Akhbar* (Lahore, 1886) was the first major Punjabi newspaper in Gurmukhi, used by Singh Sabha activists to promote Sikh and Punjabi identity. In education, Sikh institutions began formally teaching Punjabi in Gurmukhi: for example, Khalsa colleges and village schools required students to learn the Gurmukhi script. (In contrast, little was done by the colonial state to teach Punjabi.)

Orthographic norms also matured. Early texts show some spelling variation, but by the late 19th century a fairly fixed Gurmukhi orthography was in place. Scholars and reformers published standardized primers and spelling guides. Gurmukhi gained further standard status through institutions like the Singh Sabha's Punjabi publications and, by the 1890s, Khalsa College (Amritsar) which used Gurmukhi for instruction. Meanwhile, Shahmukhi lacked formal

standardization efforts, though Punjabi poets and Sufi teachers continued using it for poetry and folklore.

Script Comparison

Feature	Gurmukhī	Shahmukhī
Script family	Brāhmī-derived (Lahanda/Śāradā branch)	Perso-Arabic (Nastʿalīq style)
Type	Abugida (consonants with inherent vowel)	Abjad (consonants only, vowels optional)
Direction	Left-to-right	Right-to-left
Letters	35 base letters (3 vowel carriers + 32 consonants) (extended with ṅuḵtā)	~38 letters (Arabic alphabet + Persian additions + ~4 Punjabi-specific)
Vowels	Explicit vowel signs (diacritics after consonants)	Implied vowels (marks optional as in Urdu/Arabic)
Communities	Sikhs (and many Punjabi Hindus) in East Punjab (India)	Muslims (Punjabi-speaking) in West Punjab (Pakistan)
Established	Standardized by Guru Angad (16th c.), further by Sikh Empire and Singh Sabha	Used informally since 12th c.; term “Shahmukhi” coined in 20th c.
Usage today	Official script of Punjabi in Indian Punjab (all communities)	Common script for Punjabi in Pakistan (especially among Muslims)

This table highlights how Gurmukhi and Shahmukhi evolved from different roots and came to serve different communities. Throughout the 19th century, Gurmukhi was increasingly formalized through Sikh institutions and printing, while Shahmukhi remained the traditional script of Punjabi Muslims, linked to Persianate culture. Both scripts – along with the remnants of Landa/Mahajani for mercantile use – coexisted in the Punjab region up to the early 20th century, before political partition further entrenched their division.

Sources: Historical details above are drawn from scholarly histories of Punjabi scripts and colonial-era accounts. Script features are confirmed by linguistic descriptions. The images illustrate Gurmukhi usage and a comparison of Gurmukhi vs Shahmukhi orthography.

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Historical Evolution of Punjabi Vocabulary and Style

Punjabi is an Indo-Aryan language that developed over many centuries in South Asia. In its early history (pre-colonial era), Punjabi grew out of Prakrit dialects and inherited a core vocabulary from Sanskritic and local languages. From about the 11th century onward, successive Muslim rulers introduced Persian and Arabic elements: Persian was the court

language from the Ghaznavid and Mughal periods until the mid-19th century. As a result, Punjabi incorporated thousands of Persian/Arabic loanwords (for example *dukān* "shop," *sihārā* "saddle," *ṣāhib* "honorific," *darbar* "court," etc.). Classical Sikh and Sufi poetry abundantly mixed Punjabi with Persian-derived terms – for instance, Guru Nanak's hymns include honorifics like *pātishāh* (king) and *ṣāḥib* (master) from Persian/Arabic.

Over the same period, Punjabi retained its native Indo-Aryan base. Early poets like Baba Farid (12th–13th c.) and Sikh Gurus used vernacular forms rooted in Sanskrit (through Prakrit), even as they adopted Perso-Arabic terms. In fact, Baba Farid is often regarded as *"the first major Punjabi poet"*. This blending of sources continued in folk literature (e.g. Waris Shah's 18th-century epic *Heer Ranjha*) and devotional Sufi works.

During the colonial period (19th–mid 20th c.), British influence added new layers. English loanwords entered Punjabi (e.g. *ṭruck, ḍebit, masṭar* etc.), and Christian missionaries introduced the printing press and formal education. The first Punjabi printing press (Gurmukhi type) was set up in 1835, and the first Punjabi–English dictionary appeared in 1854. In this era, Hindu and Sikh reform movements also promoted *Sanskritization*: formal writing began to favor native or Sanskrit-derived terms over Persian ones. (For example, *pradhān* instead of *pardhān* for "chief," and *parivār* instead of *parvāṛ* for "family".) In practice, educated Punjabi in India became increasingly influenced by Hindi/Sanskrit norms, while in Muslim Punjab the Persian/Urdu habit persisted.

After Partition (post-1947) and into contemporary times, political division accentuated these differences. In India's Punjab state (1966–present), Punjabi (written in the Gurmukhi script) is the official language, taught in schools and used in media. Indian Punjabi has therefore adopted many Sanskrit-based terms and modern English vocabulary (for science, technology, administration). In Pakistan's Punjab province, however, Urdu (a Persianized language) remains dominant; Punjabi is not official, and when written uses the Shahmukhi (Perso-Arabic) script. Pakistani Punjabi thus retains a heavier load of Persian/Arabic vocabulary. (Shahmukhi Punjabi even uses the same honorifics *ṣāḥeb*, *darbar*, *nadri* etc. found in Urdu.) Regional dialects also affect lexicon: e.g. Lahnda (Western Punjabi) spoken in Pakistan includes Sindhi and Saraiki borrowings, whereas Eastern Punjabi dialects (Majhi, Malwai, etc.) in India have their own idioms.

Stylistic Characteristics of Punjabi Literature

Classical Punjabi literature (medieval to 19th c.) is best known for devotional and folk genres. The Sikh Gurus and Baba Farid wrote hymns (*shabads* and *qasidas*) in a literary Punjabi blending Sanskritic grammar with Persian terms. Sufi poets like Shah Hussain (16th c.) and Bulleh Shah (17th c.) pioneered the Punjabi *kafi* form – a mystical stanzaic folk style distinct from the Persian ghazal. (Shah Hussain is explicitly described as "a pioneer of the Kafi form in Punjabi poetry".) Their verse is simple, lyrical, and often set to music, rich in local metaphors and emotion. Folk romances (*qissas*) such as Waris Shah's Heer Ranjha (1766) employ earthy, evocative language and couplets to tell legendary love stories. Throughout, classical style tended to be poetic and idiomatic, using plain speech when telling stories or praising God, but often elevating tone in religious texts.

In the modern era, Punjabi literature diversified. British education brought Western literary forms (the novel, drama, modern verse) into Punjabi writing. Bhai Vir Singh (1872–1957) is called the *father of modern Punjabi literature*: he introduced new styles, rhythms and themes

into Punjabi novels and poetry, instilling Sikh history and ethics into narrative form. His novel *Sundri* (1898) is often cited as the first Punjabi novel. Later 20th-century writers blended folk idioms with contemporary concerns. For example, Amrita Pritam (1919–2005) wrote poetry and prose about women's experiences and the trauma of Partition. Poets like Shiv Kumar Batalvi (1936–1973), Pash (1950–1988) and Surjit Patar (b. 1945) adopted free verse and modern imagery to address love, social justice and identity (several of these are listed among the *"prominent poets and writers"* of modern Punjabi). As one scholar noted, Bhai Vir Singh endowed Punjabi with "a new style, a new rhythm, a new flow and a new thought-content" compared to the older tradition.

Stylistically, then, classical Punjabi tends to favor lyricism and devotional tone (often in simple couplets or stanzas), whereas modern Punjabi literature explores diverse forms (novels, short stories, free-verse poems) and urban themes. Yet both register the rich folk vocabulary of the people. Classical Sufi poetry, for instance, frequently uses everyday concrete imagery (wine, separation, desert, man) to convey spiritual ideas, while modern poets might use similar colloquial language for social commentary.

Register and Tone: Formal vs. Everyday Punjabi

Punjabi exhibits a clear register difference between formal (literary/high-culture) and informal (colloquial) speech. In formal writing – liturgy, media headlines, official contexts – Punjabi often uses Sanskrit-derived or technical vocabulary, sometimes translating direct Urdu/Persian equivalents back into Indic roots. For example, in formal contexts one might use *pradhān* (from Sanskrit *pradhāna*) instead of the everyday *pardhān* for "chief," and *parivār* instead of *parvāṛ* for "family". Likewise, honorifics and scholastic terms in Punjabi (especially in Indian Punjab) have Sanskrit or English origin: *devadāsa* (servant of God) instead of Persian *banda*, *vidyālaya* (school) instead of *madarsa*, etc. In contrast, everyday speech retains many Persian/Arabic loans and simpler forms, mirroring Urdu/Hindi usage. (For instance, ordinary conversation might use *admi* for "man," whereas a formal tone might say *purush*.)

These register differences have political overtones: educated Punjabi in India increasingly resembles Hindi in vocabulary, whereas educated Punjabi in Pakistan resembles Urdu. As noted in linguistic studies, modern Punjabi "in India has become increasingly influenced by the Sanskritic norms of Hindi," diverging in vocabulary from Pakistani Punjabi, which remains "much closer to the highly Persianized patterns of Urdu". In other words, in India's media or literature one hears more native-Indic terms and neologisms, whereas in Pakistan's Punjabi press many English and Persian loanwords (e.g. *jens [genes]*, *paṭṭer [letter]*, *fayaz [bounty]*) persist just as in Urdu.

Despite these differences, Punjabi register also varies by context: religious discourse (even in Pakistan) often retains Persian-Islamic vocabulary ("darbar," "hukam," "naiṅgē" for barber, etc. in Sikh tradition) that might seem literary. Everyday dialogue, on the other hand, is direct and participatory, with a lively, exclamatory tone. In journalism especially, headlines and editorials may swing toward the high register or even mix Hindi elements in Indian Punjab, while news reports remain relatively straightforward.

Development of Punjabi Journalism (Print, Radio, Digital)

Punjabi-language journalism arose in the 19th century and evolved through colonial, post-colonial and modern media. The first Punjabi newspaper (in Gurmukhi script) was *Akhbaar Sri*

Darbar Sahib Sri Amritsar Ji, started in March 1867 in Amritsar. It was followed by a wave of religiously oriented and reformist papers. By 1881, Sardar Dyal Singh Majithia launched the English *Tribune* (later with Punjabi and Hindi sister papers) in Lahore.

Timeline (selected milestones):

- *1867: Akhbaar Sri Darbar Sahib* (Amritsar), first Punjabi paper.
- *1875: Sukhīb Sambodhī* (bilingual Hindi–Gurmukhi) by Pandit Santokh Singh.
- *1876: Akal Prakash*, first *fully* Punjabi newspaper in Gurmukhi.
- *1885: Punjabi Darpan*, first paper to print a photograph.
- *1886: Sudharak*, first to carry cartoons.
- *1905: Chitṛ Pattar*, first photo-rich Punjabi paper.
- *1914: Shaheed*, the first daily Punjabi newspaper.

The Tribune article notes that by 1900–1920, some eighty Punjabi newspapers had appeared (many short-lived) and that events like the Ghadar Movement and Jallianwala Bagh massacre sparked political Punjabi journalism. Charan Singh "Shaheed" became a celebrated Punjabi journalist of that era. The interwar years (c.1920–35) – especially the Sikh Akali movement – saw a "most glorious period" of Punjabi press, with innovations like headlines and ads, and strong ties between journalism and literature.

After 1947, media diverged in the two Punjabs. In India, existing papers continued and new ones emerged. For example, *Daily Ajit* of Jalandhar – today one of the largest Punjabi dailies – was founded in Urdu in 1941 (switching to Punjabi). (Its current chief is veteran journalist Barjinder Singh Hamdard.) The *Punjabi Tribune* (from Chandigarh) and *Ajit* (Jalandhar) became leading Gurmukhi dailies. By contrast, Pakistani Punjab saw few Punjabi publications: as a Dawn report observes, *"the Sikhs had launched the first Punjabi newspaper in 1850 while the Muslims did that in 1950"*; before 1947 only two Punjabi monthlies (both non-Muslim-owned) existed. Pakistani Punjabi journalism lagged under Urdu dominance, with only occasional dailies or weeklies. (Today Pakistani Punjabi media include a handful of weeklies/magazines such as *Sajjan*, *Rozana Khabran*, and *Bhulekha*, but no large Punjabi-language press comparable to India's.)

Radio and Broadcast: Both countries' public broadcasters include Punjabi services. After 1947, Radio Pakistan (est. 1947) offered Punjabi-language programming among its domestic channels. In India, All India Radio (Akashvani) – founded 1936 – long provided Punjabi news and cultural programs via its regional stations (notably AIR Amritsar, Delhi's Punjabi Service and Punjabi regional service). Today AIR's national External Services also include a Punjabi channel.

Digital Media: In recent decades, print Punjabi journalism has largely migrated online. Major newspapers like *Punjabi Tribune*, *Ajit* and *Jagbani* (India) maintain e-paper editions, and new digital-only Punjabi news portals have arisen (e.g. Punjab Times, True Scoop News, etc.). In Pakistan, the few existing Punjabi outlets also put content online. Punjabi-language social media, podcasts and satellite TV channels (like Apna TV in Pakistan) have further broadened the "public journalism" sphere for Punjabi speakers. (However, readership remains limited compared to Urdu/English media.)

Major Literary and Journalistic Figures

Key figures and publications have shaped Punjabi style. Medieval poets – Baba Farid (13th c.), Sheikh Farid, Guru Nanak, Bhai Gurdas – established a literary tradition. Baba Farid's mystic couplets are the oldest Punjabi poetry preserved. Sufi and Bhakti poets (16th–18th c.) – Shah Hussain, Sultan Bahu, Saleh Muhammad Safoori, Bulleh Shah, Khwaja Farid, Mian Muhammad Baksh, etc. – expanded the Kafi form and folk lore. 18th-century qissa writers (like Waris Shah, whose *Heer Ranjha* became canonical) blended village speech with elevated emotion. Sikh writers – Bhai Gurdas (famous for his *Vars*), Bhai Nand Lal, and later Bhai Vir Singh (early 20th c.) – made Punjabi a vehicle for religious history and identity. Bhai Vir Singh in particular *"gave the language a new style, a new rhythm, a new flow,"* reviving Punjabi letters when Urdu was more prestigious.

In the modern era, prominent Indian Punjabi writers include Nanak Singh (novelist), Amrita Pritam (poet/novelist on Partition), Shiv Kumar Batalvi, Pash, Surjit Patar, and Jaswant Singh Kanwal. (Allamands like these introduced lyric intensity or radical themes to Punjabi poetry.) Pakistani Punjabi authors have been fewer due to state policies, but include poets and dramatists like Abdul Mannan and Ashfaq Ahmed (sometimes wrote in Punjabi).

In journalism, aside from Charan Singh Shaheed, notable figures include Narinder Singh (Prof. Kapoor) and Megha Singh who chronicled Punjabi press history, as well as newspaper founders like Munshi Hari Narayan and Firaya Mal (of *Akhbaar Sri Darbar Sahib*) and Sardar Dyal Singh Majithia (founder of *The Tribune* and *Punjabi Tribune*). In Pakistan, the journalist Jameel Paul lamented the late start of Punjabi press; a rare Punjabi daily *Rozana Khabran* (est. 1970s) and satirical magazine *Kalam* made some impact in Lahore.

Regionally, vocabulary and style differ: Western Punjabi (Pakistani) uses Shahmukhi script and Urdu-like diction, whereas Eastern Punjabi (Indian) uses Gurmukhi script. For example, the word for "language" is *zabān* (Persian) in Shahmukhi Punjabi but often *bhošā* or *bhashā* (Sanskrit) in formal Gurmukhi Punjabi. These political and script divides mean Punjabi literature and journalism have developed in parallel ways: Indian Punjabi literature drew on Hindu cultural themes and Sanskrit, while Pakistani Punjabi (when published) more often engaged Muslim themes and Persian forms. (For instance, translations like the 1911 Punjabi *Qur'ān* in Gurmukhi came from Sikh circles, whereas modern Punjabi poetry in Pakistan often addresses agrarian life in a style akin to Urdu poetry.)

Overall, the Punjabi language today reflects centuries of syncretism: its vocabulary is a mosaic of Sanskritic base and Islamic/Persian overlay, further spiced with English and regional dialect features. Its literature ranges from medieval devotional couplets to modernist novels and poetry. In formal/high registers one hears Sanskrit-based or novel coinages; in everyday speech the language remains warm and idiomatic, rich in common proverbs and metaphors. Punjabi journalism, though a late-developing field, has preserved the language's spirit: early press often mixed religious-political zeal with folk idiom, and today Punjabi media (print, radio, digital) continue using a tone that is at once respectful of tradition and lively for the general public.

Sources: Authoritative linguistic histories and historical surveys were used to compile this overview. Key references include Encyclopædia Iranica on Punjabi language history; Tribune and Dawn newspaper articles on Punjabi journalism history; and scholarly translations and encyclopedias of Punjabi literature, among others. These sources document the above developments in Punjabi's vocabulary and style across eras and regions

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Development of Punjabi Scientific Vocabulary: Colonial and Postcolonial Eras

During the British Raj, Punjabi was largely excluded from "domains of power – government, education, administration, judiciary". Colonial officials often disparaged Punjabi: for example in 1895 Judge A. W. Stogdon called it "an uncouth dialect not fit to be a permanent language" and urged replacing it with Urdu. British educational policy in Punjab favored Urdu and English; Punjabi (in Gurmukhi or Persian scripts) had no official support. As Tariq Rahman notes, under colonial rule "Urdu prospered as a literary expression somewhat at the expense of Punjabi", which was "flung to the margins" of media and formal life. In short, little effort went into developing a Punjabi scientific register during this period.

Postcolonial Punjab (India)

After 1947, Punjabi (in Gurmukhi) was adopted as the official language of Indian Punjab. The state government and new institutions took up language planning. Key bodies include the Commission for Scientific & Technical Terminology (CSTT) (est. 1961) and the Punjab government's Languages Department, which have compiled bilingual glossaries. At Punjabi University, Patiala (est. 1962) a Department of Development of Punjabi Language was founded in 1965 to produce textbooks and coördinate terminology. This department set up a "textbook cell and translation cell" dedicated to publishing higher-education materials in Punjabi. Other institutions – Punjab Agricultural University, Punjab State Council for Science & Tech, and the Punjab School Education Board – have also sponsored Punjabi science texts. Despite these efforts, production of science literature in Punjabi remains modest. One study notes that even with support from CSTT and Punjab bodies, "there are only a few publications on science in Punjabi language" from public agencies. In practice, many English scientific terms persist (often written in Gurmukhi letters) alongside coined Punjabi equivalents.

Postcolonial Punjab (Pakistan)

In contrast, Punjabi in Pakistan was marginalized after independence. Urdu was made the national language, and Punjabi never gained official status. Scholar Nazir et al. report that in Pakistani Punjab many speakers view Punjabi as "a language of abuse… not considered fit for educational matters," and in some schools children were even fined for speaking Punjabi. As Rahman observes, Pakistani Punjab largely continued "the legacy of the British" by keeping Urdu (and English) in media and education. Consequently, virtually no institutional effort was made to develop Punjabi scientific vocabulary there. With few publishers or committees supporting Punjabi technical writing, speakers often resort to Urdu or English for science.

Institutions and Standardization

Key institutions shaping Punjabi scientific language include:

- National Terminology Commission (CSTT): Published fundamental glossaries (e.g. "Science – Punjabi") with approved Punjabi equivalents for technical terms.

- Punjabi University's Development Department: Established as a central agency (1965) to standardize Punjabi and produce textbooks. Its translation cell created scientific textbooks and coined terms.
- Punjab Government and Academia: The Punjab Languages Department and Science Councils funded glossaries and science journals. Sanskrit- and Persian-derived words were often chosen by scholars to match English concepts.

Despite these efforts, the overall state of Punjabi scientific vocabulary is still evolving. A 2014 survey found that Indian Punjabi (like many Indian languages) "has not matched" Western languages in technical terminology. As a result, Punjabi writers often define concepts explicitly and rely on newly coined or borrowed terms to fill gaps.

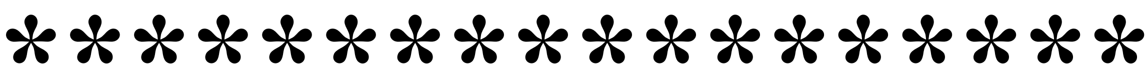
Academic Register vs. Colloquial Punjabi

The academic/scientific register of Punjabi is notably more formal and logically constrained than everyday speech. In written science texts and official discourse, writers use precise, standardized terms and strict grammar. For example, a Punjabi science reference defines "atomic number" as "the number of protons in an element's nucleus" using the technical term ਪਰਮਾਣੂ ਕ੍ਰਮਾਂਕ (paramāṇū kramāṅk). Such definition is unambiguous. A colloquial speaker might instead say something simpler (e.g. "ਇਸ ਦੇ ਪਰਮਾਣੂ ਵਿੱਚ ਕਿੰਨੇ ਪ੍ਰੋਟਾਨ ਹਨ?" – "How many protons does this atom have?") or even mix in the English phrase "atomic number," but the formal text insists on one clear term.

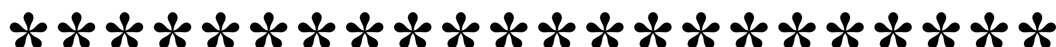
Similarly, scientific writing follows fixed syntax. Formal Punjabi typically adheres to the Subject–Object–Verb (SOV) order and uses full case markers. As one grammar notes, literary Punjabi has a "very strict ordering of words within phrases," whereas colloquial speech is "much freer" in word order. For instance, a sentence in a formal textbook might explicitly state "ਮੋਹਣ ਨੇ ਸੋਹਣ ਨੂੰ ਪਿਆਲੀ ਦਿੱਤੀ।" ("Mohan gave Sohan a cup," with all arguments marked). In contrast, everyday Punjabi might allow dropping the subject or reordering (e.g. "ਮੋਹਣ ਪਿਆਲੀ ਸੋਹਣ ਨੂੰ ਦਿੱਤੀ।") without strict adherence to the literary norm.

In summary, the academic register's logic is tightened by terminological precision, rigid syntax, and semantic clarity. Technical terms are chosen or coined to have one clear meaning, foreign loanwords are minimized, and sentences avoid ambiguity. Colloquial Punjabi, by comparison, freely uses idioms, slang, and flexible constructions, which can introduce vagueness. These differences reflect the influence of educational and institutional norms on scientific Punjabi: writers aim for consistency and rigor, whereas everyday speech prioritizes ease and expressiveness.

Sources: Linguistic and historical studies of Punjabi language policy; reports on Punjabi scientific literature and terminology; analyses of Punjabi grammar and registers; field surveys on language use in Punjab



Malayalam people



Historical Development of the Malayalam Language up to the Early 1900s

Origins and Classification

Malayalam is a South Dravidian language descended from the western coastal dialects of Middle Tamil. Scholars agree that by about the 8th–9th century CE this "Malabar" Tamil began to diverge as its own tongue. Inscriptions of the early medieval Chera (Perumal) period (9th–12th c.) show a language sometimes called Pazhaya Malayalam or "Old Malayalam." For example, the famous Kollam (Quilon) Syrian copper plates (849 CE) are inscribed in Vattezhuttu script with Grantha characters; although the text is in Tamil/Malayalam, it marks the earliest written record from Kerala. By the 12th–13th c., written works like the *Rāmācharitam* appear in a form mixing Tamil and emerging Malayalam vocabulary and grammar. Old Malayalam began to acquire distinctive phonological traits (nasalization, palatalized consonants, vowel contractions, etc.) and simpler verb morphology that set it apart from contemporary Tamil.

Script Development

Figure: Evolution of the Tamil (left) and Vatteluttu (right) scripts (public domain image). Over centuries, Malayalam was written in a succession of scripts derived from Tamil-Brahmi. Early writing used Tamil-Brahmi (3rd c. BCE onward) and its descendant Vattezhuttu (rounded letters), especially in Kerala. Vattezhuttu continued in Kerala far longer than in Tamil regions, gradually absorbing Grantha letters to represent Sanskrit sounds. Smaller regional scripts (Kolezhuttu in North Kerala, Malayanma in the south) coexisted with Vattezhuttu through the 14th–15th centuries. By the late medieval period, a "Malayalam script" had emerged: essentially the Pallava-Grantha alphabet augmented with extra characters for Malayalam phonemes. Modern Malayalam script (with vowels and consonant-conjuncts) was largely standardized by the 16th c., as chronicled by grammarians; for example, Thunchaththu Ezhuthachan (16th c., the "Father of Malayalam" literature) is credited with refining the script and eliminating redundant letters.

Literary History

The earliest Malayalam literary works date from the late 1st millennium CE. The 12th/13th c. *Rāmācharitam* (a retelling of the *Rāmāyaṇa* battle) is the oldest extant poem, blending Tamil and Malayalam elements in language. In the succeeding centuries a rich sung (pattu) poetry and *Maniprāvaḷam* tradition flourished, blending Dravidian and Sanskrit in verse. By the 14th–

15th c., entirely Malayalam-style works appear. The Kannassa (Niranam) poets (late 14th–15th c.) produced Malayalam versions of epic tales (e.g. Rama Pāṇikkar's *Malayāḷarāmāyaṇam*, Madhava's *Bhagavad Gītā*). Cherusseri Namboothiri's *Kṛṣṇagatha* (15th c.) – a devotional song on Krishna – is notable as the first major poem in pure Malayalam metre. The high point of the early literary tradition is Thunchaththu Ezhuthachan (early 16th c.), whose *Adhyātmā Rāmāyaṇam* and *Mahābhāratam* in kilippattu form fully established Malayalam's modern idiom. (Poonthanam Nambudiri's 16th c. devotional *Jñānappana* likewise became a classic.)

In parallel, Christian and Muslim communities developed Malayalam literature. The Syrian Christian community left inscriptions (Quilon plates) and later *śubhāśayam* texts in Syriac script. By the 16th–17th c. Muslim traders were composing *Mappilapaṭṭukal* (folk songs) in Arabi-Malayalam (Malayalam written in Arabic script). Meanwhile, a handful of prose works emerged: notably the first modern travelogue *Varthamana Pusthakam* (1785) by Paremmakkal Thoma Kathanar (recording a journey to Rome), and translations of religious texts.

By the 19th century Malayalam literature modernized under English influence. Missionary scholars like Hermann Gundert codified grammar and compiled the first Malayalam-English dictionary (1872). Kerala Panineeyam (A. Raja Raja Varma, 1896) laid down modern grammar norms. In 1889 Chandu Menon's *Indulekha* became the first significant Malayalam novel, reflecting social change under British rule. (Poets Kumaran Asan, Ulloor, and Vallathol – the "Modern Triumvirate" – would begin publishing in the late 19th/early 20th c., but that flowering is just beyond our scope.)

Sociopolitical and Cultural Influences

The language's development was shaped by Kerala's unique history. The ancient Chera dynasty (c. 800–1120 CE) ruled Kerala during Old Malayalam's formation, with Tamil (and later Sanskrit) as court languages. When the Chera realm fragmented, Malayalam-speaking kingdoms arose (Kolathunādu in the north, Cochin and Travancore in the south), each patronizing poets and temples. The Nambūdiri Brahmin class (who migrated from Tamil regions) and their Sanskritic learning strongly influenced Malayalam vocabulary and style (hence the heavy Sanskrit admixture in literatures and the use of Grantha letters in writing). Meanwhile, Kerala's plural religions – Hindu Bhakti, Syrian Christianity, and Islam – produced multilingual literary cultures (for example, Bhakti movement poets, translations of Ramayana for temple recitation, Malayalam Bibles by missionaries, and Arabi-Malayalam Islamic literature). These movements enriched the lexicon (loanwords from Sanskrit, Persian, even Portuguese/Dutch/English) and literary forms of Malayalam, accelerating its divergence from Tamil and its rise as a distinct tongue.

Colonial Influence and Printing

European contact and colonial rule had a profound impact on Malayalam's literacy and script. Portuguese traders arrived by 1500, and later Dutch and British powers established control. The first Malayalam book ever printed was a Christian catechism (*Nāśrāṇikaḷ Ōkkēkkum Ariyēndunna Saṅkṣēpavedārthaṁ*, by Clement Pianius) published in Rome in 1772. A local printing press followed under British auspices: the CMS press was set up at Kottayam on 18 October 1821 expressly to print Malayāḷaṁ texts (beginning with the Bible and school books). This launched the Malayalam print era. Hundreds of religious and secular books (grammars, dictionaries, textbooks, newspapers) soon came off these presses. In 1847 Hermann Gundert, a

German missionary, published the first Malayalam journal (*Rajyasamachāram*), and later printed the first Malayalam-English dictionary (1872). Kerala's publishing expanded rapidly: by the late 19th c. indigenous presses and organizations (like the Kerala Kalamandalam and Sahitya Pravarthaka Co-operative) were producing novels, magazines and journals that debated language reform, social issues, and nationalism.

Printing and colonial education thus standardized Malayalam spelling and grammar. Missionaries introduced punctuation, schooling spread literacy, and Malayalees began referring to their speech as "Malayāḷaṁ" (Malayalam) rather than "Tamiḻ" once used in village contexts. By the early 20th century Malayalam had solidified as the modern language of Kerala, with its own enriched vocabulary, script, and a growing body of literature and journalism.

Sources: Scholarly histories and linguistic studies trace Malayalam's rise from a western dialect of Tamil (8th–13th c.) into an independent Dravidian language. Copper-plate inscriptions (e.g. Kollam, 849 CE) and early poems (like *Rāmācharitam*) document Old Malayalam. Script evolution is detailed in paleographic research. Literary histories (Britannica et al.) enumerate classic works and authors. Modern-era influences (colonial presses, grammars, dictionaries) are recorded in historical accounts of 19th-century Kerala. (When direct citations from ancient inscriptions or original texts are unavailable, secondary analyses are used.)

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Historical Development of the Malayalam Writing System

Origins in Brahmi and Early South Indian Scripts

Malayalam writing ultimately derives from the ancient Brahmi script of the Indian subcontinent. The Brahmi-derived *Tamil–Brahmi* alphabet, attested from early centuries CE, was used in the Tamil country before the Common Era. By the 4th–5th century CE, this Tamil–Brahmi tradition had evolved into Vatteluttu ('round writing'), an indigenous southern Brahmi script. Vatteluttu was originally used for Tamil (and later Old Malayalam) and is attested in inscriptions from the 5th century onward. It belonged to the "southern group" of Brahmi derivatives and is a sister script to the Pallava-Chola (Grantha-derived) alphabets.

Vatteluttu letters were typically curvilinear and lacked a distinct virama mark for dead consonants. As such, they could not represent certain Sanskrit sounds. Early Kerala inscriptions – for example, the Vazhappally copper-plate of Chera king Rajashekhara (c. 830 CE) – are written in Vatteluttu. Thus, by the 9th century CE the Malabar region was using a Vatteluttu-based script to write early Malayalam. (Another early example is the Quilon Syrian copper plates of 849/850 CE, which contain the oldest attested Old Malayalam inscription.)

Transition to the Malayalam Script: Sanskrit and Grantha Influence

Vatteluttu proved impractical for writing the heavily Sanskritized medieval Malayalam language. Unlike Tamil scripts, it had no letters for voiced or aspirated consonants or for some vowels needed in Sanskrit loanwords. To accommodate this, a parallel "Arya-eluttu" (Ārya-eḻuttŭ, literally "Aryan writing") system developed. Ārya-eḻuttŭ combined the original Vatteluttu forms with Grantha letters (imported from the Pallava/Chola tradition) to represent Sanskrit sounds. Scholars note that a Grantha alphabet from the Chola Tamil region was brought to Kerala by the 8th–9th centuries and modified locally. Over the medieval period the Malayalam script became a hybrid: core Dravidian phonemes continued to use Vatteluttu-style letters, while Grantha symbols provided for Sanskritic phonetics.

This blending is reflected in Manipravalam literature (mixing Malayalam and Sanskrit): one of the earliest known Malayalam works, *Vaiśikatantram* (12th century), already shows a written system integrating both components. By the 13th century the mixed Malayalam script had been largely systematized. Over subsequent centuries these two streams of writing gradually unified. The celebrated poet T. Ezhuthachan (16th century) is credited with popularizing the blended Malayalam script in literature: he used Ārya-eluttu to write his Sanskrit-based *Adhyātmā Rāmāyaṇam*, supplementing it with Vatteluttu letters for missing Dravidian sounds. Ezhuthachan also eliminated redundant glyphs and thus "developed [the] Malayalam script into its current form". (He is often called the father of modern Malayalam for this reason.)

Regional Variants: Kolezhuthu and Malayanma

Alongside Arya-eluttu (the eventual standard script), regional variants of Vatteluttu persisted into the late medieval period. In north Kerala (the Malabar and Cochin regions) a cursive offshoot called Kolezhuthu developed by about the 12th–13th centuries. The name refers to the stylus (*kōl*) used to write it. Kolezhuthu was used especially by certain communities (e.g. Syrian Christians and Mappila Muslims) up to the 17th–18th centuries. In the southernmost region around Travancore, yet another form called Malayanma was used; it, too, belonged to the Vatteluttu family. Both Kolezhuthu and Malayanma were gradually supplanted after the 17th century by the Arya-eluttu script form (the precursor to the modern alphabet).

Manuscripts and Inscriptions

Malayalam has a rich tradition of inscriptions and palm-leaf manuscripts. Early inscriptions, like the Quilon Syrian plates (849 CE) and Vazhappally plates (c. 830 CE), are inscribed in Old Malayalam using the Vatteluttu-based script. From the 12th century onward, literary works appear in Old Malayalam. For example, the epics *Rāmācharitam* and *Thirunizhalmālā* (late 12th–13th centuries) and various ritual texts were written on *tāli* (palm leaves). These manuscripts typically use the evolving Arya-eluttu script with grantha letters for Sanskrit words and Vatteluttu-derived letters for native vocabulary. By the late medieval period, most secular and religious literature (including the *Manipravalam* corpus) was written in this mixed Malayalam script.

Colonial Contact and the Introduction of Printing

European contact in the 16th–19th centuries brought profound change. The first printed book in Malayalam appeared in 1772: *Samkshepa Vedartham*, a Christian catechism printed at the Vatican, was the world's first Malayalam print, featuring type cast by the Malayali Christian Clement Pianius. (The excerpt below shows a page from this work, illustrating the round, Grantha-influenced letterforms used in the font.)

Figure: Excerpt from Samkshepa Vedartham (1772), the first book printed in Malayalam.

During this period, the pressure of printing technology favored Arya-eluttu over the rounder Vatteluttu styles. Missionary printers (for example, at Bombay and Madras) generally cast Malayalam types based on the Arya-eluttu alphabet, effectively sidelining the old scripts. As typographic historians note, "when European missionaries began to print in Malayalam, they preferred Arya-eluttu … to the exclusion of the round script, helping cement Arya-eluttu as Malayalam's primary script". Consequently, surviving Malayali inscriptions and manuscripts after the 18th century overwhelmingly use the Arya-eluttu/Grantha-based orthography. (The round scripts continued only in handwriting among some communities: Mappila Muslims in northern Malabar still used Kolezhuthu in personal writing into the early 20th century.)

British and missionary presses accelerated adoption of printing in Kerala. In 1821 Benjamin Bailey (of the Church Missionary Society) established a Malayalam press at Kottayam (in Travancore). Bailey printed the first Malayalam books in Kerala in 1825 and, after correcting earlier type designs, issued the first fully Malayalam-printed Bible (1829). His new metal types introduced rounded forms consistent with northern Malayalam handwriting; they also separated certain vowel marks (for *i*, *ī*, etc.) from consonants, a simplification that remains in print today. These improvements – halving the number of sorts required – greatly aided the spread of Malayalam print.

Figure: Pages from the Ramban Bible (Bombay, 1811), the first Malayalam printed in India. This folio shows the early Malayalam type cast at Bombay's Courier Press (the first Indian-cast Malayalam font).

19th-Century Developments and Reforms

By mid-19th century, Malayalam script usage was largely standardized in practice, though minor reforms took place. The Basel missionary Hermann Gundert (who compiled a famous Malayalam dictionary) standardized certain orthographic conventions. Notably, he introduced the candrakkala (Malayalam *virāma* sign, ◌്) into print to explicitly mark the final *-a* (schwa) or consonant clusters. (Earlier printers often left the inherent vowel unmarked or inconsistently indicated clusters.) Gundert also helped establish Malayalam periodicals from 1846 onward, spreading the use of a more uniform script in lithographed publications.

In the late 19th century, local reformers and editors occasionally experimented with further simplifications (for example, printing detached vowel signs to ease typesetting), but these largely failed to replace the traditional convention. By 1900, the script of Malayalam used in print and manuscript was essentially the same as today's alphabet: an abugida of 15+ vowels and 36 consonants (with an appended set of Grantha letters for Sanskrit sounds). Older scripts like Kolezhuthu and Malayanma had fallen out of common use (surviving only as antiquarian styles), while Arya-eluttu – the direct descendant of Pallava/Grantha writing – formed the basis of modern Malayalam orthography.

Notable Early Texts and Inscriptions

Several surviving documents exemplify this history. Besides the 9th-century copper plates already noted, medieval texts like *Ramacharitam* (12th–13th c.) and the works of Ezhuthachan (16th c.) were written in Old/Middle Malayalam using the evolving script. Manuscript epics, devotional poems and legal records of the 16th–18th centuries preserve spellings that mix

Tamilic and Sanskrit elements. By the 19th century, printed books (catechisms, grammars and newspapers) demonstrate the fully mature alphabet. For example, Bailey's 1825 *Ceṟuppaittaṅṅaḷkku Upakārārtham* and later editions of the Malayalam Bible use the Arya-eluttu script with types cast exactly as in modern Malayalam. These documents mark the culmination of a long evolution from Brahmi through Vatteluttu and Grantha to today's Malayalam writing system.

Sources: Scholarly histories of Malayalam and South Indian scripts; epigraphic editions of Kerala inscriptions; studies of Malayalam printing and orthography. (Quoted lines indicate the cited text.)

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Historical Development of Malayalam Vocabulary and Style

Early Malayalam (9th–13th c.): Malayalam emerged from a western Tamil dialect by the 9th century CE, initially written in the Vatteluttu/Koleluttu script (a Grantha-influenced Dravidian script). The core grammar and basic lexicon remained Dravidian/Tamil, but contact with Buddhism and Brahmins brought Pali, Prakrit and Sanskrit elements early on. For example, many fundamental Malayalam words – *achan* "father", *amma* "mother", *ambalam* "temple/church", *palli* (mosque/church), and *Onam* (the festival) – have Pali/Prakrit roots. Sanskrit influence began from the 8th–9th c. (with immigrant Brahmins) and grew rapidly: Malayalam adopted new letters (from Grantha) to render Sanskrit sounds. As Sooranad Kunjan Pillai notes, principal lexical sources over the ages include Pali, Prakrit, Arabic, Persian, Dutch, Portuguese and more. These multilingual inputs set the stage for Malayalam's long diglossic tradition (formal literary style vs. colloquial speech).

Figure: Palm-leaf manuscript (Bhagavata Purana) in Malayalam script (Grantha-based Kerala script). Early manuscripts often transcribed Sanskrit texts in Malayalam letters.

Medieval Malayalam: Bhakti and Manipravalam (13th–17th c.)

In the medieval period Malayalam literature blossomed with heavily Sanskritized registers. A famous literary style was Maṇipravālam ("ruby–coral" blend), a mixed Tamil/Malayalam and Sanskrit poetic dialect. The 14th-c. *Līlātilakam* grammar praises Manipravalam as a "language in which Malayalam and Sanskrit should combine together like ruby and coral". Court poets wrote *champū* (mixed prose–verse) and *sandēśa-kāvyas* often on Puranic themes, using many Sanskrit terms. In parallel, Bhakti (devotional) literature in Malayalam gained popularity. Works like Cherusseri Namboothiri's *Krishnagatha* (15th c.) and Kilippāṭṭu ("bird-song") epics by Thunchaththu Ezhuthachan (*Adhyātmā Rāmāyaṇam* and *Mahābhārata*, 16th c.) combined simple Malayalam verse with classical content. Ezhuthachan and his contemporaries (Poonthanam, Melpathur) effectively revived Sanskritic themes in the vernacular; he is often hailed as the "father of modern Malayalam". Meanwhile, Kerala's Muslim community produced Arabi-Malayalam literature (Malayalam written in Arabic script) rich in Arabic/Persian vocabulary. In all Kerala dialects, Arabic and Persian loans are noticeable in

religious and administrative terms (e.g. *adālat* "court", *ṭālakkŭ* "sub-district"). In summary, medieval Malayalam split into high (Sanskrit-heavy literary) and low (spoken/pattu song) registers: *Manipravalam* was a prestige poetic style, while folk poetry and Bhakti verses used more native syntax and meter.

- Literary Movements & Registers: Manipravalam (elite fusion of Sanskrit and Malayalam) dominated court poetry. Devotional Bhakti poets (Ezhuthachan, Poonthanam) used accessible Malayalam meters. Religious or caste-specific dialects retained Arabic, Persian or Syriac terms in their register.

Colonial Period and Renaissance (18th–19th c.)

The 18th–19th centuries saw Malayalam standardize and Western influence enter. The first printing press (1795, CMS mission) and grammars emerged. Hermann Gundert's *Rajyasamacharam* (Thalassery, 1847) – the first Malayalam newspaper – marked the birth of modern journalism. Initially these mission-run journals (e.g. *Paschimodayam*, *Nasrani Deepika*) used formal Malayalam heavily laced with Sanskrit and some Malayalam idioms. The 1880s–1920s (Navodhana "Renaissance" period) brought literary reform: the Modern Triumvirate of Kumaran Asan, Ulloor S. Parameswara Iyer and Vallathol Narayana Menon wrote poetry infused with romantic and nationalist themes. Their styles varied – Asan was philosophically pessimistic, Ulloor classical, Vallathol socially conscious – but all expanded Malayalam vocabulary with new coinages and borrowed ideas. In 1890 A. R. Raja Raja Varma codified Malayalam grammar in *Kerala Panineeyam*, further unifying literary Malayalam. Thus, colonial-era literary Malayalam balanced Sanskritized high-diction (in formal writing and seraphic poetry) with emerging colloquial elements.

Modern Malayalam (20th–21st c.): Realism and Global Influences

After Independence, Malayalam matured into a rich modern language. Early 20th-c. writers like Thakazhi Sivasankara Pillai, Vaikom Muhammad Basheer and S. K. Pottekkatt pioneered realism and secular prose, often writing in conversational Malayalam. Poet-critics like G. Sankara Kurup and Edasseri Govindan Nair won national acclaim with modern verse. The digital age also affected vocabulary: English technical terms and global borrowings became routine (e.g. *ṭrēn*, *bus*, *softweṭ*). Meanwhile, high literature continued in established forms. Contemporary giants (M. T. Vasudevan Nair, O. N. V. Kurup, Akkitham Achyuta Namboothiri, etc.) often blend pure Malayalam idioms with philosophical diction. For example, O. V. Vijayan's novels mix colloquial speech with stylized narration, reflecting his own Travancore heritage.

- Literary Movements & Figures: The late-19th/early-20th revival (Navodhana) poets Asan, Vallathol and Ulloor built on Bhakti and romantic ideals. Mid-20th-c. authors like M. T. Vasudevan Nair and Basheer brought colloquial realism. Late-20th-c. modernists (O. V. Vijayan, M. Mukundan, Arundhati Roy in Malayalam contexts) further diversified style.

Registers and Style Variations

Malayalam has long been diglossic. The *formal* register (classical literature, official writing, educated speech) remained heavily Sanskritized (or English-influenced), while the *colloquial* register (daily conversation, folk arts) preserves Dravidian forms. For example, a formal text

might use *lokam* ("world" from Sanskrit *loka*) whereas casual speech might say *prapancham*. Writers bridge these registers: Basheer famously wrote novels in near-spoken Malayali dialect, whereas older grammars and liturgies used more Sanskrit vocabulary. Language purity movements in the 20th century tried to "excise" some English/Sanskrit loans, but today both registers coexist. The term manipravālam itself exemplifies blending: it literally likens the mix of tongues to "a necklace of coral and ruby," requiring harmony between them.

Malayalam Journalism and Media

Malayalam's journalistic register developed from these literary currents. Early newspapers (Gundert's *Rajyasamacharam*, 1847) used a sober, high style drawn from church translations. By the early 20th century, vernacular journalism (Malayala Manorama, 1888; Mathrubhumi, 1923; Deshabhimani, 1942) adopted a plainer yet polished Malayalam, often introducing English terms for modern concepts. Editorial language today is generally formal but lively, aiming for clarity to Kerala's literate audience.

Figure: All India Radio relay station in Devikulam, Kerala (2020). Broadcast media (radio/TV) transformed Malayalam journalism into a spoken register.

From the 1990s, broadcast media expanded Malayalam's reach. Doordarshan bulletins and private TV news channels (e.g. Asianet, Manorama News) brought news in colloquial Malayalam into homes. In the 21st century, online news portals and social media have introduced new styles (short-form, mixed Malayalam-English scripts). Citizen journalism and blogs often use everyday Malayalam spelling and syntax, even transliterating Malayalam in Latin letters. Despite this, formal press and broadcast news still largely use the standard literary register, bridging old and new Malayalam norms.

Vocabulary Influences (Summary)

Malayalam vocabulary reflects all these contacts. Key loanword sources include:

- Sanskrit: Extensive in liturgical, academic and formal vocabulary (e.g. *lakṣaṁ* "100,000", *praviśanam* "accession").
- Tamil (Dravidian): Core grammar and basic words (*oru* "one", *pani* "work") inherited from old Tamil dialects.
- Pali/Prakrit: Foundational terms like *achan* (father), *amma* (mother), *ambalam* (temple), *palli* (mosque/church), *Onam* (festival).
- Arabic/Persian: Religious and administrative terms (*adālat* "court", *salaam* "peace", *ṭōtaka* "measure") often via Muslim registers.
- Portuguese: Hundreds of everyday terms entered (e.g. *jaṉāla* "window", *alamāri* "cupboard", *pappā* "Pope").
- English: Modern terms for technology, institutions and science (e.g. *āppiḷ* "apple", *bāskiyuṭ* "biscuit").

These layers mean Malayalam style and diction vary with context. Classical literature and journalism use the Sanskritic/borrowed layer, while casual speech and creative writing freely mix native Malayalam forms. Over time, literary movements and media (newspapers, radio, TV, internet) have negotiated between these registers, continually enriching Malayalam with new words and stylistic blends.

Sources: Historical and linguistic studies of Malayalam; language surveys by scholars (e.g. Kunjan Pillai); and analyses of Malayalam literature and media. Detailed data on loanwords and usage are drawn from Tamil/Malayalam historical dictionaries and contemporary studies.

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Development of Academic Scientific Vocabulary in Malayalam

Historical Background and Key Milestones

Malayalam is a Dravidian language that has long drawn from Sanskrit for its literary and scholarly vocabulary. In fact, Kerala had a rich medieval science tradition (for example, the 16th-century *Yuktibhāṣā* presented advanced mathematics in Malayalam prose). In modern times a major turning point was the Kerala Sastra Sahitya Parishad (KSSP) – founded in 1962 by science writers – whose *limited objective was "publishing science literature in Malayalam, the local language"*. In the 1960s–70s, prominent Malayali intellectuals and politicians (e.g. P.T. Bhaskara Panicker, N.Y. Krishna Variar and former Chief Minister E.M.S. Namboodiripad) began advocating science education in Malayalam. Teachers and activists launched journals (like *Urika* and *Vijnanakairali*) and public movements to spread scientific temper in Malayalam. These grassroots efforts, however, revealed a critical need: *standardized technical vocabulary*. A study at the time noted that "scientific terms used in the lower classes are not standardized" and concepts often remained unclear, so English was still predominant.

This led to institutional support. Following the Kothari Commission (1964–66) recommendation that local languages be used and teachers trained for science education, the Kerala government created the State Institute of Languages (Kerala Bhasha Institute, KBI) in March 1968. The Institute's mission was explicitly "to raise Malayalam into a scientific language" and publish authoritative university-level textbooks in modern science and technology. By the 1980s KBI and the state textbook board had produced many Malayalam editions of school and college texts. KBI itself reports that over the decades it has compiled glossaries with roughly 200,000 technical terms in Malayalam, "thereby largely solving" the problem of scientific vocabulary. Meanwhile, other bodies joined in: the national Commission for Scientific & Technical Terminology (CSTT) (est. 1961) and later the National Translation Mission (NTM) (CIIL, Mysore) worked to prepare standardized glossaries for Indian languages. For example, the NTM–CSTT collaboration has systematically created Malayalam equivalents for English scientific terms. In 2019 the NTM announced a Malayalam glossary of 33,000 terms (e.g. 12,000 in politics, 6,000 in botany, etc.) for translating non-fiction into Malayalam. (The NTM also noted many of these Malayalam terms were newly coined or slightly adapted forms to replace English words.)

Influence of Sanskrit, English, Tamil, and Other Languages

Malayalam's academic lexicon has drawn heavily on *Sanskrit* and *English*. Classical Sanskrit contributed many roots and compounds (e.g. ഗണിതശാസ്ത്രം *gaṇitaśāstraṁ* "mathematics" or ഗുരുത്വാകർഷണം *gurutvākārṣaṇaṁ* "gravity" are transparently

Sanskrit-based). During colonial and postcolonial times most new science/technical terms were either adapted from English (often by transliteration or calque) or coined from Sanskrit elements. English loanwords are common especially in modern fields: for example, computing terms like കമ്പ്യൂട്ടർ (*kaṁpyūṭṭar* "computer") or ആൽഗോരിതം (*ālgōrithaṁ* "algorithm") are simply borrowed and Malayalam-phoneticized. In contrast, Tamil's role has been more muted: while colloquial Malayalam shares some Tamil/Dravidian words, formal technical vocabulary generally favors Sanskrit-derived terms. (Malayalam's older layers are Dravidian, but Sanskrit influence has been extensive in learned language.)

Scholars have pointed out that this reliance on Sanskrit and English can be problematic. One recent study notes that Malayalam "struggles to adapt" to modern science precisely *because* of "its reliance on Sanskrit-derived terms and extensive loaning from English". In response, language planners advocate Malayalamized strategies: using native compounds, reviving archaic Malayalam words, and coining new terms from Dravidian roots rather than defaulting to Sanskrit or English. For example, the paper *"Academic Dilemma of Malayalam"* proposes "prioritizing Malayalam over Sanskritized forms" and using "Malayalamised loans and compounds … coining new terms using existing patterns". Kerala institutions have followed suit: KBI publications and other glossaries often present multiple options (e.g. technical terms from Sanskrit alongside truly Malayalam alternatives), striving for clarity and wider acceptability.

Lexical Strategies

- Borrowing: Direct loans from English (and sometimes other languages) are common, especially in modern science/tech. E.g. ഓക്സിജൻ (*ōksijaṇ* "oxygen"), ഡാറ്റ (*ḍāṭṭ* "data"), സോഫ്റ്റ്വെയർ (*sophtveyar̲* "software") are borrowed and adapted phonetically.
- Transliteration vs. Translation: Many fields mix approaches. Some terms are transliterated (e.g. ആൻട്രോപി (*ānr̲ōpi* from "entropy"), ഹൈഡ്രജൻ (*haidrajaṇ* "hydrogen")), while others are translated/calqued into Sanskrit elements (e.g. *photosynthesis* became പ്രകാശസംശ്ലേഷണം *prakāśasaṃślēṣaṇaṁ* – literally "light+combining").
- Sanskritization: A long-standing strategy is to form new terms from Sanskrit roots. For instance, *lightyear* is വേളാവർഷം (*vēḷāvarṣaṁ*, "light-year"), and *cellular* is കോശീയ (*kōśīya*, from *kōśa* "cell"). Many complex compounds (like സംസ്ഥാനാധാരം *saṁsthānādhāraṁ* "infrastructure") follow Sanskrit word-building.
- Neologisms & Purism: In recent decades, some lexicographers promote pure-Malayalam coinages or revived old terms as puristic alternatives. For example, instead of the Sanskrit loan ജലം (*jalaṁ*) for "water", one might use the Dravidian word വെള്ളം (*veḷḷaṁ*), or create entirely new derivatives from Malayalam roots. The proposed strategy in [66] aligns with this: avoid unnecessary Sanskritization, use core Malayalam vocabulary, and "revive archaic words" for new concepts.
- Institutional Standardization: Government bodies (CSTT, NTM, KBI, UGC) have issued glossaries and recommended term-choices. Kerala's textbooks and research papers now generally use these standardized terms. For example, the Kerala Bhasha Institute proudly notes it "published glossaries (ശബ്ദാവലികൾ) of nearly 200,000 words…solving the problem of technical terminology to a large extent".

Academic Register vs. Colloquial Malayalam

The style and structure of academic/scientific Malayalam differ noticeably from everyday speech. Formal Malayalam (as used in textbooks and papers) tends to be more Sanskritized, noun-heavy and compounding, and often longer or more complex. It frequently uses participial constructions and relative clauses analogous to Sanskrit/English syntax. In contrast, spoken Malayalam is more analytic and idiomatic: it uses simpler verb-centered sentences, common proverbs and metaphors, and often relies on context. For example, an academic text might say *"പരീക്ഷയിലേക്ക് പ്രവേശിക്കുന്ന വിദ്യാർത്ഥികളുടെ എണ്ണം..."* ("the number of students entering the exam") using the compound പ്രവേശനം and a long noun chain, whereas colloquial speech might use a simpler construction like *"പൊതുവിധ്യാർത്ഥികൾ പരീക്ഷ തുടങ്ങുമ്പോൾ..."*. Language planners warn that inappropriate "syntactic distortion" (i.e. forcing English-style grammar into Malayalam) should be avoided. Indeed, a goal of terminology work is clarity: Malayalam academic prose strives for logical precision (with explicit conjunctions, definitions, and quantifiers) and minimal ambiguity, whereas everyday Malayalam can be more context-dependent or metaphorical.

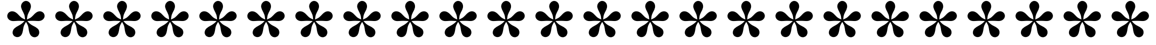
Examples of Malayalam Scientific Terms

Malayalam Term (Transliteration)	English Equivalent	Origin / Notes
ഗുരുത്വാകർഷണം (*gurutvakārṣaṇaṁ*)	Gravity	Sanskrit-derived compound (guru + ākarṣaṇa)
ആൽഗോരിതം (*ālgōrithaṁ*)	Algorithm	English loanword (transliterated)
കോശം (*kōśaṁ*)	Cell (biology)	Sanskrit (*kośa*, "cell/pore")
പ്രകാശസംശ്ലേഷണം (*prakāśasaṃślēṣaṇaṁ*)	Photosynthesis	Sanskrit compound (prakāśa "light" + saṃślēṣaṇa "combining")
ത്രികോണം (*trikōṇaṁ*)	Triangle	Sanskrit (tri + kōṇa "angle")

These illustrate the mix of sources: e.g. *ഗുരുത്വാകർഷണം* is purely Sanskrit, *ആൽഗോരിതം* is an English borrowing, while *പ്രകാശസംശ്ലേഷണം* and *കോശം* show Sanskrit roots used to coin scientific concepts. The table shows the precision Malayalam terms can achieve: each Malayalam word has a clear morphological logic even when coined (सanskritization or transliteration), enabling rigorous technical use.

Sources: Historical and linguistic development have been documented by Kerala's language and education institutions. For example, Kerala's State Language Institute notes its founding aim to develop Malayalam as a scientific medium, and KBI reports the fruits of its terminology efforts. Studies of Malayalam science education highlight early advocates (e.g. E.M.S. Namboodiripad and N.Y. Krishna Variar) and the need for standard terms. Government and academic reports (NTM, CSTT) describe ongoing standardization of technical vocabulary. Recent linguistic research explicitly discusses Malayalam's Sanskritized academic register and recommends Malayalam-based coinage for future terms. All these efforts together have gradually built a modern scientific lexicon in Malayalam, balancing precision with the language's native structures.

Assamese people



Development of the Assamese Language up to the Early 1900s

Indo-Aryan Roots and Early Forms

Assamese descends from the Eastern Indo-Aryan branch, ultimately tracing back to Middle Indo-Aryan Magadhi Prakrit. Linguists note that the dialect continuum of Magadhi Apabhramsa extended eastward into the Brahmaputra valley, giving rise to proto-Assamese by around the 7th century AD. Inscriptions from the ancient Kamarupa kingdom (e.g. the 5th-century Nagajari-Khanikargaon and Umachal rock edicts) use a script derived from Gupta Brahmi. This *Kamarupi script* gradually evolved through medieval forms into the Assamese alphabet. The Buddhist *Charyapadas* (8th–12th c.) – mystical Vajrayana verses – contain eastern vocabulary and phonetic features that closely resemble later Assamese (indeed they share many identifiably Assamese words). By the 8th century, the Brahmaputra valley (then Pragjyotishpura/Kamarupa) was recognized in Sanskrit literature, and by the 13th c. Assamese-like speech was established. In sum, Assamese inherited its basic structure from the Magadhi-Apabhramsa dialect of eastern India, with local Kamarupi forms contributing distinctive sound changes (for example, early inscriptions replace Sanskrit ṣ/ś with s, a feature of the Assamese-Magadhi lineage).

Old Assamese (13th–15th Centuries)

The Old Assamese literary era (roughly 1200–1550 AD) saw the first substantial texts in the language. In this period the language continued to diverge from neighboring Prakrits, developing features still recognizable today. Notable works include *Prahlad-Charita* by Hem Saraswati (c.14th c.) and the *Saptakanda Ramayana* by Madhav Kandali (mid-14th c.), a complete Assamese rendition of the Ramayana. Chronicle-poems like *Babruvahana Yuddha* by Harivara Vipra (13th c.) and *Lava-Kush Yuddha* illustrate Old Assamese prose and verse. As Kakati and others note, Assamese vocabulary already differed from Bengali: e.g. Old Assamese used zui 'fire' versus Bengali *aagni*, or paani 'water' (shared with other Eastern Indo-Aryan tongues) versus Bengali *jal*. Grammatically, Assamese was developing its own patterns – it would eventually adopt a full system of negative verb conjugations (prefixing *na-* to verbs) that Bengali does not have, and a set of definitives (particles like *-khan*, *-jon*) absent in Bengali. Throughout the Old Assamese period, Sanskrit continued to supply much of the formal vocabulary and influence (as in most Indo-Aryan languages), but the core grammar and phonology were establishing a distinct character.

Middle Assamese and Neo-Vaishnavite Era (16th–17th Centuries)

The 16th–17th centuries mark the Middle Assamese or Neo-Vaishnavite phase, during which Assamese crystallized into a fully distinct literary language. This era centers on the Bhakti reforms of Srimanta Sankardeva (1449–1568) and his disciple Madhavdeva (1489–1596). They composed a rich corpus in Assamese: devotional songs (Borgeets), plays (Ankiya Naat), and versions of the *Bhagavata Purana* and Ramayana in accessible Assamese. Sankardeva's works – including the *Kirtan Ghoxa* and *Naam Ghoxa* – set literary standards by using a colloquial Assamese idiom rather than Sanskrit or Bengali. The Press Information Bureau notes that the period 1550–1650 ("Era of Sankari") "marks the crystallization of a fully distinct form of Assamese". Under Neo-Vaishnavism, scriptural and poetic language became more vernacular and standardized. For example, this era solidified the pronunciation and stress patterns characteristic of Assamese; the language continued with penultimate-syllable stress (unlike Bengali's initial stress). Sankardeva also patronized scriptorial work, ensuring that manuscripts in Assamese (often written in early Eastern Nagari script) proliferated across Assam.

Early Modern Assamese (18th–Early 20th Centuries)

In the late 18th century, the Ahom kingdom collapsed and Assam was annexed by the British (Treaty of Yandabo, 1826). Initially under the Bengal Presidency, Assamese administration and education shifted briefly: Persian remained the official language until the 1830s, when a British survey (the Jenkins Report) declared Bengali the official tongue in Assam. In April 1836, Bengali replaced Assamese in courts and schools, halting the production of Assamese schoolbooks and official texts. This provoked resentment among Assamese intellectuals and missionaries.

American Baptist missionaries played a key role in reviving Assamese in the 19th century. In 1813 they printed the first Assamese book (a Bible translation by Atmaram Sharma), and in 1846 Nathan Brown launched *Orunodoi*, Assam's first newspaper.

Cover of Orunodoi, Assam's first Assamese periodical (Jan 1855). The Baptist missionaries established a press in Sivasagar and published *Orunodoi* from 1846 to 1882, with Nathan Brown as editor. This periodical connected Assam to wider world affairs (carrying international news translated into Assamese) and fostered a literary culture. It also trained Assamese writers: Anandaram Dhekial Phukan (noted poet and activist) and others began writing in *Orunodoi*. Meanwhile, Assamese scholars like Hemchandra Barua compiled grammars and dictionaries. Hemchandra published one of the earliest Assamese grammars in 1872 and the monumental Hemkosh dictionary in 1900, which standardized Assamese spelling on Sanskrit etymological lines. These works codified many features of Assamese phonology and morphology – for instance, Hemkosh treated the unique Assamese "wa" sound (ৱ) as a distinct letter, a spelling choice that persists (Assamese retains 'ৱ' while Bengali does not).

By the 1870s, persistent agitation by Assamese leaders and missionaries led the colonial administration (George Campbell, Lt. Governor of Bengal) to restore Assamese as the language of education and administration for Assamese speakers. In 1874 Assam became a Chief Commissionership, and Assamese regained primacy in primary schools (Bengali lingered at higher levels until the century's end). The late 19th century also saw the rise of modern Assamese prose and verse. Literary organizations like the Assam Sahitya Sabha (founded 1917) and magazines of the Jonaki era promoted Assamese creative writing. Thus, by the early 1900s

Assamese had fully emerged as a standardized modern language, distinct from Bengali and ready for contemporary literature.

Script and Orthography

The Assamese script is a branch of the Eastern Nagari (Bengali–Assamese) family, evolving from the ancient Kamarupi script. From the 5th–13th centuries, inscriptions in Kamarupa show an angular form of Brahmi ("Kamarupi" script) whose later medieval variants became the Assamese alphabet. During the Middle Ages the script crystallized into the familiar rounded Nagari form; by the 18th century it was essentially identical to Bengali script except for a few orthographic details. For example, Assamese orthography continued to write the unique "wa" sound with ৱ (distinct from Bengali's ব for /b/). Missionary grammarians like Nathan Brown initially used the Roman script (and even tried to distinguish Assamese diacritically), but by the 1840s Assamese print adopted Nagari types. Hemchandra Barua's Hemkosh (1900) codified modern Assamese spelling largely on Sanskrit principles. Thus the Assamese alphabet gradually took its present form by the early 20th century, carrying forward the legacy of the ancient Kamarupi script to today's Eastern Nagari letters.

Linguistic Influences

Assamese has been shaped by contact with many neighboring tongues. Sanskrit has had a pervasive influence: most classical and religious vocabulary came from Sanskrit, and Assamese retains many Sanskrit loanwords and grammatical constructions (for instance, use of compound verbs). In the Neo-Vaishnavite era, for example, Sankardeva freely incorporated Sanskrit terms even as he wrote vernacular verse. In the medieval and modern periods, Assamese also borrowed from Tai-Ahom and tribal languages. During the Ahom dynasty (16th–18th c.), many Tai-Ahom words entered Assamese: names of offices and titles (e.g. *Phukan*, *Barua*), local plant and river names (e.g. *nam* 'water', as in Namrup river), and everyday items (e.g. *lâi* 'eldest' from Tai)*. Tibeto-Burman (Bodo–Kachari) and Austroasiatic influences are evident in common vocabulary, especially rural terms for fishing, farming and tools. For instance, words for fishing baskets or fish traps in Assamese (e.g. *sôa*, *gog* etc.) have parallels in neighboring Dimasa or Bodo languages. Some Khasi and Garo loanwords (Austroasiatic) also appear in Assam's lexicon. By contrast, Bengali influence mainly arose under British rule. Prolonged contact introduced a number of Bengali terms into colloquial Assamese, but linguistic purists pointed out many structural differences: Assamese plural affixes, negation forms, stress patterns and even basic pronouns differ from Bengali's. In short, Assamese absorbed and adapted elements from Sanskrit, Tai and indigenous languages, even as it maintained its own core Indo-Aryan grammar and sound system.

Religious Literature, Bhakti Movement, and Neo-Vaishnavism

From the 14th century onward, religious movements produced much of Assam's literature. Before Sankardeva, pre-Vaishnavite works like Madhav Kandali's *Ramayana* (c. 1360) and Rudra Kandali's *Sina Sidhanta* (a cosmic poem) set precedents. But it was the 15th–17th c. Bhakti (Neo-Vaishnavite) movement that truly defined Assamese as a literary language. Sankardeva and Madhavdeva composed a vast body of devotional poetry and plays in Assamese – ranging from the *Naam Ghosa* (versified Bhagavata) to *Borgeets* (devotional songs). Their choice to write in colloquial Assamese (rather than Sanskrit) made religious ideas accessible to the masses and gave prestige to the vernacular. Subsequent Vaishnava hagiographies (*Charit*) by authors like Ramcharan Thakur further enriched the language. This era standardized many

idioms and poetic conventions. As the PIB press release notes, the “Era of Sankari literature (1550–1650 AD) marks the crystallization of a fully distinct form of Assamese”, with social and linguistic reforms reinforcing Assamese identity. The Neo-Vaishnavite movement thus solidified Assamese grammar and vocabulary in a form that underlies the modern language.

Colonial Rule, Missionaries, and Standardization

Colonialism and missionary activity in the 19th century profoundly impacted Assamese. Under British rule, educational and language policies swung between neglect and revival. After 1826 Assam fell under Bengal administration, and in 1836 Bengali was imposed as the official language (replacing both Persian and Assamese). This “dark age” for Assamese saw its suppression in schools and courts. Missionaries like Nathan Brown, however, championed Assamese: Brown’s grammar (1846) explicitly refuted the idea that Assamese was merely a Bengali dialect. The Baptist mission press printed Assamese primers, textbooks and *Orunodoi* magazine, keeping the language alive.

In parallel, Assamese intellectuals worked to standardize and modernize the language. In the 1860s–90s they produced grammars, readers and dictionaries. Hemchandra Barua’s Assamese grammar and primers educated generations of students, while Hemkosh (1900) fixed spelling conventions on a scholarly (Sanskrit-based) footing. These efforts, along with the emergence of Assamese-language newspapers and journals, laid the foundation for the 20th-century revival of Assamese literature. By 1900, the Assamese language had a codified script, a growing body of secular literature, and a standardized grammar and vocabulary – all major steps from its medieval roots.

Sources: Historical syntheses of Assamese linguistics and literature, archival chronicles and modern scholarship have been used to trace these developments.

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Historical Development of the Assamese Writing System

Origins in Brahmi and Gupta (5th–7th centuries)

The Assamese script is an eastern member of the Brahmi family. Scholars agree it ultimately descends from Brahmi→Gupta, with some later Siddhaṃ influence. Inscriptions from ancient Kamarupa (Assam) dating to the 5th century show letters nearly identical to the eastern Gupta script. For example, the 5th-c. Umachal and Nagajari rocks use Gupta-style forms. Over the 6th–7th centuries these developed regionally; typographers note Assamese “had strong influence from Gupta and Siddhaṃ script” as it evolved.

Early Assamese (Kamarupi script to 13th century)

From the 5th through 12th centuries the local form is known as the Kamarupi (Kamrupi) script. By the 12th–13th centuries it had already taken on a distinct Assamese character. The 1207 CE

Kāṇai-boroxiboa copper inscription, for example, shows a clear proto-Assamese script. S. N. Sarma and others call the 6th–12th-c. writing "ancient Kamrupi". This in turn evolved into the medieval Assamese script of the Bhakti age.

Between the 13th and 17th centuries, Assamese language literature flourished in this script. The 14th-century poet Madhava Kandali composed the *Saptakanda Ramayana* in Assamese letters. Later Srimanta Sankardev (15th–16th century) used the same script (writing in Assamese and *Brajavali*) for his plays, borgeets, and translations. These works helped fix the orthography and spread literacy. Throughout this period scribes wrote on prepared materials (see below), and the script shows a steady development towards its modern form.

Script Variations (late medieval – early modern)

By the 17th–18th centuries three distinct handwriting styles had emerged in Assam. These are often called Bamūni, Kaitheli (Lakhari) and Gharhgiya (Gadgaya) styles. Key points:

- Bamūni (Bamoniya) – Used mainly by Brahmin scholars for Sanskrit texts. It is a more conservative, ornamental form. Brahmin pundits copied Sanskrit works in this style.
- Kaitheli (Lakhāri) – Used by Kayastha (literate service) class for record-keeping, accounts, and general literature. This was the most popular style in medieval books and Vaishnavite monasteries. Manuscripts like the arithmetic text *Kitābat Manjari* and the elephant-treatise *Hastividyārnava* (18th c.) are in Kaitheli calligraphy. (Satradhikars of Sankardev's order apparently wrote in this script.)
- Garhgaya (Gadgaya) – An official style used around the Ahom court (capital Gargaon/Garhgaon). Ahom administrative documents and royal scripts were often written in this form.

These variants coexisted locally (Bamūni in Brahmin seats, Kaitheli in popular literature, Garhgaya in royal circles). By the early 19th century printing needs forced their convergence (see below).

Manuscripts and Calligraphy

Traditionally, Assamese texts were written on durable local materials. The most common was the processed bark (*sanchi pat* or *xānchi pat*), treated and trimmed into folios. After preparing the bark sheets, scribes (often called *kāṇikars*) used reed pens to inscribe beautifully shaped letters. Many surviving 16th–18th c. manuscripts are illustrated and richly decorated at the margins. For example, the *Hastividyārnava* (c. 1720, under Ahom patronage) is famed for its "calligraphy of great charm" in the old Assamese script. In general, Assamese manuscript tradition (often in monasteries/satras) favored neat, flowing handwriting – most commonly in the Kaitheli style by 17th–18th c.. These manuscripts played a key role in preserving the script form until modern printing.

Royal and Religious Patronage

Both courts and Vaishnavite institutions championed Assamese writing. Under the Ahom dynasty (13th–19th c.), Assamese was used in administration and histories. The Ahom kings kept official scribes (e.g. the post of *Likhakar Barua*) to record royal orders and events. These *buranji* histories were compiled in Assamese script. (Many such chronicles and records survive

on sanchi leaves.) Notably, King Supangmung (1663–70) even issued coins with Assamese legends.

Similarly, Neo-Vaishnavite saints made Assamese script a vehicle of religion and culture. Sankardev (and later Madhavdev) composed dozens of plays, songs (*borgeets*) and translations in Assamese script. His monasteries (satras) produced and copied texts in that alphabet, helping to spread literacy. The strong patronage of Ahom rulers (who themselves eventually embraced Vaishnavism) and of the satras ensured the script's continuity and prestige into the modern period.

Colonial Era and Printing (19th century)

The 1800s brought dramatic change. In 1813 William Carey (with Assamese convert Atmaram Sarma) printed the first Assamese book – the New Testament. This inaugurated an era of printed Assamese. American Baptist missionaries (e.g. Nathan Brown) set up presses in Assam (Sibsagar, 1836 onward) and published primers, grammars and Bibles in Assamese. Atmaram Sarma devised a metal type for Assamese (around 1833–36) so that Assamese text could be printed on the new presses. In 1846 the first Assamese periodical *Orunodoi* was launched by these missionaries, bringing the script into newspaper form.

(Side note: From 1836 to 1873 Assamese was briefly suppressed as an official language in favor of Bengali – the so-called "Dark Age" – but this mainly affected language policy, not the development of the script itself.)

Standardization (late 19th – early 20th century)

By the late 1800s printing technology and education were standardizing the script. The old variants merged under print conventions. In particular, the Bengali–Assamese typeface (Eastern Nagari) came to be shared. As one source notes, Atmaram Sarma's Serampore font and later lithography "converged to the present standard" Assamese script by the 19th c.. Thus by the early 20th century modern Assamese printing used an alphabet almost identical to Bengali's, with only a couple distinctive letters (such as a separate 'ৰ/ro' and 'ৱ/vo'). Educational texts, government publications and the Assam Sahitya Sabha (formed 1917) further cemented this standard form.

In summary, the Assamese writing system grew from Brahmi via Gupta/Kamarupi (5th c. onwards) into medieval Assamese forms (notably through the Kamrupi script), split in late medieval times into regional hands (Bamuniya, Kaitheli, Garhgaya), flourished in manuscripts under Ahom and Vaishnavite patronage, and was ultimately unified by colonial-era printing into the modern alphabet used today.

Sources: Historical epigraphy and script studies confirm this sequence, as do accounts of Assamese manuscripts and printing history. Each stage above is documented in the cited works.

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Historical Development of Assamese Literary and Journalistic Style

Early Assamese (13th–17th century)

The earliest Assamese texts (13th–14th c.) were heavily Sanskritized in vocabulary and style. For example, *Hema Saraswati*'s 13th-century *Prahlada Charitra* is written "in a heavily Sanskritized style". Literary works of this period were chiefly translations of Sanskrit epics and Puranas. Madhava Kandali (14th c.) translated the *Ramayana* into Assamese verse, embedding many Sanskrit terms. The Bhakti movement then produced devotional poetry: *Srimanta Shankaradeva* (1449–1568) composed lyrical *Kirtan-ghosa* (devotional ballads) and *Borgeets*, and his disciple *Madhavadeva* (1489–1596) continued this tradition. These high-culture texts use formal diction and elaborate imagery; their meters and devices (e.g. parallelism, classical meters) follow Sanskritic norms. The overall tone is devotional and lyrical. (No print journalism existed yet.)

- Key works/authors: *Prahlada Charitra* (Hema Saraswati, 13th c.; Sanskritized epic); *Ramayana* (Madhava Kandali, 14th c., verse translation of Sanskrit *Ramayana*); *Kirtan Ghosa*, *Borgeets* (Shankaradeva, 15th–16th c.).
- Vocabulary influences: Predominantly Sanskrit-derived (epic/Puranic). Local (Prakrit) elements and some Tai/Ahom substratum may appear, but literature remains oriented to Sanskritic lexicon.
- Stylistic features: Formal, elaborate style; use of Sanskritized grammar and poetic meters. Literary devices include allegory and mythological allusion. Devotional tone is common.

Middle Assamese (17th–19th century)

By the 17th–19th centuries, Assamese literary style diversified. The Buranjis (Ahom royal chronicles) were written in Assamese prose for the first time. These 17th–18th c. chronicles break from earlier religious style and use "essentially modern" Assamese (minus minor archaic grammar). Meanwhile, devotional and narrative literature continued (often as Satra literature under Vaishnava patronage). This period also saw growing Persian/Arabic influence: under Mughal and Ahom courts, many administrative terms (and later, loanwords) entered Assamese. Sanskrit remained important in literary works (many translations of Purana, Ramayana variants persisted). Style shifted toward more straightforward prose in chronicles, but high-culture poetry still used classical diction.

- Key works/authors: Ahom-era *Buranjis* (17th–18th c.; court chronicles in Assamese prose). Later 18th–early 19th c. writers continued Vaishnava traditions (e.g. Raghunath Mahanta's *Katha-Ramayana* and *Adbhut Ramayana* in verse – based on Sanskrit epic, though local details were added).
- Vocabulary influences: Continued heavy Sanskrit borrowings in literature; increasing Persian/Arabic terms in administrative writing (Buranjis record many such words). Bengali influence grows in the late 18th c. (cultural contact).

- Stylistic features: Court chronicles adopt a factual, modern prose style (shorter clauses). Religious literature still uses ornate language and poetic devices (e.g. songs, couplets).

Modern Assamese (19th century–present)

The 19th century brought printing, Western education, and vigorous standardization. The American Baptist missionaries printed the Assamese Bible (1813) and launched *Orunodoi* (1846), the first Assamese periodical. Nathan Brown published the first Assamese grammar (1848) and Miles Bronson an Assamese–English dictionary (1867). *Hemkosh* (1873) by Hemchandra Barua introduced a Sanskritized orthography (fixed spellings based on Sanskrit forms). From the late 19th c. onward, English and Bengali influences grew through education and media; many English technical terms and neologisms entered Assamese (often via translation or adaptation).

Literature also modernized: the *Jonaki* magazine (1889) launched the short story and a new literary style. Lakshminath Bezbaroa wrote realistic short stories and plays, and Rajanikanta Bordoloi published the first Assamese novel (*Mirijiyori*, 1894). 20th-century writers (Jyoti Prasad Agarwala, Hiren Bhattacharya, Mamoni Raisom Goswami, etc.) experimented with diverse genres and incorporated contemporary colloquial usage in fiction and poetry. Journalistic writing also matured: newspapers and journals became platforms for social reform and nationalism, influencing style toward a standard written Assamese.

- Key works/authors: Literary; *Jonaki* writers: Lakshminath Bezbaroa (short stories, modern drama); Rajanikanta Bordoloi (first novel *Mirijiyori*). Later novelists and poets: Jyoti Prasad Agarwala, Birinchi Kumar Barua, Mamoni Raisom Goswami, etc.. Scholarly: Hemchandra Barua (*Hemkosh*, grammar).
- Vocabulary influences: *English* (colonial administration, education) introduced many loanwords; *Bengali* influenced administrative and literary vocab in late 19th c.; *Hindi* contributions in film and national discourse. The language consciously re-incorporated Sanskrit elements (via Hemkosh/grammar) for learned writing. Purist efforts (20th c.) sometimes replaced English terms with Assamese equivalents, as noted in newspapers like *Tarun Asom* (translating English loanwords into native terms).
- Stylistic features: Adoption of modern prose and verse forms. Standard spelling (Sanskritized script) was solidified, and Eastern dialect became the prestige norm after 1873. Late 19th–20th c. literature shows Western influences: narrative techniques, realism, and journalism-like objectivity (e.g. Bezbaroa’s stories). Bhakti elements faded in new fiction/poetry, replaced by secular, romantic, and social themes.

Period	Vocabulary Sources	Stylistic Features/Devices	Notable Works & Authors
Early Assamese 13th–17th c.	*Sanskritic:* many Prakrit/Sanskrit loanwords from epics and puranas. Local substrate (Bodo-Kachari, Ahom) very minor in high literature.	Highly Sanskritized diction; classical meters in poetry; devotional and allegorical tone. Poetic devices (parallelism, metaphor) from Sanskrit models.	*Prahlada Charitra* (Hema Saraswati, 13th c.; Sanskritized epic); *Ramayana* (Madhava Kandali, 14th c.); Bhakti texts: *Kirtan Ghosa*, *Borgeets* (Shankaradeva, 15th–16th c.).
Middle Assamese	Continued Sanskritic literary terms; growing	Transition to prose chronicles (Buranjis) with	17th–18th c. *Buranji* chronicles (Ahom court

17th–19th c.	*Perso-Arabic* influence (especially in administration); some *Bengali* influence begins.	modern syntax; Vaishnava literature still poetic but simpler. Overall style gradually shifts from ornate to more direct.	records); later classical works (Raghunath Mahanta's *Katha Ramayana*, etc.). Satras literary output (poems, plays) continued.
Modern Assamese 19th c.–present	Heavy *English* (science, admin) and *Bengali* (education) borrowings; conscious re-introduction of Sanskritized forms (Hemkosh orthography); Hindi and other influences in media.	Printing standardizes spelling (Sanskritic orthography); new genres (novel, short story). Literary style ranges from romantic to realist. Journalism develops a concise, factual prose style (see below).	19th c. missionaries: Assamese Bible, *Arunodoi* (periodical); *Jonaki* (1889) writers (Bezbaroa – short stories; Bordoloi – *Mirijiyori*); 20th c. novelists/poets (Jyoti Prasad Agarwala, Mamoni Raisom Goswami, etc.). Dictionaries and grammars: Hemkosh (H. Barua, 1873).

Literary vs. Journalistic Style

Starting in the mid-19th century, journalistic Assamese (in newspapers and periodicals) developed features distinct from high-literary style. Early newspapers deliberately used a more colloquial, spoken-tone Assamese. For example, *Orunodoi* (1846) "used a simple approach" and "language based on 'spoken form'" with unmodified spellings. In contrast, literary/high-culture Assamese continued to favor Sanskritized vocabulary and formal constructions.

By the late 19th–20th centuries, journalism evolved toward a standard written Assamese with shorter sentences and domestic terms. Later papers like *Tarun Asom* even translated English terms into Assamese domestic expressions. The table below summarizes key differences:

Feature	Literary / High-Culture Style	Journalistic / Press Style
Vocabulary	Formal, Sanskritic lexicon (e.g. Purāṇic names, classical terms); learned borrowings.	Colloquial and evolving; early papers used local spoken forms; later incorporation of English loans or translated equivalents.
Tone	Devotional or poetic (e.g. allegorical, ornate); e.g. Bhakti songs, epics.	Informative, direct, occasionally satirical (e.g. *Axam Bandhu* critiqued social issues).
Sentence Style	Complex and lengthy (classical meters, compound sentences).	Generally shorter, straightforward sentences. *Orunodoi* ran English-like syntax, while later papers adopted compact, modern phrasing.
Orthography	Older manuscripts had variable spelling; *Hemkosh* later imposed Sanskrit-based spellings.	Early press (e.g. *Orunodoi*) used phonetic or unstandardized spellings; later press followed standardized orthography (post-Hemkosh).

In summary, literature and high-culture writing prioritized classical diction, elaborate form, and poetic elegance, while journalism gradually adopted everyday language, concise prose, and evolving vocabulary (especially under English influence

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Development of Scientific Vocabulary in the Assamese Language

Historical Development of Assamese Scientific Vocabulary

Assamese (অসমীয়া) is written in the Bengali–Assamese script. In the 19th century, missionaries and local scholars began formalizing technical terminology in Assamese. For example, the first Assamese magazine *Orunodoi* (1846–1883) regularly included science and current-affairs articles, introducing Western concepts to readers. Missionary lexicographers like S.R. Ward (1864) and Lewis Bronson (1867) compiled early Anglo–Assamese vocabularies. Bronson noted that many "scientific terms are mostly of Sanskrit origin" even as Assamese and Bengali borrow differently from Sanskrit. He also lamented that using Bengali as Assam's official medium "greatly retarded the cause of education among the masses," arguing that Assamese – the language of the people – should convey scientific instruction.

Figure: Assamese alphabet (vowels and consonants). This script is used for both everyday speech and formal terminology. Early Assamese publications (e.g. *Orunodoi*) consciously built new Assamese terms rather than borrowing too freely. For instance, *Orunodoi* "innovated the then Assamese dialect instead of borrowing words from other languages". Missionary grammars and dictionaries (Ward 1864, Bronson 1867, Hemchandra Barua's works 1870s–1900s) standardized spelling and promoted Sanskritic vocabulary for abstract concepts.

20th-Century Scholarly and Institutional Efforts

After colonial rule, Assamese intellectuals and institutions accelerated terminology development. The Asam Sahitya Sabha (est. 1917) and university scholars began compiling glossaries and translating modern texts. In popular science outreach, the Assam Science Society (formerly Gauhati Science Society, est. 1953) published the bi-monthly magazine *Bigyan Jeuti* in Assamese (since 1961) and produced educational books including a multi-volume Explanatory Science Dictionary and Glossary of Scientific Terms in Assamese. These aimed to expose Assamese school-children and general readers to scientific progress in their mother tongue.

Scholars like physicist Hiralal Duorah (former Gauhati Univ. VC) and others emphasized coining and borrowing technical terms. In 2013, the Asomiya Jatiya Prakash group launched a project to publish an Assamese Science & Technology dictionary. They noted "new trends in science and technology require a whole new vocabulary in Assamese" and advocated creating

native terminology (borrowing from English when necessary). Duorah, Pathak and others warned that without updating vocabulary, Assamese education would lag behind. Their initiative built on the earlier Asomiya Jatiya Abhidhan (national dictionary) project: the first four volumes (2012) covered common usage, and a "Bigyan Prajukti Khanda" (Science & Tech volume) of 40–50,000 terms is underwayassamesenationaldictionary.weebly.com. (Allied efforts include the Government's Commission for Scientific & Technical Terminology, though Assam lacks a comprehensive official glossary.)

Modern educators also note the persistent need for mother-tongue resources. For example, a 2020 *Anglo-Assamese Dictionary of Mathematics* preface states: "We strongly felt the need for a mathematics dictionary in our mother language Assamese…though medium was English, understanding was much easier in Assamese." The compilers lamented that an *Anglo-Assamese* math dictionary of 1,500 terms was long overdue. These contemporary efforts show continuing interest in enriching Assamese scientific lexicon for education and scholarship.

Influences of Sanskrit, Bengali, and English

Throughout these developments, Assamese technical vocabulary drew from multiple sources. Sanskrit has been foundational: classical and medieval Assamese took many terms from Sanskrit (via Kamarupi Prakrit), and scholars deliberately coined Sanskrit-based compounds for new concepts. For example, ancient Buddhist texts in Assamese used Sanskrit terms for philosophy and science. Even in the colonial era, Bronson observed that both Assamese and Bengali "borrow largely from the Sanskrit" for religious and scientific words. Thus many formal Assamese terms (e.g. ଗଣିତ gonit "mathematics", ପୃଥିବୀ prithibi "earth/planet", etc.) reflect Sanskrit heritage.

Bengali influence was also significant. During 1836–1873 the British had imposed Bengali as Assam's official language, which suppressed Assamese education. This meant many early textbooks and print materials used Bengali terms or grammar. As Assamese was reinstated, writers often translated or adapted Bengali terms. Nonetheless, authors like Bronson insisted Assamese must develop independently (he compared forcing Assamese to be identical to Bengali as akin to calling French and Italian one language). In practice, some scientific terms entered Assamese via Bengali, but academic style favors pure or Sanskritised forms (e.g. Assamese অক্ষয় *(okkhoy)* "inexhaustible" is from Sanskrit, whereas colloquial অফুৰন্ত *(aphurônnô)* is of local origin).

English became an increasing source in the 20th–21st centuries. Universities and schools taught science in English, so new concepts often entered via translation or direct borrowing. Modern Assamese often admits English terms (pronounced in Assamese script) when no native equivalent exists. For instance, technical words like ঠিক *(bulk)* or acronyms (2G, 3G) have been transliterated. However, organizations encourage Assamese coinages: e.g. Assamese সৌৰশক্তি *(sour-shakti)* "solar energy" uses Sanskrit roots, whereas a colloquial speaker might just say "solar energy" in English or use a descriptive phrase. Duorah and colleagues explicitly advocated accepting useful borrowings but overall enriching Assamese vocabulary.

Academic Assamese vs. Colloquial Assamese

Formal, academic Assamese tends to use more standardized grammar and often longer, Sanskrit-based words, unlike casual spoken Assamese. For example, an everyday speaker says

মগজ (*mogoz*, “brain”) or গৰম (*gom*, “hot/heat”), whereas a scientific text might use মস্তিষ্ক (*mostiṣk*, from Sanskrit) and উষ্ণতা (*ushṇatā*, “temperature”) for precision. Scholars also note that written Assamese uses the subject–object–verb order consistently, and maintains inflections on verbs (tense, aspect) that colloquial speech might drop for brevity. Translation manuals (e.g. NCERT glossaries) often list both forms. For example, Assamese পঢ়া (*pôṛha*, “study/read”) is the everyday verb, while অধ্যয়ন (*odhyoẏon*, “study/learning”) is used in academic contexts.

The table below illustrates some term differences (colloquial vs academic):

English Term	Colloquial Assamese (Everyday)	Formal/Academic Assamese (Sanskrit-derived)
Brain	মগজ (*mogoz*)	মস্তিষ্ক (*mostiṣk*)
Tree/Plant	গছ (*gôx*)	উদ্ভিদ (*udbhid*)
Water	পানী (*pani*)	জল (*jal*)
Heat/Hot	গৰম (*gorom*)	উষ্ণতা (*uṣṇatā*)
Study (to learn)	পঢ়া (*pôṛha*)	অধ্যয়ন (*odhyôẏôn*)

These shifts show how academic Assamese often substitutes Sanskritic vocabulary or more precise terms in formal writing and textbooks. In daily speech, simpler or locally-derived words persist. Experts stress that developing a consistent standardized terminology is crucial for higher education: as one scholar group notes, without standardized terms “usage can vary” among teachers and students, hindering clear communication.

Education Policy, Textbooks, and Standardization Efforts

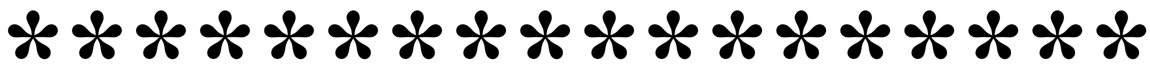
Government education policy has played a key role in shaping scientific Assamese. In Assam’s schools and colleges, science was long taught in English, but recent policies emphasize multilingual instruction. For instance, following protests, the Assam government (2024) issued *bilingual textbooks* for Classes VI–VII in science and math: each page presents Assamese on one side and English on the other. The aim is to improve conceptual understanding in the mother tongue while building English vocabulary for higher studies. This reflects the National Education Policy’s push for regional languages in early education.

Language bodies have also undertaken formal standardization. The Asomiya Jatiya Abhidhan (national dictionary) project is one such effort: its latest *Byabaharik Abhidhan* (handy dictionary) supplements the four-volume set, and a science-technology volume is being finalized (40–50k entries)assamesenationaldictionary.weebly.com. State universities and translator networks create glossaries for subjects (e.g. economics, physics) through workshops. Despite these efforts, observers note that Assamese still “lacks standardized terminology” and call for more systematic vocabulary-building. As Assam continues to expand science education in Assamese, key needs include official glossaries, consistent textbooks (with translation committees), and training of teachers in the academic register.

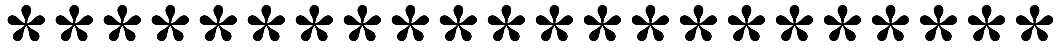
In summary, Assamese scientific vocabulary evolved from early Sanskritic borrowings, through missionary-influenced translations, to modern coining efforts. Over time it has been shaped by the interplay of indigenous linguistic tradition and external influences. Institutional

initiatives – from 19th-century print culture to today's dictionary projects and bilingual education policies – continually expand and refine the language of science in Assamese. This has created an increasingly logical, formal register for academic discourse, distinct from colloquial speech, ensuring that Assamese can articulate modern scientific and philosophical concepts fully.

Sources: Historical grammar and dictionary prefaces; 19th–21st century publications on Assamese education and lexicography.



Maithili people



Historical Development of the Maithili Language Until the Early 1900s

Historical Overview of the Maithili Language

Linguistic Evolution

Maithili belongs to the Eastern Indo-Aryan (Bihari) branch of the Indo-European family. Its ancestral lineage runs from Magadhi Prakrit through later Apabhraṃśa stages (the "Magadhan" Apabhraṃśa, also called Avahatta) into early modern Maithili. In fact, *Abahatta* (Apabhramsha Avahatta) was the transitional stage in eastern languages (6th–14th c.), and early Maithili forms are found in Abahatta texts. For example, the 15th-century Maithili poet Vidyapati wrote some works (like *Kirtilata*) in Abahatta. Linguistically, Maithili, like other New Indo-Aryan tongues, is largely analytic with SOV word order, and shows typical Eastern Indic innovations (e.g. loss of Sanskrit grammatical gender, extensive use of short vowels, nasalization). It retains pronominal and case distinctions (nominative, oblique, genitive) and a rich set of verb inflections, but also developed regional features (such as a distinct two-tier honorific system not found in neighboring Hindi).

By the 19th century, scholars began to recognize Maithili as more than just a Hindi dialect. In the 1870s British linguist E. Beames first considered it a form of Bengali, and R.C. Hoernle initially grouped it with "Eastern Hindi". However, comparative study (notably by George A. Grierson) showed Maithili had closer affinities with Gaudi (Bengali/Odia) languages. In 1881 Grierson published the first Maithili grammar, firmly classifying it under the Bihari languages (a subgroup of Eastern Indo-Aryan). Later, Indian linguist S. K. Chatterji emphasized its descent from Magadhi Prakrit, reinforcing Maithili's distinct identity. In short, by the late 1800s Maithili was acknowledged by scholars as a full-fledged language of the Magadhan Prakrit lineage, not a mere dialect of Hindi.

Script Development

Maithili was traditionally written in its own *Tirhuta* (Mithilakshar) script, an eastern Nagari derivative closely related to Bengali–Assamese scripts. Inscriptions in Maithili script date back to the 7th–10th centuries (e.g. the Mandar Hill and Sahodara inscriptions), and by the medieval period Tirhuta was used in court and religious manuscripts across Mithila (from Champaran to Deoghar). Another script, *Kaithi*, was also employed for Maithili, especially for record-keeping

and folk poetry (Kaithi was widely used in eastern Uttar Pradesh and Bihar). These scripts persisted well into the 19th century; one British account of 1771 already lists "Tirhutiya" as a separate language/script.

However, beginning in the late 19th century and accelerating in the early 20th, Maithili gradually shifted to Devanagari. Printing technology and education used more common scripts, and by the 1900s Devanagari had largely supplanted Tirhuta in everyday use. Today Maithili is *almost exclusively* printed in Devanagari, with Tirhuta surviving only in limited ritual or cultural contexts (pundit's letters, ceremonial literature). (Unicode encoding for Tirhuta was only finalized in 2014, reflecting its decline.) Thus, over centuries Maithili writing evolved from ancient Brahmi-derived alphabets (via Gupta/Siddhamian lineages) to the standardized Devanagari used today.

Literary Tradition

Maithili's literature has roots in both folk and early written traditions. Proto-Maithili (sometimes called *Protomaiṭhili*) appears in the 8th–13th-century Charyapadas (Buddhist mystical verses). Scholars have shown that the Sandhya Bhasa of some Siddha poets (e.g. Saraha, Kanhapa) from the Mithila region contain early Maithili forms. Alongside such songs, a rich oral culture of folk-ballads and vernacular poetry flourished among village bards throughout the region.

The first major written works in Maithili date to the early 1300s. Under the Karnat (Simraungarh) dynasty's King Harisimhadeva (r. 1227–1324), Brahmin scholar Jyotirishwar Thakur composed Varṇa Ratnākara (c.1324) in Maithili prose. This is celebrated as the earliest known prose in any modern Indian language. (Jyotirishwar wrote it in the indigenous Mithilakshar script.) Thus by the 14th century Maithili was already a medium for biography, geography and court literature.

The golden age of Maithili poetry came with Vidyapati (c.1352–1448) of Darbhanga. Vidyapati, patronized by King Shiva Simha Singh and Queen Lakṣmīdevī, wrote prolifically in Maithili – over a thousand songs and poems on Rādhā–Krishna love, Śiva–Pārvatī devotion, and even secular themes like migrant laborers' plight. According to *Encyclopædia Britannica*, Vidyapati was "the first writer to use Maithili as a literary language". His *Padāvalī* love-songs became immensely popular: young Chaitanya Mahaprabhu recognized their divine passion and later made them part of Gaudiya Vaishnavism. Even Rabindranath Tagore was influenced – he wrote Maithili-style poems under the pseudonym "Bhanusimha," consciously imitating Vidyapati's lyrical *padāvalī*. Vidyapati's fame spread beyond Mithila: Assamese, Bengali and Odia poets adopted his themes, and artificial literary dialects (Brajabuli in Bengal, Brajavali in Assam) were modeled on his Maithili style.

After Vidyapati, Maithili literary activity shifted largely to devotional and court genres. Vaishnava saints like Govindadās (Govinda Dās) composed Maithili hymns in the 16th–17th centuries. Maithili dramas were also written: a 17th-c. poet Lochana wrote *Rāgataranginī* (a treatise on ragas and talas). In the mid-17th century, Maithili opera-dramas (*māṭh*) such as *Pārijātaharaṇa* (the "Stealing of the Parijat Tree") by Mapāti Upādhyāya were popular; they were performed by caste-based *kīrtaniya* troupes for village audiences. Beyond India, Maithili thrived under Nepal's Malla kings (16th–17th c.), who patronized at least 70 Maithili plays. King Bhupatindra Malla of Patan (r. 1700–1749) himself composed 26 Maithili dramas. This

shows Maithili's reach into Nepali courts (especially the Maithili-speaking Mithila areas of Nepal) and its role in devotional culture.

In sum, Maithili literature from the 14th to 19th centuries includes key works such as *Varṇa Ratnākara* (Jyotirishwar, 1324), Vidyapati's *Padāvalī* (14th c.), numerous devotional songs by śākta and Vaiṣṇava poets (16th–17th c.), and treatises on music and drama (Lochana's *Rāgatarangiṇī*). These reflect both local themes (Mithila's gods, myths and customs) and the broader Bhakti currents of South Asia.

Cultural and Religious Influence

Maithili was deeply shaped by regional religion and identity. The very name comes from ancient Mithilā, the legendary kingdom of King Janaka (Sītā's father). Maithili is also called *Maithilī* after Sītā (Maithili is Sītā's name). This connection to the Ramayana mythos gave the language a sacred aura among Maithils. The region's chiefly religion was Śakti/Siva worship (Janaka's dynasty were Saivites) and later intense Vaiṣṇava bhakti. Vidyapati's poetry exemplifies this blend: he was trained as a Śaiva (he wrote Sanskrit Siva-stotras) but his famous songs are Vaishṇava kāvya (Radha–Krishna love). These compositions fueled the Bhakti movement: Chaitanya's vision of divine love was kindled by Vidyapati's lyrics. Many later bhakti poets from Bengal and Assam consciously drew on Maithili themes and forms (e.g. Sankardev's nāts in Assam).

Court patronage also linked Maithili to cultural identity. The medieval Karnat and Oinīwar dynasties of Mithila (ruled from Simraungadh and Darbhanga) fostered Maithili literature as a symbol of Mithila's heritage. In Nepal, Maithili became part of royal rituals. The Malla rulers' use of Maithili dramas and hymns helped define Mithila's identity even beyond political borders. Within Indian Mithila, Brahmin and Kayastha communities (Maithils) took pride in their language and scripts. By contrast, under Mughal rule Maithili was a vernacular of common folk, while Persian/Urdu dominated courts. Local elites like Pandit Mahesh Thakur of the Khandwala family (installed by the Mughals) eventually revived dance, music and drama in the Maithili tongue, tying it to cultural revival.

Thus Maithili has been a marker of Mithila's regional identity. Its literature is suffused with local legends (e.g. Sita-Lakshmana tales, Janaka's court) and festivals (e.g. Vivaha Panchami, Saubhagya Vivaha). The language's status was often bound up with religion: for centuries, temple priests and scholastic Brahmins used Sanskrit for formal learning, while Maithili lived in folk songs, devotional poetry and courtly love. Only in the 20th century did Maithili begin to enter schools and print (see below).

Sociopolitical Context

Politically, Maithili developed under several regimes. In the 14th century the Karnat ruler Harisimhadeva (1227–1324) formally patronized Maithili poets. In 1324 the Delhi Sultan Ghiyāsuddin Tughluq invaded Mithila and installed a Maithil Brahmin (Kameshwar Jha) to govern, beginning the Oinīwar dynasty (rulers of Darbhanga). This turmoil briefly disrupted literature (there was little new writing until Vidyapati). Nevertheless, for the next 300 years the Oinīwar (later Darbhanga) rajas were Maithil patrons. King Shiva Simha (reigned c.1370–1410) and Queen Lakhimadevi famously supported Vidyapati, continuing a legacy of court poetry. In Nepal, the Malla kings (16th–17th c.) embraced Maithili in court life, using it for plays and manuscripts.

Under Mughal suzerainty (16th–18th c.), Maithili saw mixed fortune. Some local zamindars (e.g. Mahesh Thakur of the Khandwala clan) were made feudal chiefs of Mithila under the Empire; during their tenure the arts (dance, drama, music) in Maithili enjoyed a resurgence. Yet by and large Persian remained the official language, and Maithili stayed largely regional. In the 18th century, Darbhanga Raj grew powerful (it became a major zamindari), but often neglected Maithili: religious and Sanskritic traditions held sway more than vernacular literature.

Colonial rule brought major changes. After Maharaja Maheshvar Singh of Darbhanga died in 1860, the British took over the estate as regent. For nearly four decades (1860–1898) Darbhanga was administered by the Crown; during this regency Maithili patronage waned further. When the estate was returned (to Maharaja Lakshmishvar Singh in 1898), the new court took a "lackadaisical" approach to Maithili. No official support was given, and Urdu/Hindi schools predominated. Only individual scholars (e.g. Parameshvar Mishra, Chanda Jha) began to revive interest in Maithili in the late 19th century. Thus by 1900, despite its rich heritage, Maithili lacked formal recognition: it was not a court or administrative language, and press publications in Maithili were just emerging.

Status by the Early 1900s

By the turn of the 20th century, Maithili was firmly the mother tongue of millions in Bihar and the Nepal Terai, but it had little institutional presence. Education in Mithila was conducted in Urdu, Bengali or English; Maithili appeared only informally in village schools. However, a modern Maithili literary movement had begun. In 1905 the monthly journal *Maithil Hiṭa Sạdhana* was launched, followed by *Mithilāmaula* (Mithila Modi) in 1906 and *Mithilā Mihir* in 1908. These publications fostered essays, poems and news in Maithili and nurtured a cadre of writers. In 1910 the Maithil Mahasabha was founded as the first public organization for Maithili's development. It campaigned for official recognition of Maithili (as a "regional language") and promoted standardization of grammar and orthography. (Notably, the Society initially restricted membership to Maithil Brahmins and Karna Kayasthas, reflecting social tensions in the language's elitist patronage.) In 1917 Calcutta University formally recognized Maithili, a rare academic endorsement at the time.

Thus, by the 1900s Maithili had a burgeoning print culture and a nascent identity movement, even though formal support was minimal. In popular life Maithili thrived: oral storytelling, folk songs, and devotional recitations were widespread in village festivals and fairs. But higher education and administration did not use Maithili. Its status was roughly that of a literate vernacular and symbol of Mithila's heritage. The early-20th-century push (journals, societies, grammars) laid the groundwork for Maithili's later codification (e.g. Sahitya-Akademi recognition in 1965 and eventual inclusion in India's Constitution), but those developments lay beyond the period requested.

Sources: This analysis draws on historical surveys and linguistic studies of Maithili. Key references include British-era scholarship and modern encyclopedias: Maithili's Indo-Aryan lineage and Apabhraṃśa origins; its scripts (Tirhuta, Kaithi, later Devanagari); classical literature (Jyotirishwar's *Varṇa Ratnākara*, Vidyapati's poetry); cultural context (Vaishnavite and Śaivite influences); and sociopolitical history (Karnat/Oiniwar patronage, Mughal-era developments, British regency, and early 20th-century publications). These sources provide dates, figures and excerpts illustrating the rich historical trajectory of the Maithili language.

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Historical Development of the Maithili Writing System

Historical Origins and Early Attestations

The Tirhuta (Mithilakshar) script – Maithili's traditional script – descends from the Brahmi family via the eastern "Gaudi" (Proto-Bengali) lineage. By the 7th–10th centuries CE, the eastern Brahmi variants coalesced into distinct alphabets in Bihar and Bengal. Early inscriptions attest this script from the 7th century (e.g. the Adityasena Mandar Hill stone inscriptions, now in Deoghar). By the 10th century it had assumed essentially its mature form, found again in 950 CE on the Sahodara temple inscriptions. Over the next centuries Tirhuta was used throughout Mithila.

The earliest Maithili-language writings appear only in the late medieval period. Vernacular Maithili prose is first attested by Jyotirishwar's *Varṇa Ratnākara* (1324 CE) – the oldest surviving Maithili work. The famed poet Vidyāpati (c.1350–1448) composed Maithili lyrics (mātrāvṛtta songs) in this script. From the 13th century onward a few inscriptions (on coins and temples) and numerous palm-leaf manuscripts used Tirhuta to record Maithili content. Genealogical records (paṇjīs) of Maithil Brahmin and Kayastha families survive from the 14th century, indicating continuous script use for local language and cultural documents. (Note: many inscriptions from earlier periods in Tirhuta are Sanskrit or Prakrit, but show the script's evolution.)

Tirhuta (Mithilakshar) Script: Development and Use

Tirhuta (sometimes called Mithilākṣar) is a left-to-right abugida alphabet, closely related to the Bengali–Assamese scripts. It retained special characters (vowels, consonants, diacritics) to render Maithili and Sanskrit alike. Because Maithili literature and liturgical Sanskrit coexisted in Mithila, Tirhuta was used for both: Maithili poets wrote their vernacular works in it, and Brahmin scholars wrote Sanskrit treatises in the same letters. In effect, Tirhuta served as the standard regional script – appearing on temple inscriptions and royal coins (e.g. 15th-century Simraon and Oinwarā dynasty finds) – and was the script taught in traditional schools.

Over time, Tirhuta underwent minor orthographic changes. Early forms (7th–12th c.) are nearly indistinguishable from Old Bengali/Assamese writing. By the 14th century it had fully diverged, with a distinct style of glyphs (note even the sacred Ganesha symbol *añjī* was used before Tirhuta texts). Traditional Maithili orthography marked all Sanskritic vowels and consonant clusters; later prose and popular writings simplified some markers. For example, in classical Tirhuta the inherent *a* (schwa) at word-end was often written even when unpronounced – an older practice noted by 19th-century grammarians. (In modern practice the final schwa is normally not sounded, though older manuscripts still preserve the written sign.) By the early 20th century, as Devanagari influence grew, Tirhuta spelling was streamlined and the full character repertoire was slightly reduced.

Throughout its history, Tirhuta remained tied to Maithili identity. Manuscripts from the 13th–19th centuries (religious texts, poetry, and paṇjī charts) all use Tirhuta. Even as late as the 19th century, village schools (tols) taught the alphabet traditionally. Only in the very late 19th/early 20th century did printed Devanagari begin to supplant it. (Metal Tirhuta typefaces were developed in Calcutta in the 1920s, marking the first printing of Maithili books in this script.)

Kaithi and Other Scripts

Alongside Tirhuta, Kaithi was a major script for writing Maithili. Kaithi (from *Kayasthī*) is a cursive Brahmi-derived script originally used by the Kayastha scribes of northern India for records and correspondence. It spread widely under the Mughals and early British, and adapted to many languages in eastern UP–Bihar. In fact, Kaithi was formally the official court script of Bihar into the 19th century. Maithili was one of the languages written in Kaithi: it was used for everyday letters, legal documents, and administrative papers of the Maithil communities.

Within Kaithi there emerged a distinct "Tirhuti" (tri-huṭī) variant used in Mithila. This local style was considered especially elegant. Thus in Mithila one often finds Maithili texts in either Tirhuta or Kaithi lettering. Traditionally, Brahmin scholars and caste-*Paṇjikars* (genealogists) preferred Tirhuta, while Kayastha scribes and local officials wrote Maithili in Kaithi. The two scripts coexisted: e.g. a 19th-century matrimonial record might have parallel columns of Tirhuta and Kaithi text. As late as the 1850s, official statistics show far more Kaithi primers in Bihar schools than Devanagari, indicating its popularity.

However, social forces soon shifted literacy toward Devanagari. British and nationalist leaders (especially in the Hindi movement) promoted Devanagari for all north-Indian languages. By the early 20th century Maithili publications increasingly appeared in Devanagari, and many Maithils came to perceive Kaithi (and Tirhuta) as outdated. By independence, Tirhuta and Kaithi had largely disappeared from official use, surviving only in limited contexts (genealogies, ritual manuscripts).

Orthographic Conventions and Changes

Maithili orthography (in Tirhuta or Kaithi) originally incorporated many features of Sanskritic Brahmic writing, but with some local conventions. For instance, Maithili traditionally retained the use of explicit vowel symbols (matras) for short vowels that some neighboring scripts treated differently. Conversely, one well-known feature is Maithili's treatment of the inherent vowel *a*: when final in a word this schwa is not pronounced, even though classical orthography often still writes it. In older Tirhuta texts scholars even used special marks (like the sign ◌◌ or visarga) to signal an unpronounced *a*, though these fell out of use in modern times.

Over the late medieval and colonial periods, orthography gradually simplified. Some redundant letters (such as separate symbols for vocalic *r̥̄*, now rare) became vestigial. Nineteenth-century scholars like Grierson noted these conventions: for example, non-final *a* tended to weaken rather than drop in spoken Maithili, but eventually even that distinction blurred. Overall, by the turn of the 20th century Maithili spelling conventions had largely stabilized in writing, just as the language itself was being codified by scholars.

Sociolinguistic Context and Script Usage

Script choice in Mithila was historically intertwined with caste and class. Tirhuta was identified with the Brahmin and scholar caste: Maithil Brahmins used it for Sanskrit scholarship, temple record-keeping and keeping the family paṇjī (genealogy). Kayasthas and other scribal communities were adept in both Tirhuta and Kaithi. In practice, many ordinary Maithili speakers learned whichever script was used by their local institution (temple school, revenue office, or family), but broadly speaking Brahmanical institutions favored Tirhuta while village clerks favored Kaithi.

In the 19th century new layers entered the picture. Western education and the Hindi-Urdu controversy led many upper-caste Maithils (Brahmins and Kayasthas) to align with the Hindi-Devanagari movement. They sometimes portrayed Maithili as merely a *dialect* of Hindi and began using Devanagari for Maithili writing. Ironically, this shift effectively marginalized the traditional script: Maithili print culture (emerging circa 1900) was largely in Devanagari. As one modern study notes, only *after* the advent of printing did Maithili become strongly associated with the upper castes; earlier, Maithili had been more of a folk language spanning castes.

Religion played a secondary role: most Maithili-language writing was Hindu in context (Sanskrit scriptures, devotional songs, genealogies), so Tirhuta scripts carried Hindu scholarly prestige. However, Kaithi's neutrality (used by both Hindus and Muslims in mixed regions) made it accessible. Muslims and other non-Brahmin classes tended to use Kaithi or later Devanagari rather than Tirhuta, which remained symbolically linked to the Hindu scriptural tradition. Thus by the late 19th century, Maithili was a language spoken by peasants and elites alike, but the *script* had become partly stratified: Tirhuta for traditional literati, Kaithi (and eventually Devanagari) for administration and broader literacy.

Maithili and Neighboring Languages/Scripts

Maithili shares close affinities with other eastern Indo-Aryan tongues. Linguistically it evolved from the Magadhi Prakrit/Apaḇhṛṃśa continuum and retains many Sanskrit features; its early written works are often heavily Sanskritized. In script terms, Maithili's Tirhuta is nearly identical to early Bengali–Assamese scripts. As one historian remarks, old Maithili and Bengali alphabets had "hardly any difference" – indeed, some scholars once called Tirhuta a variant of Gaudiya (proto-Bengali) script. Throughout the medieval era, the Maithila region was culturally in contact with Bengal and Nepal, so scribes and scholars often used similar letter-forms.

Maithili also borrowed from Sanskrit alongside its neighbors; indeed Tirhuta was the traditional script for Sanskrit texts in Mithila. (For example, local commentaries and philosophical works by 16th–18th century Maithil pandits appear in Tirhuta.) Unlike Bengali, Maithili did not develop a distinct script of its own (other than calling it by names like Vaidehi or Tirhuta). Its writing system fit within the same Eastern Brahmi family as Odia or Newari.

In the colonial and early modern period, political boundaries shifted Maithili's script relationships. Bihar was administratively linked with the Hindi heartland, so Devanagari became increasingly used. To the north (Nepal's Terai), Maithili was often written in Devanagari by the 20th century. Meanwhile, in Bengal and Assam, related scripts (Bengali-Assamese alphabets) evolved separately, but the resemblance remained.

Maithili Literature and Script Evolution

The flowering of Maithili literature had a strong impact on its writing system. Beginning in the 14th century, Maithili became a major literary language (notably with Vidyāpati's devotional and love poetry). These classics were composed and copied in Tirhuta, which helped fix certain orthographic norms. For instance, Vidyāpati's poetry often preserves traditional spellings (with explicit schwas and conjuncts) that later vernacular works would simplify. Conversely, the vernacular audience of these works meant that spellings sometimes reflected actual pronunciation changes (Maithili retained certain phonetic distinctions lost in Sanskrit). Over time, scribes copying Maithili anthologies standardized many conjunct clusters and vowel marks to ensure readability.

With the coming of print around 1900, Maithili literature began to be published more widely. The first printers (e.g. Darbhanga's Acharya Ramlal or – later – Ramlochan Saran) used Tirhuta type for Maithili books. This revival brought a more fixed script usage: printers had to decide one glyph for each sound, effectively codifying orthography. Thus early 20th-century editions of Vidyāpati's works and Maithil folk tales, set in movable type, became de facto models of how Tirhuta should look. Unfortunately, these printing efforts were limited and soon overtaken by Hindi presses. But the Maithili print tradition (albeit brief) did reinforce Tirhuta forms and promoted the idea of a "Maithili alphabet" among educated readers.

Early Codification and Instruction

Before the 20th century, there were few formal attempts to teach Maithili script beyond traditional tutoring. Maithili had no official orthography or government examination. Learning was mainly familial or via Sanskrit schools, where Tirhuta was imparted orally/handwritten. In the colonial era scholars began to study Maithili scientifically: for example, Rudolf Hoernle's 1880 grammar of "Eastern Hindi" famously recognized Maithili as a distinct language (one of the first such grammars). This work and others gathered folk literature, but they rarely addressed script pedagogy.

No board or state prescribed Tirhuta as a school subject in the 19th century. The first primers for Maithili readers often used Devanagari or Kaithi. Only in the last decades of British rule did occasional Maithili primers in Tirhuta appear (prepared by local scholars), and even then distribution was minimal. In sum, until about 1900 Maithili script usage was kept alive by community tradition (temple schools, familial tutors, paṇjikārs), rather than formal education.

Sources: Historical linguistics and epigraphic studies on Tirhuta; Pandey's proposals and surveys of Maithili manuscripts; accounts of caste, script, and Maithili print; Ethnologue and grammars noting Maithili's scripts; corpus of Maithili literary history.

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Historical Development of Maithili Vocabulary and Style

Maithili Language: Historical Vocabulary and Stylistic Evolution

Early origins and medieval era: Maithili evolved out of the eastern Magadhi Prakrit/Apabhramsa continuum. In the 10–14th centuries it passed through the Abahatta stage (a late-apabhramsa) shared by Bengali, Odia and Assamese. The great poet Vidyapati (c.1350–1450) wrote in the vernacular Maithili (then a late-Abahatta dialect) even as Sanskrit remained the courtly literary language. His use of folk-style Maithili in devotional and love poetry broke precedent and encouraged later writers to adopt the local tongue rather than Sanskrit. In this period the vocabulary was still strongly Sanskritic: many *tatsama* (direct Sanskrit) words and compounds were used in learned poetry and prose.

Medieval influences on vocabulary and style: During the late medieval period (16th–18th centuries), Maithili absorbed diverse external elements. Muslim rule and trade brought Persian, Arabic and Urdu terms into Maithili, especially in administration and legal documents. For example, contemporary deeds and letters are described as written in a "highly dignified but Persianised Maithili style" laden with Urdu/Persian technical terms. At the same time, Braj-Bhasha (the language of Krishnaite devotion) influenced Maithili lyrics; poets often mixed Maithili with Braj dialects, reflecting religious and cultural ties. Maithili's Eastern neighbors (Assamese, Bengali, Oriya) also shaped syntax and usage through centuries of contact. Overall, medieval Maithili literature retained elaborate poetic forms, employing Sanskrit meters (ragas, talas) and ornate rhetoric derived from Sanskrit poetics.

Shifts toward the vernacular: From the 18th century onward, a notable stylistic shift occurred. Poets like Manabodha (Umapati Upadhyaya) began writing long narratives (mahakāvyas) in Maithili using simpler, colloquial diction. He *"freed the language from all Prakritic affectations"* and "bade adieu to the ornate style… based on later Sanskrit literature," consciously writing in the everyday speech of the common people. In this way Maithili exited its exclusive subservience to Sanskrit and developed idiomatic expression closer to the spoken tongue. By this era, many *tadbhava* (evolved native) words predominated over *tatsama*. As a result, late-medieval and early-modern Maithili began to mirror a more realistic, narrative style rather than strictly literary Sanskritic verse.

Colonial era and standardization: In the 19th century, Maithili was formally studied and standardized. Irish linguist George A. Grierson documented Maithili grammar and folk literature during the British Raj, raising the language's profile. He treated Maithili and its dialects as a unified language spoken across Mithila. This period also saw the rise of print media: the first Maithili magazines (e.g. *Maithil Hit Sadhan*, 1905) introduced modern prose and journalism. Two literary registers became established: Sidhu or Shishtabhasha (शिष्टभाषा), an "elegant" formal style rich in Sanskrit-derived vocabulary, and Chalitabhasha (चलितभाषा), the ordinary current style closer to spoken speech. Traditional poets and dramatists usually wrote in Shishtabhasha; in contrast the newer prose writers and newspapers preferred Chalitabhasha for its accessibility. (The terms *sidhu* and *chalita* in practice reflect the classic vs. colloquial split in many North Indian languages.)

Modern developments: From the 20th century onward, Maithili literature and journalism flourished. Author/critics like Surendra Jha 'Suman', Radha Krishna Choudhary, Jaykant Mishra and others enriched the language across genres. As Maithili writing moved into secular journalism and education, it incorporated more Hindi and English loanwords for technical, administrative and new cultural concepts. In fact, one source notes that *"the basic vocabulary of Maithili is Sanskrit in origin, but over the years Maithili has borrowed words from English, Hindi, Bengali, as well as other neighboring Indo-Aryan languages."* Modern idioms, metaphorical turns and syntax in Maithili often reflect English influence in thought and expression. Many Punjabi and English slogans find their way into headlines, and writers freely mix Hindi-origin terms for contemporary concepts (for example, using Sanskrit or Hindi synonyms where an exact Maithili word may be lacking).

Stylistic conventions – literary vs. journalistic usage: Traditional Maithili literature is known for its poetic devices, formal honorifics and classical allusions. In contrast, modern Maithili journalism and non-fiction writing tend to use a plainer, more direct style. News and essays generally employ Chalitabhasha with simple sentence structures, whereas older literature (poems, epics) often used compound or archaic verb forms. For example, older grammars note that pronouns and verbs carry multiple *honorific* levels in formal style; in everyday writing these levels are usually collapsed to a single polite form. Likewise, verse and drama might fix to strict metrical patterns, but news writing is free of meter. Overall the difference mirrors a diglossic pattern: *high-register* Maithili (rich in tatsama vocabulary, formal tone, classical references) versus *low-register* or colloquial Maithili (vernacular lexis, simpler syntax, often influenced by Hindi).

- External influences on vocabulary: Sanskrit/Prakrit core lexicon; heavy use of Sanskrit tatsama words in classical texts. Persian/Arabic/Urdu inputs during Mughal era (e.g. administrative terms). Braj-Bhasha and regional Hindi influences in devotional literature. In the 20th–21st century, borrowing from Hindi and English dominates: as one modern survey notes, Maithili has absorbed *"English loanwords…over the years"* along with Hindi and Bengali terms.
- Stylistic registers: Two main literary registers are recognized: Shishtabhasha (Sidhu) for formal, polished writing, and Chalita (informal) for conversational style. Traditional genres (poetry, plays) favored Shishtabhasha, with complex compounds and Sanskritic diction. Modern prose, journalism and folk literature mostly use Chalita, favoring the everyday speech patterns of Mithila. Notably, 18th-century poet Manabodha exemplified this shift – he *"made serious attempts at the simplification of language"* and explicitly wrote in the *spoken language of the common masses*.
- Key authors and texts: Major medieval figures include Vidyapati (whose Padavali established Maithili as a literary language), and Jyotirishwar Thakur (whose *Varnaratnakar* is early Maithili prose). Late medieval poet Govindadasa and others enriched devotional lyric. The 18th century saw Manabodha's Krishnajanma as a milestone in narrative Maithili. Modern-era contributors (20th c.) include Surendra Jha 'Suman', Jaykant Mishra, and Baldev Mishra (also grammarian). Movements like the Maithili Sahitya Parishad (founded 1930) promoted the Tirhuta script and high-literary norms.

Conclusion: Maithili's vocabulary and style have continuously evolved under layered influences. Early Maithili inherited Sanskritic and Prakrit features; later it absorbed Persian/Arabic and devotional regional elements. In the modern period, Hindi and English have reshaped its lexicon and idioms. Stylistically, Maithili literature shows a historical divide

between a formal Sanskritized register and a colloquial vernacular. Key literary figures at each stage – from Vidyapati to Manabodha to contemporary writers – have molded these conventions. Consequently, traditional Maithili poetry remains rich in classical forms, while today's Maithili journalism and prose favor a simpler, modern style. These developments are documented in linguistic surveys and historical studies of Maithili, which highlight how external contact and social change have shaped the language over time.

Sources: Historical and linguistic analyses of Maithili literature and language (e.g. *A Survey of Maithili Literature*, encyclopedias and journals) were used to detail these developments. Notable citations include discussions of Vidyapati's role, Grierson's documentation, external loanwords, and stylistic shifts in key authors. These works collectively trace Maithili's journey from a Sanskrit-influenced literary idiom to its present-day literary and journalistic forms.

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Development of Scientific Vocabulary in Maithili and Its Logical Structure

Historical Development of Academic Vocabulary in Maithili

Early Influences (Sanskrit and Medieval): Maithili evolved within the Sanskritic tradition. Early Maithili literature (e.g. 14th-century *Varṇa Ratnākara*, the poetry of Vidyapati) richly used Sanskrit loanwords. Classical philosophical and literary terms in Maithili – like *दर्शन* (darśan, "philosophy"), *तत्व* (tattva, "principle"), *मनोविज्ञान* (manovijñāna, "psychology") – are inherited from Sanskrit. British-era scholars also noted Maithili's hybrid nature: for instance, Vidyapati's classical Maithili mixed vernacular syntax with Sanskrit lexicon. Such foundations meant that even in medieval Maithili, scholarly language was heavily Sanskritized.

Colonial Era and Early 20th Century: Under British rule, Maithili's distinct identity emerged. Grierson's *Linguistic Survey of India* (1903) controversially subsumed Maithili as "Eastern Hindi," prompting Maithil intellectuals to standardize the language. In 1917 Calcutta University became the first to recognize Maithili as a literary language, followed by Banaras Hindu University in 1933. These endorsements spurred grammars and lexicons (e.g. Govind Jha's *Kalyani Koś*, 1999) that documented Maithili vocabulary, including many scientific and literary terms. By mid-century, organizations like the All-India Maithili Sahitya Parishad further promoted a "standard" Maithili based on Brahman dialects of Darbhanga.

Post-Independence Developments: After 1947, Maithili gained institutional support. The Sahitya Akademi awarded Maithili in 1965, and Bihar's government formed a Maithili Academy in 1975. By 2003 Maithili was added to India's Eighth Schedule, giving it official status. Article 347 of the Indian Constitution now permits using Maithili for official purposes in Bihar, "giving Maithili a certain status and influence in the education and administration of Bihar". In practice, however, Maithili-medium education is limited: recent analyses note a "limited development of Maithili language curriculum" and a shortage of standardized Maithili

textbooks, hindering its use in schools. In Nepal, Maithili is constitutionally recognized as a language to be preserved. Scholars there have urged creation of a Maithili Academy to plan terminology and develop a corpus, emphasizing research and digital tools.

Vocabulary Expansion and Language Planning: Throughout the 20th century and today, Maithili's academic lexicon has grown through borrowing and coinage. Government bodies like India's Commission for Scientific and Technical Terminology (CSTT) have worked to create glossaries in Indian languages. For example, a 2018 seminar reported that CSTT has developed ~850,000 technical terms in Hindi and other languages, and stressed that *"Maithili language needs to store technical words"* by collecting existing Maithili scientific terms. Modern planners recommend a mixed strategy: use Sanskrit or traditional Maithili roots for cultural/humanities terms, and borrow/adapt European (especially English) terms for modern science and technology. This mirrors practices in Hindi and Nepali. One study on Maithili planning explicitly notes that Maithili can "turn to Sanskrit for… literature, culture and scholarship" terms, while borrowing from English for science and technology. Thus, many academic terms in Maithili are either shared with Sanskrit/Hindi or calqued from English.

Examples of Technical Terminology: Maithili uses a range of Sanskrit-derived terms in academia:

- Mathematics: The word *गणित* (gaṇit, "mathematics") is standard, and branches of math are named with Sanskrit compounds: *अङ्कगणित* (aṅkagaṇit, "arithmetic"), *रेखागणित* (rekhāgaṇit, "geometry"), *त्रिकोणमिति* (trikoṇamiti, "trigonometry"), *बीजगणित* (bījagaṇit, "algebra"), *कलन* (kalan, "calculus"). A practitioner is a *गणितज्ञ* (gaṇitajña, "mathematician"). These terms parallel Hindi/Sanskrit (e.g. *trikoṇamiti* = त्रिकोणमिति).
- Natural Sciences: Maithili typically uses *भौतिक विज्ञान* (bhoutik vijñān, "physics"), *रसायनशास्त्र* (rasāyan śāstra, "chemistry"), *जीवविज्ञान* (jīvavijñān, "biology"), etc. (These compounds are identical or similar to Hindi equivalents.) Academic usage also includes compounds for subfields (e.g. *भौतिकशास्त्र*, *परमाणु विज्ञान*).
- Philosophy & Humanities: Classical terms prevail: e.g. *दर्शन* (darśan, "philosophy"), *तत्त्वमीमांसा* (tattvamīmāṃsā, "philosophical investigation"), *इतिहास* (itihās, "history"), *भूगोल* (bhūgol, "geography"), etc. Everyday Maithili has no simpler native words for many of these, so the scholarly Sanskritic terms are used unchanged.

These examples show Maithili's academic vocabulary largely overlaps with Sanskrit/Hindi lexicon. (For instance, the Maithili Wikipedia entry on गणित lists all the above math terms.) As a concrete note, even the word for "science" is विज्ञान (vijñān) or older बिग्यान, defined as a branch of knowledge.

Register and "Tighter Logic" of Academic Maithili

In practice, written/academic Maithili is more formal and logically structured than everyday speech. It uses full grammar, explicit markers, and precise terminology. For example, the copula "is" appears as अछि (achhi) in formal Maithili, whereas colloquial speech often truncates it to अइछ (aich). Similarly, words with Sanskrit roots are preserved in writing: e.g. "honey" is *मधु* (madhu) formally but colloquially *मौध* (maudh). Another example is "letter" (mail): formal

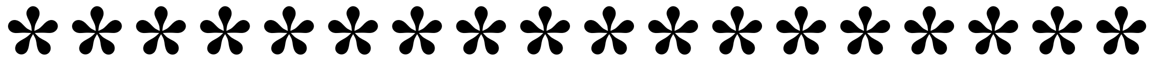
Maithili uses *चिट्ठी* (ciṭṭhī, from Sanskrit चिट्ठी), but spoken Maithili often says *खता'* (khatā', from Urdu किताब 'kitāb' meaning book). These and other examples are summarized below:

Concept	Colloquial Maithili	Academic Maithili (formal)
"is/to be"	*अइछ* (*aich*)	*अछि* (*achhi*)
"honey"	*मौध* (*maudh*)	*मधु* (*madhu*)
"letter" (post)	*खता'* (*khatā'*)	*चिट्ठी* (*ciṭṭhī*)

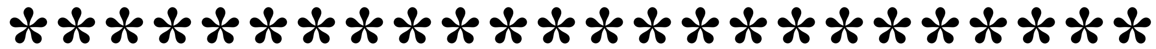
Beyond vocabulary, academic Maithili prefers complete sentence structure and explicit connectors. It uses case particles and honorifics more consistently (e.g. *पाठ पढ़ेलाह* with full verb ending, instead of a clipped spoken form). In written Maithili one avoids elliptical or ambiguous phrasing. In short, scholarly Maithili "strings arguments together" in a way akin to Sanskritized registers of other Indic languages. As one Hindi-language study observes, formal literary registers (like "Modern Standard Hindi" or Sanskritized Hindi) are marked by Sanskrit vocabulary and strict syntax; Maithili follows the same pattern. Thus, compared to relaxed colloquial speech, academic Maithili exhibits "tighter logic" through full grammar, standardized terms, and semantic precision.

In summary, Maithili's academic lexicon grew from its Sanskrit heritage and was expanded by modern planning. Key periods (early lit, colonial standardization, and post-2000 language planning) shaped its vocabulary. Institutional bodies (universities, academies, CSTT) continue to coin and compile technical terms. In usage, academic Maithili maintains explicit, Sanskritized forms and technical terminology (especially in mathematics and science) to achieve clarity and logical precision, contrasting with the more informal, hybrid forms of everyday speech.

Sources: Historical and linguistic studies of Maithili; Maithili lexicons and Wikipedia (showing math and science terms); language planning analyses; comparative register studies



Santali people



Historical Development of the Santali Language to the Early 1900s

Austroasiatic Roots and Classification

Santali is a member of the Munda branch of the Austroasiatic family (related to Khmer, Vietnamese, Mon, etc.). Within the Munda languages it falls in the North Munda subgroup (the Kherwarian branch), closely related to Mundari, Ho and other languages. Paul Sidwell's linguistic reconstruction even suggests that proto-Munda speakers ancestral to Santali migrated from Southeast Asia (Indochina) into Odisha about 4000–3500 years ago. Thus Santali shares characteristic Austroasiatic features (e.g. agglutinative morphology, inclusive/exclusive pronouns) and is often contrasted with nearby Indo-Aryan languages. In India Santali is one of the largest tribal languages and (uniquely among Munda tongues) an officially recognized scheduled language.

Oral Traditions Before Writing

For millennia Santali was purely an oral language. Its speakers preserved history and culture through songs, myths, riddles and folktales passed down generations. Early ethnographers note that the Santals jealously maintained their distinct traditions, with little Hindu influence reaching them: "They have retained their language…almost intact," one 1891 account observed, reflecting the isolation of Santali oral culture. In short, prior to any external contact all knowledge of religion, law and history was conveyed by word of mouth. As one scholar summarizes, "till the nineteenth century Santali remained an oral language and all the traditional knowledge, history, stories, songs etc. were transmitted orally from generation to generation". Only in the mid-1800s, when British and missionary scholars took interest, did Santali begin to be recorded in writing.

Influence of Neighboring Languages

By the 19th century Santali was in sustained contact with surrounding Indo-Aryan tongues. Santals often live alongside Bengali speakers in Bengal, Odia speakers in Orissa, and Hindi (and related Bihari) speakers in Bihar and Jharkhand. As a result Santali has borrowed vocabulary from these neighbors. Linguists estimate that roughly 20% of everyday Santali words today are loanwords – mainly from Hindi, Bengali, Odia (Oriya), Assamese, Nepali and even English. For example, modern Santali phonology and noun classifiers often show Indo-Aryan influence, and words for modern concepts were often adopted directly (e.g. *kole* for "school" from Bengali). In short, "a lot of words from different languages have been adopted

and adapted to the Santal ideas and linguistic rules”. Nonetheless, even heavy borrowing has not obscured Santali’s identity; traditional Santal communities remained proud of their own linguistic heritage despite these accommodations.

British Colonial Documentation (18th–19th c.)

Under British rule Santali attracted scholarly attention as part of the colonial study of India’s “tribal” languages. From the mid-1800s onward European ethnographers, colonial officials and missionaries began to record Santali systematically. For example, the British-sponsored Calcutta School Book Society published L.O. Skrefsrud’s first Santali grammar in 1873. Collectors like Jeremiah Phillips and A.R. Campbell (an ethnographer) worked alongside missionaries to compile word lists and folklore in Santali. These efforts typically used whatever script was convenient (more on this below) and laid the groundwork for later scholarship. As a result of colonial-era study, Santali became one of the best-documented tribal languages in India, with published grammars, vocabularies and folk-tale collections appearing by the late 19th century.

Missionary Codification: Grammars, Dictionaries, Texts

Christian missionaries played an outsized role in codifying Santali. The Norwegian-run Santal Mission (and others) immersed themselves in Santal society from the 1850s onward. Pioneers like Lars Olsen Skrefsrud and Paul Olaf Bodding spent decades among the Santals; they are famed for producing the first written materials in the language. Skrefsrud (1840–1910) produced the first Santali grammar (1873) and in 1895 published the first book in Santali – a translation of the New Testament. Bodding (1865–1938) later developed a Santali alphabet and compiler-dictionary, and even created a Latin-script Santali orthography in the 1890s. In sum, by the early 1900s mission scholars had produced grammars and primers, dictionaries, and religious texts (Bible portions, hymns, prayers) in Santali. These works often appeared in bilingual editions or with extensive glosses. The missionary publications both preserved vast amounts of oral literature (epics, folktales, songs) and imposed a standardized written form on the language.

Scripts Used Before Ol Chiki

Before the invention of Ol Chiki (1925), Santali was written using existing scripts. In practice, Santali texts appeared in whichever local script was available. In Bengal and Assam, Santali was often written in the Bengali-Assamese abugida; in Orissa in the Odia script; and in regions influenced by Hindi education, even Devanagari was used. Missionaries and colonial officials commonly used the Roman (Latin) alphabet (sometimes with diacritics) for printing Santali – in fact Bodding devised a formal Santali Latin alphabet in the 1890s. For example:

- Bengali script: used by Santals in West Bengal and Bangladesh, especially for folk tales and church materials.
- Odia script: used in Orissa/Mayurbhanj by local Santals and missionaries in that region.
- Roman (Latin): used by most missionaries; Bodding’s Santali-Latin orthography became a de facto standard for the northern churches.

Each writing system incorporated Santali phonology in its own way. (A short-lived attempt at a native Santali script, *Monj Dander Ank*, was made in 1922 but never adopted.) Overall, pre-

20th-century Santali literature was written not in an indigenous script but in Bengali, Odia or Latin characters.

Cultural and Political Implications of Early Literacy

The early linguistic work had profound cultural and political effects for the Santal people. On the cultural side, having Santali in writing helped preserve and legitimize Santal identity. Missionaries themselves noted that supporting the Santals' language and education was key to their outreach. They set up mission schools teaching Santali-speaking children, and used Santali textbooks and primers. In doing so the missions tied Christian conversion to literacy and social uplift – Santals came to associate their language with education and welfare programs. As one observer puts it, the missionaries "contributed to the preservation of the local population's language and cultural heritage" while providing schooling and healthcare.

Politically, the new literacy enabled Santali leaders to organize and advocate for tribal rights. The language codification coincided with early Santal political movements (e.g. the Santal Hul revolt of 1855–56), and missionaries often supported Santal demands for land, education and self-governance. Santal chiefs even worked with European missionaries as interpreters and advocates to petition colonial authorities for reforms. In sum, by giving Santali a written form the 19th-century linguistic work helped integrate the Santal community into modern education and legal frameworks while reinforcing a distinct Santal cultural identity. Later analyses note that having a script was seen as key to cultural pride and continuity: the invention of Ol Chiki in the next generation (1925) was celebrated as finally giving Santals a native alphabet, empowering "generations of Santals" to read and write in their own language.

Sources: Scholarly and historical accounts of Santali classify it as a Kherwarian (North Munda) Austroasiatic language. Early missionary and colonial writings document the oral folk tradition and the initial grammars and lexicons. Linguists like Sidwell discuss its prehistory in Indo-Burman migrations. Modern studies of Santal culture emphasize the impact of writing on language preservation and tribal rights.

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Historical Development of the Santali Writing System

Santali Oral Tradition and Language Roots

Santali is an Austroasiatic (Munda) language long preserved by the Santal tribe. Until well into the 19th century it was *entirely* oral – "hitherto an unwritten language" – with history, myths and laws passed down by word of mouth. Santal culture has a rich oral heritage of folk songs, chants, and ritual dramas (seren-enec') that embodied communal memory. Scholars note that these song-dance performances were *central* to Santali literacy: they helped spread knowledge and even influenced early Santali print journals. In short, Santali "survived and evolved" for centuries in oral form before any alphabet was used.

Missionary and Colonial Documentation (mid-1800s)

European interest in India's languages in the mid-1800s brought the first Santali writings. In 1852 American missionary Rev. Jeremiah Phillips published an *An Introduction to the Santál Language* (grammar/vocabulary) – the first Santali book in print. Phillips explicitly noted that Santals "hitherto" had no written characters of their own, so he adopted the Bengali script "for obvious reasons". In the following decades other missionaries published vocabularies and translations. In 1868 Rev. E. L. Puxley issued a Santali dictionary using Roman (Latin) letters, and in 1873 Lutheran missionary Lars Skrefsrud produced a Santali grammar using a Roman alphabet with diacritics. Skrefsrud's grammar (and later Bible translation) became the foundation for all subsequent work on Santali. In short, 19th-century missionaries (Phillips, Campbell, Skrefsrud, etc.) codified Santali grammar, collected folk tales, translated Scripture, and created primers – primarily using Roman script (often adapted from Bengali or Hindustani orthography). For example, in the 1890s Christian missionaries "found it helpful to write in Santali" using Latin letters, producing Santali primers, dictionaries and gospel texts. During this period colonial officials and ethnographers relied on those missionary works to record Santali words and grammar in Bengali, Odia, or Latin scripts, but they did not invent a separate Santali script.

Use of Bengali, Odia, Devanagari and Latin Scripts

As literacy spread under British rule and missionary schools, Santals began writing their language in several external scripts. Typically a Santali speaker used whichever alphabet was dominant in the region: Bengali-Assamese script in Bengal and Assam, Odia script in Odisha, and Devanagari (Hindi) in Bihar/Jharkhand/Nepal. Thus, for much of the 19th century Santali texts were printed in Bengali or Odia type where those scripts were learned, and in Devanagari where Hindi schools prevailed. For instance, Santal schools in West Bengal taught in Bengali, so Santals there read and wrote Santali in Bengali letters. Meanwhile, the Roman (Latin) script remained in use by Christians and scholars (the textbooks and Bibles from the 1890s continued in print). In sum, by the early 1900s Santali appeared in as many as six different alphabets – Latin, Bengali, Oriya, Devanagari, and two others – each adapted (often imperfectly) to Santali sounds. As one Santal writer later noted, none of these borrowed scripts "accurately reflects Santali phonemes," which meant native speakers had no single standard to unify them.

Regional and Sociopolitical Influences on Script Choice

Script use was deeply tied to politics and society. Santals are historically an marginalized Adivasi people "outside the Hindu caste system". Their language is not Indo-European but Austro-Asiatic (related to Khmer and Vietnamese). Under colonial rule and afterward, education and administration were conducted in the majority languages of each province, so Santals usually adopted those scripts. (In Bihar/Jharkhand, Hindi/Devanagari was imposed; in Odisha, Odia script; in Bengal, Bengali.) Even the term Santals use for their language – *"ho ro"* (language of the people) versus *"diku ro"* (languages of outsiders) – reflects the identity divide between tribal and non-tribal spheres. By the late 19th century, Santal leaders saw that no external script fully served their needs. This diffusion was becoming "divisive" for Santali identity. In missionary and tribal schools the push for literacy with foreign scripts spurred some Santals to seek their own writing system.

An Ol Chiki-script sign on a market building in Odisha. Raghunath Murmu's Ol Chiki alphabet (invented 1925) was later adopted for Santali; prior to that Santali appeared in regional scripts (Bengali, Odia, Roman, etc.) as shown above.

Precursors to an Indigenous Script (Early 20th Century)

In the early 20th century Santal intellectuals began creating a native alphabet. The poet Sadhu Ramchand Murmu (1897–1954) of Bengal developed a script called *"Maj Dader Ank"* (Monj Dander Ank) around 1922–. He even wrote some poetry in it, but it never spread widely. Soon afterward Raghunath Murmu of Mayurbhanj, Odisha, set out to build a fully Santali script. In 1925 he devised Ol Chiki (ᱚᱞ ᱪᱤᱠᱤ), with 30 new letters designed for Santali sounds. (He publicized it in 1939.) Ol Chiki, unlike earlier attempts, was tailor-made for Santali phonology and was learned and promoted through Santal schools and literature. Over time it largely supplanted the older multi-script practice – today Ol Chiki is the official Santali script.

Throughout the 19th century Santali literature emerged only via oral tradition and the efforts of outsiders. Colonial-era missionaries and scholars recorded Santali in Bengali, Odia, Devanagari or Roman scripts. Regional politics – which state the Santals lived in and which script schools used – heavily determined how Santali was written. Only in the early 20th century did Santals themselves engineer an alphabet. In that sense, Ol Chiki stands on the shoulders of many borrowed systems: it is the culmination of earlier scripts and the oral memory they tried to capture. By the mid-1900s, therefore, Santali had finally moved from purely oral culture into its own written tradition, founded on both external-script transcription and new indigenous innovation.

Sources: Historical accounts and linguistic studies of Santali. These describe oral Santal traditions, missionary grammars (1850s–1890s), script adaptations in various regions, and early script-creation efforts.

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Development of Academic and Scientific Vocabulary in Santali

Historical Overview

Santali (also *Santhali*) is a North-Munda (Austroasiatic) language historically passed down orally. In the 1800s European missionaries (e.g. Phillips, Skrefsrud, Bodding, Campbell) first began documenting Santali, writing grammars and dictionaries in Roman, Bengali or Odia scripts. This missionary era (ca. 1860–1900) saw the first written Santali literature. After Indian independence, Santali speakers used regional scripts: Bengali (in West Bengal/Assam), Odia (in Odisha), and Devanagari (in Bihar/Jharkhand). In 1925 Pandit Raghunath Murmu created

the Ol Chiki script specifically for Santali, and it has become widely adopted. Finally, Santali gained national status by inclusion in India's Eighth Schedule (2003) and is now offered as an academic subject (e.g. UGC-NET eligibility from 2013 onwards). All these developments – from script invention to constitutional recognition – laid the groundwork for expanding Santali's academic and scientific register.

Writing Systems and Script Influence

Santali has been written in multiple scripts, each influencing its vocabulary. Early texts were in *Roman script* (by missionaries) and regional Indian scripts (Bengali–Assamese in Bengal, Odia in Odisha, Devanagari in Bihar/Jharkhand). The choice of script often channeled borrowings: for example, Bengali-script Santali likely borrowed words via Bengali, and Devanagari Santali via Hindi/Sanskrit. In 1925 Pandit Raghunath Murmu's Ol Chiki (Ol Cemet') script was invented as a dedicated Santali alphabet. Ol Chiki's phonemic design makes it easier to form native neologisms and accurately write Santali sounds. Today Ol Chiki is the *official* script for Santali literature, though educated Santals may still use Latin or regional scripts. Overall, the script shift to Ol Chiki has helped standardize spelling of technical terms and reduce ambiguity from multiple writing systems.

Institutional and Educational Initiatives

A number of governmental and educational initiatives have boosted Santali's technical vocabulary. The Government of India's Commission for Scientific and Technical Terminology (CSTT), active since 1961, now includes Santali among ten languages for which it is compiling *5,000-word technical dictionaries* (a 2023 initiative reflecting NEP-2020's emphasis on regional languages). In practice, states with large Santali populations have begun mother-tongue education programs. For example, Assam (2025) introduced Santali-medium schooling using Ol Chiki textbooks. Odisha's education program produces Santali textbooks (classes I–V) in Ol Chiki under a Multilingual Education scheme. The National Education Policy (2020) itself promotes regional languages in education, which supports creating Santali teaching materials. Higher education has followed suit: several Indian universities (e.g. Jharkhand's Santal Parganas University) now offer Santali courses up to MA and PhD levels. In 2013 UGC officially allowed Santali in the NET exam, enabling lectureship in Santali-medium colleges.

Academic/Scientific Vocabulary: Examples

Santali academic vocabulary draws heavily on loanwords and neologisms adapted to Ol Chiki. For instance:

- Education – ᱥᱤᱠᱷᱟᱹᱥᱱᱟ (*sikhsana*), borrowed from Sanskrit/Hindi *śikṣā*. (In compound: ᱦᱳᱫᱳᱢᱳ ᱥᱤᱠᱷᱟᱹᱥᱱᱟ, *hodomo sikhsana*, "physical education".)
- University – ᱡᱮᱜᱮᱫ ᱵᱤᱨᱫᱟᱹᱜᱟᱛ (*jeged biridaghat*), a coined phrase meaning "campus of learning."
- Physics – ᱦᱳᱫᱳᱢᱳ (*hodomo*) or ᱵᱷᱮᱱᱟᱡ (*bheyajon*), both attest to current usage.
- Mathematics – ᱮᱞᱠᱷᱟ (*elkha*) (appears to be a native term, "counting").
- Physical education – ᱦᱳᱫᱳᱢᱳ ᱥᱤᱠᱷᱟᱹᱥᱱᱟ (*hodomo sikhsana*).

These examples show a mix of Sanskrit-based loans and original Santali coinages. In general, technical Santali terms are chosen to be clear and easy to use, per terminology guidelines. (For instance, glossaries evolve by "accept[ing] technical terms already in common use" and by coining clear new terms.) The ongoing work of CSTT and tribal research bodies is adding hundreds of such terms each year.

Academic vs. Colloquial Register

Santali's spoken register is typically topic-prominent, with flexible word order and frequent omission of obvious subjects or objects. In contrast, its academic register tends toward greater explicitness: sentences often include all case/subject markers and use compound terms for precision. Terminology efforts stress that academic Santali should be "clear, concise and easy to speak and understand", implying a preference for logical, unambiguous structures. In practice, formal Santali texts may mirror Hindi or English syntax more closely (e.g. maintaining S–V–O order) and employ standardized technical vocabulary, whereas colloquial Santali relies more on shared context, idiomatic expressions, and native everyday lexicon. Thus, the academic register is marked by *lexical precision* (specialized terms) and *syntactic clarity* (fewer ellipses), building on Santali's agglutinative grammar to convey complex ideas.

Key Figures and Works

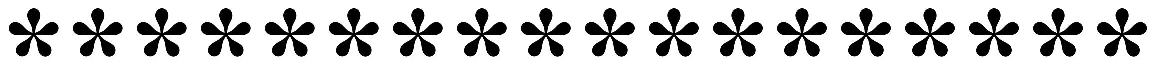
Key contributors to Santali's development include both early linguists and contemporary activists:

- European missionaries (late 1800s–early 1900s): A. R. Campbell, J. Phillips, Lars Skrefsrud and P. O. Bodding recorded Santali in Bengali, Odia and Roman scripts and published the first grammars and dictionaries. These works preserved folk literature and provided basic lexicons.
- Sadhu Ramchand Murmu (1922): Created an early Santali script (*Monj Dander Ank*), though it was not widely adopted.
- Pandit Raghunath Murmu (1925–1930s): Invented the Ol Chiki script (Ol Cemet') and published Santali primers and songs. Ol Chiki gave Santali a unique writing system and solidified written literature.
- P. O. Bodding (1905): Wrote *A Santali Grammar* and *Dictionary* (Dakshina Bharata), foundational academic references.
- Government bodies: The *Commission for Scientific & Technical Terminology* (est. 1960) fosters new vocabulary. In recent years, Jharkhand and Odisha tribal research institutes have produced Santali textbooks and bilingual glossaries (e.g. an Odia–Santali phrasebook by SCSTRTI, Odisha).
- Dr. Dhuni Soren (Santal Academy, Dumka): A modern scholar who has written on Santali terminology and chairs language committees. His 2019 report (for UNESCO's Indigenous Languages Year) outlines principles for creating Santali scientific and administrative terms.
- Others: Contemporary Santali authors and educators (e.g. Basil Majhi, Basant Murmu) have compiled glossaries and schoolbooks. Key publications include state-approved Santali primers, cultural journals, and academic papers on Santali linguistics.

Together, these figures and institutions have transformed Santali from an unwritten folk language into one with an emerging academic vocabulary. Continued effort – through

glossaries, textbooks, and bilingual education programs – is steadily enriching Santali's scientific register and making higher learning accessible in the mother tongue.

Sources: Historical and script information from Anderson (2005) and Dhuni Soren (2019); government and educational initiatives from news reports and policy sources; terminology guidelines from Soren's commission report. Examples of Santali terms are drawn from bilingual dictionaries.



Kashmiri people

Historical Development of the Kashmiri Language to the Early 1900s

Indo-Aryan Dardic Roots of Kashmiri

Kashmiri is classified as an Indo-Aryan language of the Northwestern group, traditionally placed in the Dardic subgroup. In fact, Britannica notes that *"Kashmiri is the only Dardic language that has been used extensively for literary purposes"*. Historically, Kashmiri has preserved many archaic Indo-Aryan features: for example, it retains the original voiced prefix *du-* for "two" (as in Sanskrit *dvi*), rather than the **ba-* used in Hindi (*baahattar* for 72). Unusually for an Indo-Aryan tongue, Kashmiri also has a rich vowel system (including central vowels /ɨ, ɨː, a, aː/) and a verb-second (V2) word order more like Germanic. Like its Dardic neighbors (e.g. Shina, Khowar), Kashmiri shows a split-ergative case system and uses an ergative marker on past-tense verbs. In summary, Kashmiri's core grammar – case inflection, gender distinction, ergativity – marks it as Indo-Aryan, but its phonology (nasalization, palatalization, V2 syntax) remains quite distinct among Indian .

Sanskritic Influence (Early Phase)

From its earliest development, Kashmiri has been heavily influenced by Sanskrit and Indo-Aryan Prakrits. Linguists note that ancient Kashmir was part of the Sanskritic cultural sphere, and Kashmiri speakers gradually absorbed vast Sanskritic vocabulary and grammar. As Chatterji (cited by Kachru) observes, Kashmiri *"became part of the Sanskritic culture-world of India,"* with Indo-Aryan Prakrits "profoundly modifying the Dardic bases of Kashmiri". Another survey likewise divides Kashmiri's history into two phases: an earliest phase (pre-14th c.) dominated by Sanskrit, followed by a later phase (post-14th c.) of Persian/Arabic influence. In practical terms, this meant Kashmiri inherited thousands of Sanskritic roots and maintained conservative Indo-Aryan features (e.g. archaic sibilants, the 'd-' in *du-* for "two"). Many early Kashmiri personal and place names survive in classical Sanskrit form (e.g. *Bilhan*, *Amritlekha*, *Bhaskara* etc.), reflecting this layering of Sanskritic vocabulary into the native.

Early Literature and Sharada Script (up to 1500)

The earliest Kashmiri texts date from roughly the 13th–15th centuries AD. Surviving manuscripts include tantric and folk works in old vernacular. For example, the *Mahanaya-Prakasha* (a Tantric ritual text) and *Chumma-Sampradaya* (a verse collection) were written in

Sharada script around the 13th–15th centuries. According to Kachru, *“the earliest literary text of Kashmiri has been placed between 1200 and 1500 AD”*, suggesting a nascent literary tradition by the late medieval period. All early Kashmiri writing used the Sharada script (also called Sarada) – a Brahmi-derived alphabet native to Kashmir. Sharada emerged in the 8th century AD and descended from Gupta Brahmi; it remained the principal literary and inscriptional script of Kashmir up to the 19th–20th centuries. (Earliest Sharada inscriptions found in Kashmir are dated AD 804.) In sum, the pre-Islamic written phase of Kashmiri was Sanskritized in language and used the Sharada script, with literature largely confined to religious and courtly contexts.

Persian and Islamic Influence (14th–18th centuries)

The arrival of Islam in the 14th century brought a second major phase of influence on Kashmiri. Persian quickly became the court and literary language of Kashmir’s Sultans, and Islamic missionaries introduced new vocabulary, script, and literary genres. Persian poetry and Sufi mysticism flourished in Kashmir from the era of Sultan Zain-ul-Abidin (r. 1420–1470) onward, earning the valley the nickname *Iran-e-Saghir* (“Little Iran”) due to its adoption of Persian cultural forms. Under successive Shah-Miri and Chak Sultans (14th–16th c.) and later Mughal rulers (1586 onward), Persian remained the language of administration and high culture. As a result, Persian and Arabic loanwords deeply enriched Kashmiri vocabulary – especially in law, administration, scholarship, and daily life. Scholars note that Kashmiri Muslims traditionally favored Perso-Arabic loan-words, while Kashmiri Hindus used more Sanskrit-derived. (In fact, Omkar Koul writes that “most of the distinct vocabulary used by Hindus is derived from Sanskrit and that used by Muslims is derived from Perso-Arabic sources”.)

Script Shift and Bilingual Culture

The spread of Islam also changed Kashmiri writing. From the 14th–15th centuries, Kashmiri began to be written in a modified Perso-Arabic (Nastaliq) script. By tradition, Muslim scholars adapted the Arabic alphabet to Kashmiri sounds (adding letters or diacritics as needed) after the arrival of Islam. Meanwhile, Kashmiri Pandits continued to use Sharada (and later Devanagari) for religious texts. In modern terms, Kashmiri in the Muslim community came to be written with Perso-Arabic script, while Kashmiri Pandits often wrote Kashmiri in Devanagari. This digraphic situation (Sharada/Devanagari vs. Perso-Arabic) has deep historical roots: Britannica notes that even into the 20th century, Hindu schools taught Sharada, whereas *“Muslims in Kashmir use a Persian-Arabic script”*. (By the mid-20th century, Perso-Arabic was officially adopted for Kashmiri; Sharada survives only liturgically.)

Literary Developments (15th–18th c.)

Kashmiri vernacular literature continued to grow under the medieval Sufi saints and poets. Early poet-saints set enduring precedents: for example, the 14th-century Shaivite mystic Lalleshwari (Lal Ded) composed hundreds of *vakhs* (mystic quatrains) in Kashmiri, making spiritual teachings accessible in the local tongue. Her disciple and spiritual successor, Sheikh Noor-ud-Din (Nund Rishi; d.1440), is celebrated as a Sufi saint-poet who blended Shaiva and Islamic themes in Kashmiri verse. By the late 15th century the first Kashmiri prose narratives appeared – e.g. Avtar Bhatt’s “Bansha Katha” (Ramayana legend, c.1446). In the 16th century, the Chak dynasty produced noted poets like Abdur Rehman Rasa, and the famous poetess Habba Khatoon (1554–1609) – a Sufi mystic and queen of Kashmiri ruler Yusuf Shah – composed lyrical love and devotional songs. (A popular historiographical view holds

Lalleshwari as the *"undisputed founder"* of modern Kashmiri, though in this account she appears later in the 14th c.)

These centuries thus saw Kashmir's folk and mystical traditions crystallize in Kashmiri. Major surviving works include collections of vakhs and songs by Lalleshwari and Nund Rishi (preserved in oral tradition), romances and epics translated or composed in Kashmiri (often under Persianate influence), and the *Vaar* (ballad) tradition. Unfortunately, many early Kashmiri works exist only in fragments or later copies, and scholarship on this period is still incomplete. Nevertheless, by the Mughal era a distinctive Kashmiri literary idiom – rich in native grammar but laced with Sanskrit and Persian—had taken shape.

British Colonial and Dogra Period (1800s–Early 1900s)

From the mid-19th century onward, Kashmiri speakers lived under the Dogra Maharajas (from 1846) and British influence. Under Dogra rule, Urdu gradually replaced Persian as the court language. By 1889 Maharaja Pratap Singh, on advice of the British, formally made Urdu the state language instead of Persian. In practice, educated Kashmiris became multilingual: Urdu (and Persian) remained important for poetry and administration, but English began to appear in schools. Kashmiri itself remained largely a vernacular, with no official status. Many Kashmiri Pandit intellectuals mastered Urdu and English, and some even adopted Urdu as their primary literary language.

During this period some Western and Indian scholars produced formal grammars and dictionaries of Kashmiri. For example, missionary Stanley Wakeman and linguist T.R. Wade published early grammars in the mid-1800s; G.A. Grierson's *Linguistic Survey of India* (1906–11) included Kashmiri data and a manual. By 1916 Grierson published a large Kashmiri–English dictionary (compiled partly from Pandit Ishwara Kaul's notes). These works codified Kashmiri's grammar and lexicon in Devanagari or Roman transliteration, making the language more accessible to outside scholars. (In Kashmiri society itself, literacy in Kashmiri remained limited and education emphasized Urdu or Persian. Printing in Kashmiri – in any script – was rare before the 20th century.) In everyday life, Kashmiri continued as the mother tongue of most valley residents, but under the Dogras its prestige was secondary to Urdu and English.

Linguistic Evolution and Vocabulary

Over these centuries, Kashmiri's grammar and phonology evolved under contact with Sanskrit and Persian. It retained its Dardic core (split ergativity, rich inflection) but absorbed many Indo-Aryan and Persian grammatical forms. For instance, the case system (nominal declension) and two-gender system persisted, but many Persian auxiliaries and particles entered the verb system. Kashmiri's phonology also shifted: Sanskrit loanwords often brought in new consonant clusters, while Persian introduced gutturals (e.g. /q/, /x/). At the same time, Kashmiris maintained several unique features – for example, Kashmiri has a set of central vowels uncommon in neighboring, and as mentioned it preserves archaic *du-* for "two". By the early 20th century, Kashmiri spoken by Hindus and Muslims was largely mutually intelligible, but certain vocabulary and style differences reflected the religious split. As one study notes, "most of the distinct vocabulary used by Hindus is derived from Sanskrit and that used by Muslims is derived from Perso-Arabic sources". Nevertheless, urban and educated speakers often "style-switch" between Sanskritized and Persianized registers depending on.

In sum, Kashmiri's lexicon became a blend of strata: native Dardic words (especially in kinship terms, nature, daily life), an extensive layer of inherited Sanskrit/Prakrit roots, and a large overlay of Persian/Arabic borrowings (covering art, administration, religion, cuisine, clothing, etc.). The language thus reflects its history: a Himalayan Dardic base richly overlaid with classical Sanskrit vocabulary, then further enriched by medieval Persian/Arabic, and finally touched by English loanwords in the late colonial era.

Sociolinguistic Context

Socially, Kashmiri has always been a community language of the Kashmir Valley. In premodern times it was the vernacular of both Hindus and Muslims, with elite classes also using Sanskrit or Persian. Under Muslim rule, Persian became the official and literary prestige language, but Kashmiri persisted as the people's tongue. In the Dogra and colonial period, education in Urdu/English further marginalized Kashmiri in formal domains. Census and missionary reports from the 19th century note that many Kashmiri Hindus and Muslims spoke Urdu or Punjabi as second languages, and some Kashmiri Pandits even used Urdu for literary purposes. Yet among themselves, Kashmiris of both faiths continued to use Kashmiri for everyday speech and folk culture. By the early 1900s there were calls from Kashmiri intellectuals for promoting the language (e.g. through publishing newspapers or schools in Kashmiri), but such efforts were limited. As a result, until modern times Kashmiri remained primarily oral, with its written forms confined to poetry, religious texts, and occasional translations (for example, legends or scripture rendered into the vernacular).

Scripts: Over time Kashmiri was written in three main scripts. The Sharada script (8th–20th c.) was the historic script of Kashmir. It was used for early manuscripts in Sanskrit and Kashmiri alike and survived in Pandit rituals. After the 14th century, the Perso-Arabic (Nastaliq) script became dominant for Muslim writers. By tradition, Kashmiri Muslims still write in Perso-Arabic today. Kashmiri Pandits meanwhile shifted to Devanagari for Kashmiri (and still use it in publications and liturgy), so that today "Kashmiri Muslims write their language with the Arabic script, and Kashmiri Hindus use the Devanagari alphabet". (In the late 20th century, Kashmiri in India was made an official language, using a modified Perso-Arabic script in practice.)

Notable Figures and Texts: Key authors illustrate this history. As noted, the 14th-century saint-poets Lal Ded (Lalleshwari) and Nund Rishi wrote mystical poetry in the emerging Kashmiri dialect, effectively *founding* its literary tradition. In the 15th century, Avtar Bhatt produced the *Bansha Katha* (an episode of the Ramayana) in Kashmiri during Sultan Zain-ul-Abidin's reign. The 16th century saw the great poetess Habba Khatoon (Queen of Yusuf Shah Chak) compose lyrical love songs, and mystic poets like Abdur Rehman Rasa and others continued writing in Kashmiri under Mughal rule. By the 18th and 19th centuries, figures such as Pandit Gopi Nath Koul (known as *Mahjoor*, 1885–1952, slightly beyond our cutoff) and others modernized Kashmiri poetry, drawing on both local tradition and Urdu influences. Throughout, the primary genres were devotional songs (*vakhs*, *watsuns*), romantic and patriotic lyrics, and folklore.

In sum, the Kashmiri language evolved from a Dardic base to an Indo-Aryan vernacular overlaid by Sanskrit and Persian layers. Its phonology and grammar reflect unique retention of archaic Indo-European features (e.g. original *du-* in numerals) combined with innovations (e.g. verb-second order). Its vocabulary became a tapestry of Sanskritic heritage and later Persian/Arabic borrowings. Socially, Kashmiri remained the language of the valley's people, while its literary fortunes waxed and waned with shifting political powers. By the early 1900s

Kashmiri had a continuous (though modest) literary output, a strong oral tradition, and a tri-scriptural writing system (Sharada, Perso-Arabic, Devanagari) that together testify to its rich historical journey.

Sources: Authoritative historical linguistics and ethnographic surveys (e.g. Grierson's *Linguistic Survey of India*, Kachru 1969, Omkar Koul's works) and reference works (Encyclopaedia Britannica, Scriptsource) provide the basis for this overview. All statements above are supported by these sources.

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The Kashmiri Writing System: From Sharada to Perso-Arabic and Devanagari (8th–19th Centuries)

The Kashmiri language has been written in several scripts over its history. The oldest and indigenous script is Sharada, a Brahmi-derived alphabet that emerged in the 8th century CE. Sharada was the primary writing system in medieval Kashmir, used especially by Hindu scholars and for Sanskrit literature. For example, a 19th-century Kashmiri manuscript in Sharada is shown below:

Example of a 19th-century Kashmir Sharada-script manuscript page (Sanskrit text). Sharada descended from the North Indian Gupta script and corresponds letter-for-letter with Devanagari, but with more angular forms. Early Sharada inscriptions appear by AD 804 (Kashmir and Punjab). Inscriptions from the 9th–10th centuries on Utpala coins and the Avantiswami temple jar (Avantivarman's foundation, 855–883 CE) show Sharada in. Through the 10th–12th centuries it spread across the western Himalayas (Punjab, Himachal, Afghanistan), but in Kashmir it remained in continuous.

Sharada was not only an epigraphic script but also a literary one. Many Sanskrit works (e.g. *Rajatarangini*) were written in Sharada. Kashmiri Pandit scholarship remained Sanskrit-based: even the 11th-century poet Kṣemendra urged Sanskrit poets to study bhasa-kāvya (vernacular Kashmiri verse) alongside Prakrit. Manuscripts of those *bhasa-kāvya* (and the Sanskrit chronicles) survive in. Sharada continued in use into the modern era – often confined to Hindu ritual contexts (birth records, horoscopes, and temple rites). In fact, Kashmiri scribes used special Sharada diacritic signs for Kashmiri sounds (as later also used in Devanagari) all the way through the early 20th century.

Islam and the Perso-Arabic Script (14th–19th C)

With the arrival of Islam in Kashmir (c. 14th century), Persian language and culture gained prominence. Soon after Muslim rule began (c. 1339 CE), the Perso-Arabic writing system was introduced alongside Sharada. According to Kashmir Pandit scholar K. N. Pandit, during Sultan Zain-ul-Abidin's reign (1420–1470) both scripts were used: Kashmiri's elites wrote in Persian script (in Persian and Kashmiri), while Brahmin priests and pandits continued to write in

Sharada (and in Sanskrit). Over time Persian became the official and prestige language of the state (under Shahi, Mughal, Afghan and Sikh rulers). Persian (written in Perso-Arabic script) was studied in Kashmir's schools, and creative writers often regarded writing in Persian as an honor. By contrast, Kashmiri literature existed mainly at the folk level (e.g. the 16th-century rumaal poems of Habba Khatoon), and Kashmiri-language texts were often recorded in Sharada if by Hindus, or in Perso-Arabic if by Muslims.

After roughly a century of Muslim rule, Persian became the official state language of Kashmir. Persian rule continued under the Mughals and Afghan governors, until the Dogra regime (after 1846) finally replaced Persian with Urdu in 1907. The Perso-Arabic script (often in a Nastaʿlīq style) was thus the dominant script for administrative and literary use. In practice, Muslims of Kashmir routinely wrote Kashmiri in Perso-Arabic letters (with added vowel marks) for their religious and secular texts. Kashmiri Muslim poetry and chronicles from the 15th–19th centuries (e.g. Shaikh Ya'qub Ṣarfī's works, or the *Bahāristān-e Shāhī* chronicle) were composed in Persian, but any Kashmiri idioms would also use Persian script. Some 19th-century Kashmiri religious texts (like the will of the Sufi saint Maqdoom Sahib, housed in Srinagar) survive in both Sharada and Perso-Arabic scripts. By the late 1800s, the Perso-Arabic Kashmiri script was so widespread that both Hindu and Muslim authors could use it; only in recent decades has it been sometimes framed as "the Muslim script" for Kashmiri, with Devanagari presented as a "Hindu script".

Devanagari and Other Scripts (19th–Early 20th C)

Under British influence and rising Hindu cultural nationalism, Devanagari (Nagari) began to be used for Kashmiri by Pandit intellectuals. The first major use of Nagari was by Pandit Ishwar Kaul, who in 1879 wrote the *Kashmīra-Śabdāmṛitam*, a Sanskrit treatise on Kashmiri grammar using Nagari. George A. Grierson later adopted Ishwar Kaul's system of Nagari diacritics for his own *Linguistic Survey of India* materials and Kashmiri dictionary (1906). In the early 20th century, Kashmiri newspapers and periodicals began to include Nagari editions or sections: for instance, the Lahore *Bahāre-Kashmīr* (1930s) and Srinagar's *Pratāp* magazine printed Kashmiri in both Perso-Arabic and Devanagari. (Even though this is slightly past our 1900 cutoff, it reflects the late-19th trend.)

By the late 19th century, therefore, three scripts were in use: Sharada (now almost exclusively for Hindu ritual), Perso-Arabic (dominant among Muslim writers and officialdom), and Devanagari (used by some Kashmiri Pandits and scholars). In rural and folk contexts, Kashmiri continued mainly as an oral idiom, but Islamic Kashmiri poetry (shruks) and some Hindu narratives (vakhs of Lallā, which were first recorded in Sharada) attest to the vernacular's literary tradition. During this period the *first Kashmiri Bible* was translated (1822) into Kashmiri in Sharada, with a second edition in Nastaʿlīq, reflecting both traditions.

Cultural and political forces underlay these shifts. Muslim rulers promoted Persian literacy and gave little encouragement to a distinct Kashmiri script. Kashmiri Pandits, conversely, retained Sharada for religious texts but increasingly turned to Hindi/Dev nagari under North Indian influence. By the 20th century, modern Kashmiri education and printing favoured Perso-Arabic for Muslims and Devanagari for Hindus (reflecting the wider Hindi-Urdu divide), although officially the Kashmiri Perso-Arabic script was later standardized and recognized by the Jammu & Kashmir government. Throughout, religious identity and power structures strongly shaped which scripts individuals learned and used.

Sources: Authoritative histories and surveys note that Sharada emerged in Kashmir by the 8th century (earliest records ~804 CE) and remained in use (esp. among pandits) until modern . Manuscript evidence (Munīmatā-maṇimālā, Ṣādhanaṅgaśastra, etc.) and inscriptions (coins of Avantivarman, Didda, etc.) illustrate Sharada's medieval. Encyclopaedia Iranica and other studies document the Persian influence from the 14th century onward, and colonial sources (Grierson, Kashmiri scholars) detail the later adoption of Perso-Arabic and Devanagari scripts. These sources provide the basis for the above chronological account.

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Development of Scientific Vocabulary in the Kashmiri Language

Historical Influences on Kashmiri Scholarly Vocabulary

Kashmiri is a Dardic (Indo-Aryan) language that from its origin has incorporated layers of scholarly vocabulary. In antiquity and the medieval period, classical Sanskrit made deep inroads into Kashmiri: about half of Kashmiri words are ultimately Sanskrit-derived. After the 14th century, Islamic rule brought Persian as the court and literary language of Kashmir. Under rulers like Zainu'l-Abedin (15th c.), Kashmiri "began to accept the influence of Persian", absorbing Persian and Arabic terms (often via Persian) into its lexicon. Persian remained the official language of the sultanate and Mughal Kashmir, and even after about a century of Muslim rule it "was replaced by Urdu in 1907". (Urdu remained the state language through the Dogra period and after 1947.) Thus early Kashmiri scholarship was framed in Sanskrit and Persian–Urdu vocabularies, with Kashmiri itself remaining primarily the spoken vernacular.

Colonial and Pre-Independence Period

During the Dogra (19th–20th c.) and British periods, formal education in Kashmir was conducted largely in Urdu and English. No major system for scientific or technical Kashmiri terminology existed: science teaching at schools and colleges used Urdu or English. Linguists and orientalists did document Kashmiri, however. For example, George Grierson's *Dictionary of the Kashmiri Language* (1932) catalogued words of many kinds, and Central Institute of Indian Languages (CIIL) linguists like Jawaharlal Handoo compiled common-word glossaries (e.g. *Hindi-Kashmiri Common Words*, 1975). But technical or specialized terms were not standardized in Kashmiri at that time, being learned chiefly in English or Urdu.

Post-Independence Development: Institutions and Policies

After 1947, Indian and J&K policies gradually encouraged regional languages. In 1958 the Jammu & Kashmir Academy of Art, Culture and Languages (JKAACL) was founded as an autonomous society to promote Kashmiri and other regional languages. Its mandate includes publishing scholarly works, encyclopedias and dictionaries, and sponsoring translations between Kashmiri and other languages. (Indeed, the Academy's objectives explicitly mention

“translations of literary works from one regional … language into others”.) Kashmiri’s status rose further when it was made an official language of J&K in 2020 by law, alongside Hindi, Urdu, Dogri and English.

Universities also played a key role. The University of Kashmir established a research cell in Kashmiri in 1974, which became a full-fledged Kashmiri department by 1979 and now oversees master’s and doctoral programs. The Central University of Kashmir (est. 2009) likewise includes a Department of Kashmiri. These departments have published textbooks, glossaries and language courses in Kashmiri. For instance, UoK’s Kashmiri Department has a *Publication Cell* that “produces textbooks, reference materials, and research monographs in Kashmiri” for its students and scholars. Central government bodies contributed as well: the Central Hindi Directorate (Ministry of Education) issued trilingual “Hindi–Kashmiri–English” dictionaries in 1988, and scholars like Omkar Koul et al. compiled specialized glossaries (e.g. an *English–Kashmiri Administrative Terminology*, and a *Library and Information Science* English–Hindi–Kashmiri glossary) under the Commission for Scientific and Technical Terminology (CSTT). In 1961 India’s CSTT was created precisely “to evolve technical terminology in all Indian languages”; it now works with state academies, universities and translation missions to standardize scientific terms across languages.

At the state level, J&K’s reorganization in 2019 led to a new Society model for JKAACL (from 2021) under the Lieutenant Governor, modeled on the national *Sahitya Akademi* framework. This society continues to support Kashmiri lexicography and translation, and sponsors cultural events where scientific ideas may be discussed in Kashmiri. In short, post-1947 Kashmiri saw a proliferation of language bodies (state and central) and academic departments mobilized to expand its corpus, including for science and technology.

Translation Movements and Terminology Standardization

A key phase in Kashmiri scientific vocabulary has been the ongoing push to translate and standardize terminology. National initiatives like the National Translation Mission (NTM) explicitly aim to make “knowledge texts accessible in all Indian languages” and note that “standardization of technical and scientific terminology is a primary requirement” for this task. NTM works closely with the CSTT to define terms in the 22 scheduled languages, including Kashmiri, so that textbooks and scientific literature can be accurately translated.

Locally, the University of Kashmir and CSTT have begun organizing technical-glossary workshops. For example, in June 2024 UoK’s Electronics & IT department co-hosted a two-day seminar “*Kashmiri Technical Terminology and its Role in Science and Technology*” with CSTT. Similarly, 5-day workshops in 2023–24 produced “Fundamental Glossaries” for fields like broadcasting and electronics (English–Hindi–Kashmiri glossaries compiled by faculty and CSTT experts). These events explicitly aim to “evolve and improve the technical terminology” in Kashmiri, engaging scholars and students. The goal is a set of common, uniformly defined Kashmiri terms, as emphasized by CSTT officials (who noted the need for “common, uniform and standardised terminology” across India’s diverse languages).

At the institutional level, JKAACL and UoK have also issued Kashmiri readers and textbooks. For instance, the University’s Kashmiri department published the *Kạshur-Hindi Reader* (1979) and later series of school texts (*Kashir Kitab*, 1982 onwards) to teach Kashmiri even to non-native students. Such publications lay groundwork for science education in Kashmiri. The Academy’s multi-volume *Kashir Dikshanri* (1968–80) and later dictionaries by scholars like

Shafi Shauq (2017) provide lexical reference across domains. In recent years, CSTT itself has released Kashmiri glossaries on varied subjects (e.g. administrative terms, library science) to build reference material. Overall, translation movements in Kashmir have focused on creating standardized glossaries and teaching materials to fill gaps between English/Urdu and Kashmiri scientific lexicons.

Examples of Kashmiri Scientific Terms

Illustrative examples show how Kashmiri technical terms often differ from everyday words. One case is "electricity." In colloquial Kashmiri, the native word *bijli* means "lightning" or "electricity," and this term has been adopted formally for electricity in technical contexts. Thus the Koshur grammar/glossary lists *bijli* (f.) = "electricity". (Everyday speech also uses *bijli* for "lightning," but its technical use requires it to denote electrical power specifically.) Similarly, English "energy" is often expressed in Kashmiri with Persian-derived words like *tāqat* (طاقت) or *tawanayi* (توانائی) meaning "strength/power," whereas casual language might use more general terms.

More complex concepts typically need compound or borrowed formations. For example, some speakers have proposed Sanskrit-style compounds like *padārth* (from Sanskrit *padārtha*, "matter") for "matter," or constructed terms for "electron" or "vector." (Unofficial community glossaries suggest coinages such as *ākator* for atom or *vaahun* for vector, showing how logical root-formation is used.) The technical vocabulary often uses affixes or multi-syllabic compounds not common in colloquial speech. For instance, scientific terms may preserve Sanskrit/Persian inflections and derivations to keep one-to-one meaning, whereas everyday Kashmiri favors simpler, frequently borrowed words.

Register Comparison: Scientific vs. Colloquial Kashmiri

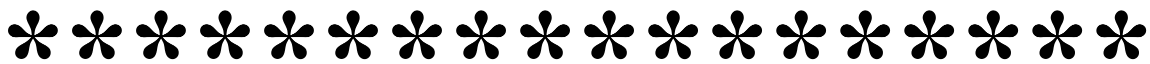
Scholars note that a formal scientific register in Kashmiri is inherently more precise and regularized than colloquial speech. Administrative and academic efforts stress that technical terms must have exact definitions. As one report on a recent seminar remarked, developing "precise technical terminology in regional languages like Kashmiri is crucial for advancing technical education". In practice, this means Kashmiri technical vocabulary aims to reduce ambiguity: each concept (say, a scientific principle) is matched to one standard term, unlike in everyday speech where multiple synonyms or loanwords might be used loosely. The Vice-Chancellor of Kashmir University observed that using native technical terms "enhances comprehension and retention" because students learn concepts with one clear Kashmiri label.

By contrast, spoken Kashmiri is more flexible. Many Perso-Urdu loans in conversation have variable gender or meaning, whereas scientific glossaries seek consistency. For example, ordinary speakers might refer to a magnet with the word *kahrub* (کهرب) borrowed from Persian "amber," but a technical lexicon might opt for a coined term to avoid confusion. The very process of standardizing shows the difference: NTM notes there is "no uniformity" in existing technical terms across dialects, so glossaries are needed. In sum, Kashmiri academic language tends to "tighten" the lexicon – borrowing as needed but fixing definitions – so that each term has a controlled meaning. This gives the technical register a tighter logical structure than everyday speech.

In summary, Kashmiri scientific vocabulary has evolved from a mix of Sanskritic and Persian roots in early times, through a colonial hiatus of Urdu/English dominance, into a modern period

of conscious language planning. Institutions like universities and language academies (and national bodies like CSTT/NTM) now actively create and disseminate Kashmiri science terms. The result is a specialized lexicon where examples like *bijli* (“electricity”) or Persian-derived *tawanayi* (“energy”) demonstrate how formal terminology can differ structurally from daily speech – precisely defined and often compound – reflecting the language’s adaptation to the needs of science and scholarship.

Sources: Authoritative histories and studies of Kashmiri (e.g. Encyclopædia Iranica; linguist N. Gorekar cited in Wikipedia); official language policy documents and news (J&K Official Language Act 2020, Rising Kashmir reports); university and Academy publications and websites; and published Kashmiri dictionaries/glossaries. All references are cited in the text.



Nepali people

Historical Development of the Nepali Language up to the Early 1900s

The Nepali language is an Indo-Aryan tongue with deep roots in the Indian subcontinent's linguistic history. Modern Nepali (also historically called Khas Kura, Gorkhali or Parbatiya) evolved from Sanskrit through successive Middle Indo-Aryan stages. By the early medieval period it had emerged as a distinct Eastern Pahari language. Linguists link Nepali to the speech of the ancient Khasha people of the Himalayas: inscriptions of 13th–14th century Khasha rulers (e.g. Ashoka Challa, r.1255–1278) use an early form of Nepali. Comparative evidence places Nepali in the *Khasa Apabhramsha* group (a late Prakrit stage). For example, studies note that in the 11th–12th centuries Dardic-speaking Aryans (the Khas and related tribes) penetrated the central Himalayas, and that the Khasa speech (Khaskura) was overlaid by Indo-Aryan elements from the plains. Overall, Nepali is descended from Sanskrit via Prakrit and Apabhramsha: scholars commonly state that it "emerged as a distinct language around 1000 A.D.", borne out by the 10th-century Damupal's Inscription of a Khasa king in the Karnali.

Archaeological and textual data support this timeline. The earliest known Nepali-language inscription is the *Damupal* (or Dullu) inscription from Dailekh (c.981 AD), issued by King Bhupal . This and other medieval steles show that Khas kings in western Nepal were already using Old Nepali for official inscriptions by the 10th–13th centuries. After the 13th century, wave of migrants from northern India (Rajputs, Brahmins, etc.) fled into the Himalayan foothills. As these Indo-Aryan groups interacted with the local Khas populations, the language of the Khas (Khaskura) spread eastward and assimilated many vocabulary and grammatical features from the new arrivals. By the later medieval era (14th–15th centuries), Khaskura had blended with Prakrit-derived dialects and even elements of Awadhi, Bhojpuri, Maithili, and other Indo-Aryan tongues brought by migrants or traders. In particular, the Sena rulers of central Nepal (15th–18th c.) unified hill and Terai regions under their sway, exposing Khaskura speakers to these plains dialects. The net effect was that Nepali acquired a larger vocabulary, simpler grammar, and softer phonology – traits that helped it become a common lingua franca among the ethnically diverse peoples of Nepal's mid-hills.

The Khasa (Khas) Kingdom and Early Linguistic Influences

The medieval Khas (Khasha) kingdom in western Nepal was the crucible in which Nepali first formed. In Sanskrit and Puranic texts, "Khasas" are recorded as a Himalayan people; by the 12th century the Khasas ruled over western Nepal and parts of Garhwal and Kumaon. King Ashoka Challa (r.1255–78) even styled himself *khaṣa-rājādhi rāja* ("emperor of the Khashas"). His court inscriptions use a language identifiable as proto-Nepali (Old Khas), showing that by

then Khaskura was already established. Linguists note that this period (mid-12th c.) was globally the "last stage of the Apabhramshas" in North India, and they explicitly link Nepali to "Khasa Apabhramsa and Dardic/Paishachi Prakrit".

The collapse of Khas power (by c.1400) dispersed Khasa speakers. Political fragmentation drove many Khasas eastward into Nepal's mid-hill valleys. These migrants continued to call their language Khaskura or *Khasî* ("language of the Khasas"). As they settled among Tibeto-Burman and other Himalayan tribes, Khaskura absorbed local words, but it also maintained its Indo-Aryan base. Over the next few centuries it became one of the major Pahari dialects spoken in Nepal. By the late 16th–18th centuries, Nepali (as Khaskura/Gorkhali) was the mother tongue of hill populations across western and central Nepal, although in the Kathmandu Valley itself the Newar language (Nepal Bhasa) remained literate and prestigious.

Linguistic Evolution through Contact and Standardization

Throughout its evolution Nepali remained an Indo-Aryan language heavily influenced by Sanskrit and neighboring Prakrits. Culturally, Nepal's terrain connected India's plains with Tibetan hinterlands, so Nepali absorbed features of surrounding tongues. For example, contact with Maithili and Bhojpuri speakers during the Sen era enriched its lexicon with Maithili and Awadhi words. Nepal's Eastern Pahari relatives (Kumaoni and Garhwali) are closely related dialects, reflecting a common ancestry in the old Khasa. By the end of the medieval period, Nepali had simplified from its complex Sanskrit heritage: the case system was reduced, sounds softened, and many honorifics from older Indo-Aryan registers were dropped.

In the 18th–19th centuries, administrative and literary influences added further layers. After the Muslim conquests of India (15th c.) sent Rajput and Brahmin immigrants into the hills, they brought Persian and Arabic loanwords via Mughal culture. Later, contact with Hindi and Bengali also introduced new vocabulary. In fact, ethnographers note that by the early 20th century, Nepali's formal/legal register (for administration) contained many Persian and Arabic terms, while the spoken language freely borrowed from Sanskrit and other northern Indian languages as needed. However, the core grammar and structure remained solidly Indo-Aryan.

Scripts: From Brahmi to Rañjana to Devanagari

The written history of Nepali also reflects Nepal's multi-script heritage. In ancient times the region's inscriptions were carved in Brahmi-derived scripts. For example, during the early Licchavi period (4th–8th c. CE) locally-used varieties of Gupta/Brahmi script appear on stone. By the 10th century, a distinctive Nepalese (Rañjana/Prachalit) script had developed in the Kathmandu Valley. (This *Nepal Lipi* was used mainly by Newars for Sanskrit and Nepal Bhasa texts, but it also saw some use in inscriptions and manuscripts of the time.) Copperplate records and manuscripts from the 11th–14th centuries – including the Gopalarājavamsāvali and Buddhist sutras – are often written in Rañjana or related Nepalese scripts.

With political change, script usage shifted. When the Shah dynasty (Gorkha kings) conquered the Kathmandu Valley (c.1769 AD), they began to favor the Devanagari script that the Khas/Gorkha elite used. Devanagari was already widely known in India as the medium for Sanskrit and northern literatures, so it became the natural choice for the new unified state. By the late 18th century the Shah and Rana regimes issued edicts in Devanagari. For example, King Rana Bahadur Shah (ruled 1777–99) ordered the Limbu people (in eastern Nepal) to use Nepali written in Devanagari in official correspondence. Likewise, Prime Minister Jung Bahadur Rana

(1856) banned all non-Nepali languages from government business, thereby enforcing Nepali in Devanagari in administration. In short, Rañjana and other local scripts gradually fell out of use for state affairs, being "supplanted by the modern script known as Devanagari". By the early 20th century, Nepali literature and newspapers were uniformly printed in Devanagari, which remains the official script today.

Unification under the Gorkha Kingdom

The eighteenth century was a turning point. In 1743 Prithvi Narayan Shah, ruler of the small Gorkha kingdom, launched a conquest of neighboring principalities. By 1768–69 he had captured the Kathmandu Valley and many hill states, "unifying" Nepal under the Shah dynasty. Prithvi Narayan Shah based this unification on a clear national vision: the *chaukas (caste)*-Hindu hierarchy and a single language. Nepali (then called *Gorkhā Bhāṣā* or *Khaskura*) was promoted as the language of state and society. The king famously declared Nepal's unity on four pillars: the divine king (to be *Chhindyeshwor Mahārājā*), Hindu religion, the caste system, and Nepali as the language of administration and education. Henceforth the ruling Gorkha elite and courts used Nepali almost exclusively for governance, rituals, and internal correspondence. (Kathmandu's traditional Newar bureaucracy was systematically replaced or assimilated.)

After unification, Nepal's rulers and nobility identified themselves as Gorkhali (or Gurkhali), and their language came to be called Gorkhali too. In official contexts it was often termed *Nepālī Bhāṣā*, especially after 1933 (when the royal language committee renamed itself the Nepali Bhasa Prakashini Samiti). Culturally, the crown patronized Nepali: court poets and scholars wrote in it, and important chronicles began to appear in Nepali alongside Sanskrit. By the early 19th century, the conquest-era demand that all subjects learn Nepali meant the language spread widely. In effect, after unification Nepali became Nepal's de facto national language and lingua franca. (Even before formal independence from British India, Nepal's rulers had ensured that foreign correspondence with the British and Tibetans used Nepali in Devanagari.)

Early Literary Works and Authors

In the early centuries Nepali literature was mostly oral. Folk songs, ballads, and local legends circulated among villagers. Surviving written examples before the modern age are rare. Inscriptions (like Damupal's stone) are a primary source: for instance, the 14th-century Dullu stele is one of the earliest Nepali inscriptions known. Some religious or epic texts also began to be rendered in Nepali. For example, fragments of the *Bhaswati* (a Sanskrit text) were translated around 1400 AD, and the *Śrī Swa-sthānī Brāṭa Katha* (based on the *Skanda Purāṇa*) existed in Newari and Nepali versions by the early modern period. However, until the 19th century nearly all high literature (court histories, philosophy, drama) in Nepal was written in Sanskrit or Newari, not Nepali.

The true literary flowering began in the 1800s. *Bhanubhakta Acharya* (1814–1868) became Nepal's first great Nepali poet. He is celebrated as the *"Adhikabi"* (First Poet) of Nepali, chiefly for translating the Sanskrit Rāmāyaṇa into Nepali. Bhanubhakta rendered the epic into a lively Nepali verse (around 1844), making it accessible to common people. His work was immensely popular for its colloquial style and piety. Bhanubhakta also composed original poems on morality, social satire and devotion. His generation saw a small circle of poets adopting Nepali (rather than Sanskrit) for literature. For instance, Saint Gyanadatta composed the devotional

Udayalaharī in Nepali. By mid-19th century a body of Nepali poetry existed, though it remained confined to a few authors of aristocratic or Brahmin background.

Toward the late 19th and early 20th centuries, Nepali prose began to emerge. The Kathmandu Darbar Pathshala (royal school) and later private efforts generated textbooks and grammars. The *first Nepali novel* is usually given as Bir Charitra (The Brave Character), penned by Girish Ballabh Joshi in 1903 (Samvat 1960). (The Rana regime had banned it; only the first part was published clandestinely.) Other early works include Rudra Raj Pande's *Roopmati* (1934, slightly beyond our period) and assorted travelogues, diaries, and religious verse. Importantly, Nepali began to carry a written standard: in India's Benares, missionaries and expatriate scholars like Archibald Turnbull (publishing a Nepali grammar in 1887) and later Ram Mani Acharya Dixit (1883–1972) worked to codify Nepali grammar, orthography and print culture.

Standardization, Patronage and Spread

Under the Shah and especially the Rana regimes (1846–1951), Nepali received firm official backing – though often by suppressing other tongues. The policy was explicitly monolingual: school curricula and government decrees were in Nepali (Devanagari), and other languages were barred from formal use. For example, Prime Minister Jung Bahadur Rana decreed in 1854 that no language other than Nepali be used in government service. This enforcement helped standardize Nepali as the common language of urban administration and elite culture. In practice, it also meant that Newari, Maithili, and other local languages were marginalized in Kathmandu's power structure.

Print media played a role too. With Nepal's opening to the outside world in the late 19th century, printing presses arrived (often run by expatriates or missionaries). The first Nepali-language book printed within Nepal dates to 1898, and the first Nepali newspaper, *Gorkhapatra*, began in 1901. These fostered a common literary standard and disseminated modern Nepali beyond the court. Diaspora communities also spread Nepali. In British India (Darjeeling, Sikkim, Assam), Gorkha soldiers and migrants founded schools and presses in Nepali. By the early 20th century Nepali was a regional lingua franca: it was the majority language in much of Nepal and the lingua franca of hill communities in Sikkim, Bhutan, and the Darjeeling Himalayas.

The early 1900s saw institutional efforts to promote Nepali literature and language study. In Kathmandu, the government established the *Gorkha Bhasa Prakashini Samiti* in 1913 (1970 BS) to publish Nepali literature, later renamed the *Nepali Bhasa Prakashini Samiti* in 1933. Modern Nepali scholars began compiling dictionaries, grammars and history. Although Ranas were conservative, some did patronize Nepali writers; for instance, Motiram Bhatta (a key 19th-century poet-publisher) revived interest in Bhanubhakta's work around 1890.

Conclusion: Nepali by the Early 20th Century

By the dawn of the 20th century, Nepali had transformed from a regional dialect of the Khas hills into Nepal's national language. It was firmly Indo-Aryan in structure but richly layered by centuries of contact. Officially written in Devanagari and taught in schools, it served as the language of the court, army, and increasingly of commerce. Nepali had a growing modern literature, including poetry, prose, and translations, and it functioned as the lingua franca across Nepal's ethnolinguistic mosaic. Sanskrit and Persian influences remained visible in its vocabulary (especially in formal registers), but everyday Nepali had acquired its own identity and simplicity. In summary, by the early 1900s Nepali stood as the consolidated language of a

newly unified Nepal – a literary language championed by its poets and the instrument of national administration – poised to enter the modern era as Nepal's de facto official language.

Sources: Authoritative histories and linguistic studies of Nepali. Each section above cites these sources in context.

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Historical Development of the Nepali Writing System

The written tradition of Nepal traces back to the 3rd century BCE with Ashoka's Brahmi inscriptions (e.g. the Lumbini pillar inscription in Brahmi script identifying Buddha's birthplace). Over the centuries, this Brahmi-derived lineage evolved through Gupta-era forms during the Licchavi period (5th–9th centuries CE) and into a rich family of local scripts. In the medieval era (from the 10th century onward), indigenous Nepalese ("Newar") scripts such as Rañjanā, Bhujimol, Prachalit, etc. emerged and flourished. These ornate scripts were used primarily for religious and courtly literature (Sanskrit and Nepal Bhasa), but by the 19th century Devanagari – the familiar script of northern India – became the standard for writing Nepali (Khas/Parbatiya). The shift to Devanagari was accelerated by state policies after the Gorkha unification (1768) and Rana rule, eventually replacing the older Nepalese scripts in most official and literary contexts.

Figure: Chronological evolution of scripts in Nepal. This chart (Hemraj Shakya) shows Brahmi-derived letters evolving through Licchavi forms to medieval Nepalese scripts (Rañjanā, Bhujimol, Prachalit) and ultimately to modern Devanagari. It highlights the continuity of letter shapes from ancient to modern times.

Ancient Scripts: Brahmi and Gupta (up to 9th century CE)

The earliest writing in the Nepal region used Brahmi script. Notably, Emperor Ashoka's *Lumbini pillar inscription* (3rd century BCE, in Nepal) is in Brahmi script. Over a millennium later, Licchavi-period inscriptions (5th–9th centuries) were carved mostly in Sanskrit using a late-Brahmi variant known as the Gupta script. Archaeological finds (stone inscriptions and coins) from this era (e.g. Changu Narayan temple, 5th–6th c.) bear Sanskrit text in Gupta-derived letterforms, showing the continuity of the Brahmi tradition in Nepali lands. (These early inscriptions reflect religious dedications in Hindu or Buddhist contexts, but the scripts themselves are direct descendants of the pan-Indian Brahmi heritage.)

Emergence of Nepalese Scripts (10th–18th centuries)

From the 10th century AD, a distinct "Nepal Lipi" (Newar script) family developed in the Kathmandu Valley. Early examples include Buddhist manuscripts: a *Lankāvatāra Sūtra* dated Nepal Era 28 (908 AD) and a *Prajñāpāramitā* text (920 AD). By 1041 AD one of the oldest extant *Rāmāyaṇa* manuscripts was written in a Nepalese script. Over the next centuries the Prachalit Nepal script (and its variants like Rañjanā and Bhujimol) became dominant for ritual

and literary writing. These scripts were used on stone, coins, palm-leaf manuscripts and temple inscriptions. For example, the *Gopālarājavaṃśāvalī* (a history of Nepal, 1389 AD) was composed in Nepal Lipi, and even the 1775 AD Nepal–Tibet Treaty was penned in a Nepalese script. These scripts are typified by horizontal head-bars and ornate curves: the Rañjanā script (emerging around the 11th century) was used by the Newar people to write Sanskrit and Nepal Bhasa and is still used decoratively (e.g. on prayer wheels). Similarly, Bhujimol – literally "fly-headed" – is the oldest form of Nepal Lipi, used for Nepal Bhasa and Sanskrit as early as the 3rd century BCE on a rediscovered brick.

Religious and Cultural Influences

Religion played a key role in the script development. Kathmandu (the Nepal Mandala) was a hub of both Hinduism and Vajrayana Buddhism. Buddhist mantras and sutras were inscribed in Rañjanā and other Nepalese scripts (as seen on monastery prayer wheels). These scripts spread to Tibet, China, Japan and beyond for Buddhist purposes. Conversely, Hindu elites patronized Sanskrit learning, reinforcing the use of Brahmi-derived scripts. The rulers of the Malla era (12th–18th c.) were Hindu kings ruling Newar-speaking lands, and official documents often appeared in Sanskrit (in Nepal Lipi) or mixed languages. Outside the valley, the Khas (Gorkha) people spoke an Indo-Aryan (Khas) language. Their cultural ties to the Himalaya meant that by the medieval period, Nepali (Parbatiya) was influenced by Sanskrit but eventually written using the Brahmi-derived Devanagari (as in neighboring India) rather than the valley's Nepalese scripts. Some Newar sources even note that scribes occasionally wrote Khas-language texts in Nepal Lipi, but this was never widespread.

Gorkha Unification and the Shah Dynasty (1768 onward)

The unification of Nepal under Prithvi Narayan Shah in 1768 was a watershed. The Gorkha conquest brought the Kathmandu Valley under one state. Prithvi Narayan and his successors elevated *Parbatiya* (the Gorkhali language, later called Nepali) as the state tongue. In effect, Nepali (Khas) became the court and military language. Politically, this marginalized the older Newar (Nepal Bhasa) scripts. Contemporary chronicles report that Shah rulers suppressed Nepalese scripts and language in administration and trade. By decree, property deeds and official documents had to be in Nepali using Devanagari (as seen in 1912 when Rana PM Chandra Shamsher invalidated texts in any other language or script). In practical terms, from the late 18th century Nepali elites were schooled in Sanskrit-medium learning but wrote their affairs in Devanagari script (the traditional script of Sanskrit scholarship in India). Thus the Gorkha-Shah state effectively standardized Devanagari as the script for Nepali.

Transition to Devanagari as the Dominant Script

Even before unification, some Nepali (Khas) inscriptions appear in Devanagari. For instance, a 17th-century Doti copper inscription (King Mandhata Shahi, 1747 B.S.) is in old Khas language written in Devanagari. After 1768, the use of Devanagari spread rapidly. The first modern legal code (*Mulukī Ain*, 1854) was drafted in Nepali (then "Gorkha Bhasa") and Devanagari. From the Rana era onward, Devanagari became ubiquitous: by 1906 the regime outright banned Nepal Bhasa and Nepal Lipi in official use, encouraging all writers to adopt Devanagari. By the early 20th century, all government work in Nepali was officially in Devanagari. (Nepali is still written in Devanagari today.) In remote ethnic areas Tibetan-derived scripts were sometimes used for ethnic languages, but even ethnic Nepali speakers exclusively used Devanagari for Nepali writing.

Use of Written Nepali in Administration, Literature, and Religion

Under Shah/Rana rule, Nepali became the administrative language. Judicial and state documents, royal proclamations and the census were all recorded in Nepali/Devanagari. The 1854 Mulukī Ain explicitly declared Nepali (Gorkha) as the sole official working language. Nepal's first national newspaper, *Gorkhapatra*, began in 1901 (in Nepali). In literature, Nepali gained rapid new life. Prior to unification there were few Nepali-language books (most religious books were Sanskrit or Newar). But from the early 19th century a Nepali literary renaissance occurred: Pundits composed epics and kīrtan in Nepali, culminating in *Bhanubhakta Ācārya*'s translation of the *Rāmāyaṇa* (1830s–1840s), which became hugely popular for its devotional style. Likewise, romantic and social poetry emerged by late 19th/early 20th centuries. In religious life, vernacular Nepali found a role in sermons, folk songs, and later printed spiritual texts (e.g. Nepali versions of *Rāmāyaṇa*, *Bhagavat Purāṇa*). Nonetheless, Hindu temple rituals remained in Sanskrit, while Newar Buddhist communities continued using classical Nepal Bhasa for their own religious writings. (Thus in pre-modern Kathmandu, three scripts often coexisted in culture: Sanskrit in Devanagari or Nepal script, Newar literature in Nepal Lipi, and Nepali in Devanagari.)

Key Inscriptions, Manuscripts, and Milestones

Throughout this history, certain inscriptions and texts mark major shifts. For example, the Dullu copper inscription (~981 AD) in a western Khas kingdom is the oldest known Nepali-language text. In Kathmandu, most pre-18th c. inscriptions were Sanskrit, but by the 17th century local dynasts began including Nepali (Khas) as well – e.g. Pratap Malla's multi-lingual inscriptions (1654–1670 CE) show Nepali alongside Sanskrit and Nepal Bhasa. Manuscripts such as the 1389 *Gopālarājavaṃśāvalī* (history in Nepal Lipi) or the 1775 Treaty inscribed in Nepalese script mark the height of Newar literary culture. In the modern era, print media is a milestone: *Gorkhapatra* (1901) was Nepal's first national newspaper in Nepali. Likewise, the moveable-type printing of Nepal Lipi in 1952 (for a Nepal Bhasa journal) shows the final attempts to revive old scripts. Taken together, these artifacts illustrate the transition from ancient Brahmi and Gupta inscriptions to the indigenous Newar scripts of the Kathmandu Valley, and finally to the supremacy of Devanagari for Nepali by the early 20th century.

Timeline of Key Developments

- 3rd century BCE: Ashoka's Lumbini pillar inscription (Nepal) in Brahmi script.
- 6th century CE: Licchavi stone inscriptions (e.g. Changu Narayan) in Sanskrit, Gupta script.
- ~981 CE: Dullu copper inscription (Khas/Nepali language) – earliest known Nepali text.
- 908–920 CE: Oldest Nepalese-script manuscripts (Buddhist texts in Kathmandu Valley).
- 1041 CE: Early *Rāmāyaṇa* manuscript in Nepal script.
- 1389 CE: *Gopālarājavaṃśāvalī* (history of Nepal) written in Nepal Lipi.
- 1654–1670 CE: Malla kings (e.g. Pratap Malla) issue stone inscriptions in Sanskrit, Newar, and Nepali (Khas) simultaneously.
- 1768 CE: Prithvi Narayan Shah unifies Nepal (Gorkha conquest of Kathmandu), setting the stage for standardized Nepali in Devanagari.
- 1854 CE: *Mulukī Ain* codifies Nepali (Gorkha Bhasa) in Devanagari as the sole official language.
- 1901 CE: First issue of *Gorkhapatra* newspaper (state-run, Nepali language).

- 1906 CE: Rana government bans Nepal Bhasa/Nepal Lipi in administration, promoting Devanagari for all Nepali writing.

Each entry above is documented by historical sources, reflecting how political, cultural and religious shifts shaped the Nepali script over time.

Sources: Historical and linguistic studies of Nepali and Nepalese scripts. The chart image is from Hemraj Shakya's *Table of Evolution of Nepali Scripts*. The prayer-wheel photograph shows the Rañjanā script (a Nepalese script) still in ceremonial use.

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Historical Development of Nepali Literary and Journalistic Language

Origins and Early Development

Nepali (originally called *Khas Kura*) is an Indo-Aryan language descended from Sanskrit through Middle Indo-Aryan (Prakrit/Apabhraṃśa) forms. Its early development (10th–14th centuries, in the Khasa Kingdom) shows gradual evolution from these sources. During later medieval times, regional Indian languages left their mark: under the Sena dynasty (16th–17th c.), Nepali absorbed vocabulary and phonetic influence from Awadhi, Bhojpuri, Braj Bhasha, and Maithili. By the 1700s the Khas dialects had diversified, and one became the *prakrit*-derived *Gorakhā Bhāṣā* of the Gorkha rulers. Standard Nepali later crystallized in the hill dialects of the Kathmandu valley, but remnants of older forms (e.g. *–o, –i* adjective endings) and honorific levels (low/medium/high/very-high/royal) can be traced to these early strata.

- Sanskrit and Prakrit: Nepali grammar and a large share of its vocabulary derive from Sanskrit and its vernacular successors. Grammatical parallels (e.g. verb endings, participles, pronouns) reveal a direct lineage. Nearly five thousand Nepali words can be etymologically matched with Sanskrit counterparts.
- Persian, Arabic, English: In later centuries Nepali's formal registers drew on Persian and Arabic (especially for law and administration). Technical and modern concepts have brought in English loanwords. Today, modern spoken Nepali freely borrows from Hindi, English, and Sanskrit.

The Gorkha Unification (18th c.) and Royal Court Language

In the mid-18th century Prithvi Narayan Shah of Gorkha conquered Kathmandu Valley (1768) and declared *Gorakhā Bhāṣā* (the Gorkha tongue) the court and state language. This effectively made Nepali (then the Khas dialect of the hill Brahmin/Chhetri elite) the official language of a unified Nepal. Court documents from this era (e.g. Lal Mohar royal charters, 1769 onward) show Nepali in a nearly modern form, with only minor archaic grammar and orthography. The Shah kings' admonitions, such as Prithvi Narayan's famous *Divyopadeś* (advice), are among the earliest written samples of this state Nepali (then still called Gorkhā Bhāṣā).

Royal usage also entrenched a highly honorific register. As Britannica notes, Nepali has five honorific levels, the highest being the royal form "used exclusively to refer to or by the royal family". Under the Shahs and later the Rana monarchs, official prose often favored Sanskritic diction and formulaic praise. For example, Gorkha court language would traditionally say the king "rests" or "reposes" rather than simply "sleeps". This elaborate courtly idiom set a high-standard model for Nepali writing that would persist, especially in state media, well into the 20th century.

The 19th Century – Early Literature and Bhanubhakta Acharya

Literary Nepali begins in earnest in the 19th century. Early poets (c.1830s) often wrote in a Sanskritized style, retelling Hindu epics in a language "more Sanskrit than Nepali". However, Bhanubhakta Acharya (1814–1868) transformed Nepali letters. As the "*Adikavi*" (first poet), he rendered the *Ramayana* into Nepali in fluent, colloquial verse. Bhanubhakta's translation was celebrated for its simplicity, emotional sincerity, and *"colloquial flavour"*. In his own words and actions he insisted on using everyday speech, gaining popular acceptance even under a regime that otherwise preferred Sanskrit prestige. His work had a unifying effect – many scholars say it achieved a "cultural, emotional and linguistic unification" of Nepal akin to the political unity won by Prithvi Shah.

Bhanubhakta's legacy set the tone for later Nepali poets. In the late 19th and early 20th centuries, writers like Lekhnath Paudyal and Gopal Prasad Rimal built on his vernacular style, often imitating folk rhythms. By the 1920s, modernists such as Bal Krishna Sama and Laxmi Prasad Devkota explicitly broke from the Sanskritic tradition. They experimented with Western literary forms (prose poetry, psychological drama, short story) and wrote about love, social ills and nationalism. This shift created a distinctly Nepali literary idiom: rooted in folk speech but rich enough to handle complex themes.

Rana Regime (1846–1951): Censorship and Education

The autocratic Rana regime imposed strict controls on language and publishing. Gorkhapatra (founded 1901) remained Nepal's only newspaper, entirely government-run. Journalists under Rana rule essentially relayed official notices; independent journalism was impossible. Censorship was draconian. Imported books and newspapers were vetted: vernacular Nepali or political material was often banned, while Sanskrit religious texts passed freely. For example, a Rana government order explicitly forbade subscribing to Indian nationalist weeklies like *Bande Mataram* or *Jugantar*. Even Nepali writers faced obstacles: poet Bal Krishna Sama (a relative of the Ranas) had to circulate his work covertly until 1929, eventually raising funds to print it in Banaras. In short, private publishing in Nepal was nearly impossible, and many literati operated in exile (Banaras or Darjeeling) to avoid censorship.

Educational policies under the Ranas also shaped language. Initially the Ranas favored English-language schooling (often sending elites to Calcutta); Nepali-medium instruction was minimal. Only in the early 20th century (Dev Shamsher's era) did Nepali begin to be promoted in schools. Nonetheless, nationalist thinkers and some Ranas sought to raise Nepali's status: by mid-20th c. they funded translations (e.g. a Nepali *Bhagavad Gītā*) and established the Gorkha Bhasa Prakashini Samiti (1913) to develop Nepali. By 1951 there was a small but growing Nepali-educated public.

Key Rana-era developments:

- Language policy: The "one nation, one language" ethos of the Ranas made Nepali the sole official language in government and schools, suppressing others. Ranas discouraged Newar, Hindi, Maithili etc., seeing Nepali as a unifying national code.
- Style in official discourse: Official Nepali often adopted honorific and Sanskritic terms. While folk Nepali continued orally, formal writing under the Ranas leaned toward the classical style model set by earlier court documents.
- Censorship: High for any vernacular publishing. Only religious or non-political books easily entered Nepal; new Nepali creative works languished unless government-approved.

Post-1951 Modernization and Panchayat (1951–1990)

The overthrow of the Ranas in 1951 ushered in greater linguistic pluralism. The Nepali press expanded: private newspapers and the first radio station (Radio Nepal, 1951) began operating. Writers who had published abroad now returned. In 1957 the Royal Nepal Academy (Rashtriya Nepali Kalakar Samuha) was founded to promote Nepali literature and language. Nonetheless, Nepali remained hegemonic: constitutional and education policies of the 1950s–60s treated Nepali as the primary medium. A national education commission (1956) explicitly recommended teaching in Nepali, warning that other languages "will gradually disappear" otherwise.

The Panchayat era (1960–1990) codified this nationalist language policy. The slogan "Eutā Bhāṣā, Eutā Bhēś, Eutā Desh" ("One language, one dress, one nation") made Nepali a symbol of unity. All textbooks, official business, and media were in Nepali (or English in technical fields). Minority languages were marginalized. Yet even during Panchayat, modern literary trends continued: the 1960s–80s saw flourishing Nepali poetry and fiction on social themes (e.g. Laxmi Prasad Devkota's later works, Parijat's novels). Gorkhapatra and The Rising Nepal (English daily) remained state organs, while a few private literary journals (*Sharada*, *Udghosh*) circulated under license. Many intellectuals looked to global influences: for example, Nepali drama and prose increasingly mirrored European models.

Journalism and Media (1990–Present)

Since the 1990 return to multi-party democracy, Nepal's media landscape has exploded. The 1990 constitution guaranteed press freedom, and a 1992 press law removed most censorship. Independent newspapers flourished: after the ban on private media was lifted, dozens of dailies and weeklies sprang up. By 2000 Kantipur (est. 1993) and The Kathmandu Post became leading private papers, and Nepali-language tabloids and FM radio multiplied.np. This quantitative boom was matched by technical change: 24×7 TV news and (from the 2000s) online news portals and social media have made Nepali news instantaneous. A recent survey notes that, post-1990, "the media was the one sector which recorded massive growth" and diversified in content and form.np.

Stylistically, 21st-century Nepali journalism is eclectic. Many newspapers mix formal and informal styles. Some talk-radio and tabloids use everyday speech to engage readers, while major dailies still often employ literary devices or Sanskrit-derived terms. This variation reflects a tension in public discourse over language formality: for example, in 2025 Prime Minister K.P. Sharma Oli publicly criticized the use of the informal "timi" ('you') in news reports and praised Gorkhapatra's conservative style. Such debates highlight the ongoing

negotiation between a purist, Sanskritized Nepali and a more pragmatic, colloquial medium in the Nepali press.

- Key media figures/publications: The state newspapers Gorkhapatra (founded 1901) and The Rising Nepal continue under government auspices. Private publishing is now led by groups like Kantipur Media (Kantipur, Nepal, Annapurna Post) and Nagarik (Nagarik weekly, OnlineKhabar, etc.). Notable veteran editors include the late Prem Raj Acharya (first editor of Sharada magazine, 1934) and Balkrishna Sama (poet, first chief editor of Gorkhapatra in 1955). Important literary figures of the late 20th c. include poets like Siddhicharan Shrestha and novelists like Parijat (1950s–60s) and Indra Bahadur Rai (Diaspora writer). English-language media (The Kathmandu Post, Nepali Times) have grown but Nepali-language journalism remains dominant.

Vocabulary and Register Trends

Throughout Nepali's history, vocabulary has stratified by context. Highly Sanskritized registers have long been used in religion, law, and royalty. Government and legal Nepali in particular borrowed from Sanskrit (and earlier from Persian/Arabic) for formal terminology. In contrast, colloquial Nepali – spoken by the mass public – retains simpler grammar and many native or regional words. Bhanubhakta's breakthrough was to write epic poetry in this colloquial mode. Today a similar split persists: formal journalism and academia often favor Sanskrit loanwords, whereas entertainment media and social media lean more on everyday idiom and English technicalisms.

These dual strains have engendered debate. Conservative voices lament "language degradation" when press or politicians use modern slang or the common *timi* form. Meanwhile, many writers and readers demand clear, accessible language. The result is a constant oscillation: Nepali in print today may swing between archaic high style (as in some editorials) and populist simplicity (as in human-interest stories). This tension — between preserving Sanskritic heritage and embracing living speech — is central to Nepali's stylistic evolution.

Conclusion

The Nepali language's literary and journalistic styles reflect its layered history. From its Sanskritic roots through regional contacts, Nepali has absorbed many influences, yet it also developed a strong indigenous voice. Royal and courtly usage (especially during unification and Rana rule) leaned toward the classical and honorific, whereas folk and literary figures like Bhanubhakta popularized the vernacular. Censorship and education policies alternately suppressed and standardized Nepali. Modern democratization and globalization have further diversified language use: today Nepali journalism ranges from tradition-bound high form to innovative colloquialism. Iconic authors (e.g. Acharya, Devkota), editors (e.g. Prem Raj Acharya, Sama), and publications (Gorkhapatra, Sharada, Kantipur) each contributed to shaping the language. In sum, Nepali's vocabulary and style have continually balanced sacred tradition and pragmatic change, mirroring Nepal's own cultural evolution.

Sources: Scholarly histories and linguistic studies of Nepali, among others. The cited works are by Nepali and area specialists, as well as the digital South Asia Dictionary and relevant journalistic accounts.

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Development of Scientific Vocabulary and Logic in the Nepali Language

Over centuries Nepali (Khasā) has built its formal lexicon on classical Indo-Aryan roots. At its core Nepali inherited Sanskrit-derived words for basic concepts – pronouns, numerals, concrete nouns and verbs – and later borrowed extensively from neighboring Indo-Aryan languages (especially Hindustani/Hindi) for new terms. Early Nepali registers (literary, religious, legal) therefore remained heavily Sanskritised: dictionaries note that "the two main channels" for learned vocabularies were Sanskrit via literature and religion. Encyclopædia Britannica observes that written Nepali's style is "influenced by Sanskrit" and that technical terms in government were often *"devised and borrowed from Sanskrit and English as needed"*. For example, older courts and administration used Persian/Arabic loanwords via Hindustani, but on occasion coined native terms from Sanskrit (e.g. *dārā*, *dharma*, etc.).

During the 19th–early 20th century, Nepal's limited formal education began incorporating Western science through British India. Although Nepal was never directly colonized, its Rāṇa-era schools (Darbar High School, 1853; Tri-Chandra College, 1918) introduced Nepali students to modern science largely via English and Hindi texts. As a result, many modern scientific concepts "baptized in the English language" had to be adapted into Nepali. Bal Ram Adhikari notes that in Nepal English often serves as the source language for new scientific terms – i.e. concepts are translated or transliterated from English. In practice, this meant early Nepali science vocabulary was either directly borrowed (e.g. ଅକ୍ସିଜେନ *aksijan* from *oxygen*), calqued word-for-word (e.g. *beg* for "speed"), or coined by coining Sanskrit compounds (e.g. *gurutvākārṣaṇa* for "gravity"). Some terms were hybridized by mixing Nepali and English morphemes.

These trends accelerated after 1951, when democratic reform fostered Nepali-medium education. The constitution (2015) reaffirmed Nepali as the official language for all domains, including science and research. To meet this mandate, Nepal's academic and policy institutions took an active role in vocabulary expansion (Table 1). The Nepal Academy (Nepal Rājyā Prajñā Pratisthān, est. 1957) became the government's language authority for literature and science. It sponsored major glossaries and dictionaries of technical terms: e.g. *Bijñān Śabdāvalī* ("Science Glossary") in 1978, *Ādhārbhūt Prabidhik Śabdāvalī* ("Basic Technical Terms") in 1995, and *Bijñān Śabdakoś* ("Science Dictionary") in 2003. These works explicitly used Sanskrit roots in coining terms – Gorkhali (1978) recounts that in developing Nepali science lexicon "we have used Sanskrit roots", a policy repeated in the Academy's 2003 Science Dictionary ("Sanskrit roots have been used while coining words"). More recently, Nepal Academy has updated the official Nepali dictionary (7th edition, 2010) and convened national language conferences (e.g. 2011 orthography conference) to standardize spellings and usage.

Table 1. *Key phases in development of Nepali scientific/academic vocabulary.* (Sources: Nepali language policy and lexicography literature.)

Period	Developments and Influences
Pre-20th cent.	Core Nepali inherited Sanskritic Indo-Aryan vocabulary via religion and literature. Limited formal science terms existed, as knowledge was conveyed through Sanskrit or Persian translations.
Early 20th cent.	Rāṇa-era education introduces Western science indirectly (through India). English and Hindi texts bring new terms. Hindi and Hindustani heavily influence everyday Nepali, but no systematic Nepali science register yet.
1950s–1970s	Post-revolution standardization: Nepali-medium schools and textbooks. *Royal Nepal Academy* (1957–2007) founded to develop Nepali literature and science. Glossaries of technical terms compiled (1978, 1995, 2003). Panchayat-era policy made Nepali sole official language ("One Language" policy) emphasizing Nepali in education and science.
1980s–2000s	Expansion of higher education and media. Science and technology vocabulary grows via curriculum development. Nepal Academy continues lexicon projects; many new terms are transliterations, calques, or Sanskrit compounds. Public dictionaries and thesauri incorporate scientific terms.
2010s–present	Digital/Global era: Internet, science communication. 2015 Constitution confirms Nepali as official language. Nepali publishers (Curriculum Dev. Center, Janak Edu. Materials) regularly update science textbooks. Ongoing efforts to coin coherent terms; bilingual education materials also appear.

The role of translation and borrowing has been central. Adhikari emphasizes that Nepali's science vocabulary is "conceptually English-oriented" – i.e. English concepts are mapped into Nepali forms. In practice, most new terms come either from English or (via English) from international scientific usage. Hindi has also served as an intermediary: some Nepali curricula originally drew on Indian science glossaries (e.g. Central Hindi Directorate glossaries for school science) or directly borrowed Hindi terms. Britannica notes that modern Nepali "has borrowed vocabulary from Hindi, Sanskrit, and English". In sum, English is the primary influence on term formation (since most technical advances arrive via English), with Sanskrit providing the morphological material, and Hindi/Persian contributing additional colloquial vocabulary.

Formal Academic Register vs. Colloquial Nepali

The academic and technical register of Nepali is markedly more formal and systematic than everyday speech. Scholars and journalists note that spoken Nepali is flexible and idiomatic, drawing freely on regional dialects and borrowed words. By contrast, *written* Nepali – especially in newspapers, official documents or textbooks – is highly Sanskritized and prescriptive. As journalist Manjushree Thapa observes, *"written Nepali is formal… The rules of grammar are rigid… [and] the diction of written Nepali is high, with many words rooted in Sanskrit"*. In other words, the academic register tolerates only one "correct" usage of grammar and terminology, whereas colloquial speech may use alternate forms or relaxed grammar.

This "tighter logic" in the academic vocabulary manifests in several ways:

- Precision of terminology: Scientific Nepali typically assigns a single specific term to each concept, avoiding synonyms. Commonly, everyday words have multiple meanings or idioms, but the scientific term is unambiguous. For example, ordinary Nepali might use the general word *बल (bal)* for "force/power," but physics uses more precise terms (e.g.

दाब (dāb) for "pressure"). Likewise, everyday *बिजुली (bijulī)* means electricity or lightning, whereas the technical term is *विद्युत् (bidyut)* or *विद्युत्-तरंग (bidyut-taraṅg)* for "electrical wave". The glossary for schools illustrates this consistency (see Table 2).

- Morpho-syntactic regularity: Formal Nepali science writing adheres strictly to Nepali grammar norms (subject–object–verb word order, no casual contractions). The Nepalese Linguistics analysis finds that most scientific terms are multi-morphemic compounds with fixed structure (often *Sanskrit root* + *suffix* or *compound noun*). In contrast, speech allows flexible word order and colloquial constructions. Thapa notes that spoken Nepali has *"flexible"* grammar and variable honorific levels, whereas written form has few options and strict rules.
- Terminological consistency: Official terminology is standardized across contexts. The Nepal Academy's glossaries and dictionaries enforce one term for a concept. For instance, "gravity" is always *गुरुत्वाकर्षण (gurutvākārṣaṇa)*, a compound of गुरुत्व + आकर्षण. Colloquially, a Nepali might simply say *त्यो त पृथ्वीले तान्ने बल हो* ("that is the Earth's pulling force") or use the Hindi-influenced *प्रकर्षण (prakarṣaṇ)*, which are informal paraphrases.

The following table exemplifies formal vs. colloquial usage for common science words:

English concept	Formal Nepali term (source register)	Colloquial Nepali (everyday usage)
Electricity	विद्युत् (*bidyut*, from Sanskrit-root)	बिजुली (*bijulī*; common term derived from *vidyut*)
Speed	वेग (*veg*; literal "velocity")	रफ्तार (*raftār*; from Hindi/Urdu "raftār")
Energy/Power	ऊर्जा (*ūrjā*; from Sanskrit *urja*)	शक्ति (*śakti*; common word for "power")
Science	विज्ञान (*vijñāna*; lit. "knowledge")	साइन्स (*sāins*; English loan used in informal contexts)
Brain (anatomy)	मस्तिष्क (*mastiṣk*; Sanskrit)	दिमाग (*dimāg*; from Hindustani "dimaag")

These contrasts show that the scientific register avoids the colloquial synonyms and loans that pervade everyday speech. For example, although both *विद्युत्* and *बिजुली* ultimately derive from the same Sanskrit root (*विद्युत्*), the former is retained for technical usage. Similarly, while *विज्ञान* is the standard word for "science," a Nepali speaker might jokingly use *साइन्स* in casual talk, but formal writing strictly uses *विज्ञान*.

Neologism Formation and Terminology Construction

New scientific and academic terms in Nepali are systematically constructed, often by affixation and compounding of Sanskrit-derived morphemes. Adhikari's morphological study of school science vocabulary found that only a small fraction (~8%) of terms are monomorphemic; most involve prefixes/suffixes or are compounds. Common strategies include:

- Prefixation/suffixation: Attaching Nepali/Sanskrit affixes to a root. For example, *बिद्युत्* (*biddhut*, "electricity") is formed from the prefix *bi-* + root *dhut* + suffix *-a*. Similarly,

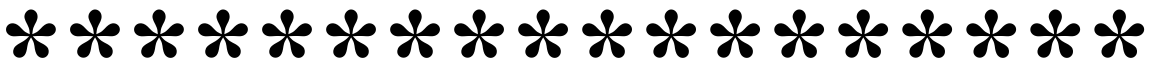
जडान (*jaḍān*, "fusion") comes from *sam-* + *yuj-* + *-an*. Official glossaries note that scientific coinages deliberately use classical affixes to match the concept exactly.

- Compounding: Joining two nouns (often Sanskrit-based) where the first modifies the second. For instance, गुरुत्वाकर्षण ("gravity") combines गुरुत्व (gravitas) + आकर्षण (attraction). Other examples in Adhikari's survey include चन्द्रमास ("synodic month", from चन्द्र+मास) and बुधमण्डल ("Mercury's orbit", from बुध+मण्डल). In such compounds, the head is the final noun (e.g. आकर्षण "attraction" is head in गुरुत्वाकर्षण).
- Hybrid formations: Partly Nepali, partly English or other sources. Rare English terms are sometimes simply transliterated into Devanagari (e.g. अक्सिजन for "oxygen") and then treated like Nepali. Hybrid compounds mix one Nepali component with an English borrow. These are accepted as natural phenomena in technical terms.

These systematic methods ensure consistency: once a Sanskritized term is established, it is used uniformly (e.g. गुरुत्वाकर्षण never varies in spelling or word order). Nepal Academy's lexicographers explicitly adopt such principles (e.g. "Sanskrit roots have been used while coining words") to maintain terminological regularity. The result is a precise, internally logical vocabulary: each new term transparently maps onto its underlying concept, unlike the idiomatic variety of everyday speech.

In summary, Nepali's academic-scientific vocabulary evolved from a Sanskrit-inflected base, through the influx of English/Hindi science, into a standardized modern register. Government and scholarly bodies have driven its expansion via glossaries and dictionaries. Because of this conscious planning, the scientific register exhibits greater terminological precision and uniformity than colloquial Nepali. Formal Nepali thus reads like a tightly-constructed compound language (rich in affixes and classical stems), whereas colloquial Nepali remains flexible, idiomatic and replete with loan-words.

Sources: Historical and linguistic details are drawn from Nepalese linguistic studies and language-policy documents; term examples and glossary data are taken from Nepali science education materials and linguistic analyse.



Sanskrit people

Historical Development of Sanskrit (Origins to early 20th century)

Indo-European Roots and Vedic Sanskrit (c. 1500–500 BCE). Sanskrit emerged from the Proto-Indo-Aryan language of migrating Indo-European tribes. Its closest relatives are in the Indo-Iranian branch of the Indo-European family. Scholars note that Rigvedic Sanskrit (the language of the *Ṛg-veda*) shares archaic features with ancient Greek and Old Avestan, reflecting a common Proto-Indo-European origin. The *Ṛg-veda* (c. 1500–1200 BCE) is the oldest extant Sanskrit text. It was preserved by an extremely exacting oral tradition, yielding a corpus of 1,028 hymns in archaic Vedic Sanskrit.

Figure: An early 19th-century manuscript of the Ṛg-veda. The Vedas testify that Vedic Sanskrit was already a highly inflected, poetic language. It rapidly absorbed regional vocabulary (e.g. names of plants/animals) and some Dravidian features as the Aryans spread across the subcontinent. Over the Vedic age (c. 1500–500 BCE), the language gradually evolved, but retained its elaborate phonology and accent system.

Classical Sanskrit and Pāṇini's Grammar (c. 500 BCE–300 CE). By the late Vedic period, Sanskrit had become a high literary and liturgical medium. The mid-1st millennium BCE saw the formal codification of "Classical Sanskrit." The seminal work here is Pāṇini's *Aṣṭādhyāyī* (c. 5th–4th century BCE) – an eight-chapter grammar that systematized Sanskrit's phonology and morphology. Pāṇini's concise sutra-style metalanguage set the standard for all later Sanskrit. With minor modifications (Pāṇini's grammar even recognized regional variants), Classical Sanskrit became a standardized literary register. Renowned grammarians like Patañjali (Mahābhāṣya) and Kātyāyana (Vārtikas) commentated on Pāṇini's work, fixing the language for millennia. Classical Sanskrit retained the expressive power of Vedic without much of its archaism. Its vocabulary and grammar were rich enough to serve literature, philosophy and science.

Major Literary and Religious Texts. Sanskrit's literatures grew immensely from the late Vedic through medieval times. After the Vedas and Upaniṣads, the epics mark its golden age: the *Mahābhārata* and *Rāmāyaṇa* (c. 400 BCE–300 CE) were composed in a high "Epic Sanskrit" register, blending Classical Sanskrit and archaic forms. The Sanskrit Puranas (mythic-historical encyclopedias) and Dharmashastras (legal texts) continued the tradition. Poetry and drama flourished: Kālidāsa (4th–5th c. CE), Bhavabhūti, and others wrote courtly verses and plays. Collections of fables (the *Pañcatantra*, *Hitopadeśa*) and didactic literature were rendered into polished Sanskrit verse. Even Buddhism and Jainism produced Sanskrit works: Buddhist

Sanskrit sutras and commentaries (especially Mahayana) and Jain Agamas (often in Ardhamāgadhī or Sanskrit) show Sanskrit's pan-religious role.

Sanskrit in religion also remained central. Hindu ritual manuals, temple hymns and Tantric texts were written in Sanskrit. The Vedas and Upaniṣads (the "shruti" corpus) undergirded priestly tradition. Philosophical treatises – the six dārśanas (Nyāya, Vaiśeṣika, Sāṅkhya, Yoga, Pūrva and Uttara Mīmāṃsā or Vedānta) – were composed in Sanskrit. Works like the *Brahma-sūtras* and commentaries (Śankara, Rāmānuja, etc.) defined Hindu thought. Sanskrit also became the vehicle for science and learning: astronomy and mathematics in Sanskrit (Aryabhata's *Āryabhaṭīya*, Brahmagupta, Bhāskara etc.), medicine (Carakasaṃhitā, Suśruta-saṃhitā), grammar (Pāṇini, Bhartṛhari), logic (Nyāya Sūtra and commentaries) and literary theory (Nāṭyaśāstra) were all written in Sanskrit. As Britannica notes, Sanskrit treatises on logic, astronomy and mathematics made it the language of classical Indian science and philosophy.

Interaction with Prakrits and Regional Languages. Throughout its history Sanskrit coexisted with vernacular Middle Indo-Aryan languages (Prakrits, Apabhraṃśas) and later New Indo-Aryan dialects. In the early centuries BCE/CE, Jain and Buddhist texts often used Prakrits (Pāli, Ardhamāgadhī, Maharashtri etc.) to reach lay audiences. Yet the learned classes and elites remained committed to Sanskrit as the *saṃskṛta* or "refined" language. Classical dramas by Kālidāsa, Śūdraka and others famously use both languages (heroic speeches in Sanskrit, commoners in Prakrit), showing they coexisted. By tradition, Sanskrit was the standard of education and high culture, while Prakrits were "original, natural" speech. Many words in Vedic Sanskrit appear to derive from or parallel Prakrit forms, indicating early contact. Over time, the Prakrits evolved into Apabhraṃśas and then modern Indo-Aryan languages (Hindi, Bengali, Marathi etc.), but they borrowed heavily from Sanskrit vocabulary. Even so, Sanskrit retained its prestige: as one scholar put it, Sanskrit was "an ideal instrument for presenting ideas" and acted as a unifying high culture language across South Asia.

Medieval Period – Temples, Courts, and Scholarship (8th–18th c.). During the medieval era, Sanskrit remained the lingua franca of Hindu scholarship, religion and many royal courts – even as Islamic dynasties ruled much of India. Major Hindu kingdoms (e.g. the Palas, Rashtrakutas, Cholas, Chalukyas and later the Vijayanagara Empire in the south, and Rajput and central Indian courts) patronized Sanskrit literature, temple inscriptions and education. For example, Srinivasa and Pañjabi poets, philosophical works by Śaṅkarācārya (8th c.), and textbooks of grammar and astronomy were produced in Sanskrit. Temple inscriptions across India – whether in Tamil country or in Orissa and Bengal – often featured Sanskrit verses honoring deities or kings. As a consequence, Sanskrit continued to evolve stylistically, even if it ceased to be anybody's mother tongue.

Many Muslim rulers were indifferent or hostile to Sanskrit, but some showed interest. The Persianate courts of Delhi and the Deccan generally used Persian/Arabic for administration and high culture, which slowly marginalized Sanskrit in public life. Still, a number of Muslim princes (notably the Kashmiri Sultans like Zain-ul-'Ābidīn) patronized Sanskrit scholars and histories (e.g. the later *Rajatarangiṇī* continuations) as a matter of policy. The Mughal emperors Aurangzeb and others gave almost no support to Sanskrit learning, but Akbar (r. 1556–1605) was an exception. Emperor Akbar amassed a large collection of Sanskrit manuscripts and famously ordered the translation of many Sanskrit works into Persian. Under Akbar's reign, the *Mahābhārata* and *Rāmāyaṇa* (as well as *Nala-Damayantī* and scientific texts like Bhāskara's *Līlāvatī*) were rendered into Persian. This "literary fusion" illustrates how Sanskrit literature remained valued as knowledge even under Persian influence. In contrast, most Muslim nobles

preferred Persian/Arabic themselves, and Sanskrit largely ceased to be used in courts and administration. Indo-Aryan vernaculars (especially Hindustani/Urdu) gradually borrowed Persian- and Arabic-origin words and even scripts, filling the socio-political space Sanskrit once held.

Colonial Period and Orientalist Scholarship (18th–19th c.). With the coming of the British and other Europeans, Sanskrit entered a new phase of interaction. On one hand, by the late 18th century the East India Company and early Orientalist scholars promoted the study of classical Hindu learning. William Jones (1772) established the Asiatic Society of Bengal and pioneered Sanskrit philology. Under Governor-General Wellesley and Amherst, institutions were founded: the Benares Sanskrit College (est. 1791) and Sanskrit College Calcutta (1824) were set up to teach Sanskrit grammar, literature and philosophy. These colleges were meant to educate a small number of pandits for administrative and educational service. Meanwhile European linguists discovered that Sanskrit was closely related to Greek and Latin. The comparative study of Indo-European languages took shape: Sanskrit studies in Berlin, Paris and Oxford (e.g. by Franz Bopp, Eugène Burnouf, Max Müller, Monier Monier-Williams and others) became a key part of "Orientalism." For example, Britannica notes that recognizing Sanskrit's kinship with European tongues "gave rise to the comparative method in the humanities".

On the other hand, British colonial education policy soon shifted. In the famous 1835 Minute on Education, Macaulay dismissed Sanskrit learning as inferior to English science and sought to create an anglicized Indian elite. He urged ceasing publication of Sanskrit and Persian textbooks except at a minimal level. Thereafter, English-medium education was given priority, and funding for indigenous languages was cut. Macaulay's reforms led to English gradually replacing Sanskrit and Persian as the academic and administrative languages in the Raj. Nonetheless, some Sanskrit instruction persisted: Sanskrit remained a subject in newly established universities, and a Brahminical educational path (*tol*/*pathshala*/*gurukula*) survived in traditional communities. As Britannica reports, Sanskrit continued "to be widely taught" in schools and *gurukulas*, even as it had ceased to develop as a spoken tongue. By the late 19th century, Sanskrit was recognized as part of India's heritage (eventually enshrined in the Indian Constitution) but functionally a classical language studied by scholars and priests.

19th-Century Reform Movements and Sanskrit Education. In colonial India, Sanskrit also played a role in social-religious revival. The Brahmo and Arya Samaj movements, for instance, drew on Sanskrit texts to legitimize reforms. Raja Rammohan Roy (1772–1833) studied Vedas and Upaniṣads and used their monotheistic elements to critique idolatry, even as he famously opposed the exclusive preservation of Sanskrit education (he petitioned against the only-Brahmin Sanskrit college, advocating modern sciences and English). Later, Swami Dayānanda Sarasvatī (1824–1883), founder of the Arya Samaj (1875), proclaimed the "infallible authority" of the Sanskrit Vedas and launched modern *gurukula* schools. These Ashram schools taught boys and girls Sanskrit, Vedic chanting and traditional philosophy as a counter to British influence. In practice, several reformers incorporated Sanskrit studies into their programs: Ishwar Chandra Vidyasagar in Bengal revamped the Calcutta Sanskrit College (introducing English and sciences alongside Sanskrit) and composed new Sanskrit grammars for students. By the late 19th century Sanskrit hymns and classical stories were also used in Indian nationalism to invoke a shared cultural heritage. Yet political power had shifted: newspapers, courts and the civil service now worked in English or local languages. Sanskrit's prestige remained strong among learned Hindus, but its utilitarian role had narrowed to religion, scholarship and as a marker of cultural identity.

Status into the Early 20th Century. By the 1900s, Sanskrit had undergone a long arc from vernacular-rooted tongue to highly codified classical language. It never disappeared – it continued as the liturgical language of Hindu rites, Buddhist chants, and temple rituals across South and Southeast Asia. Urban elites and traditional scholars still read and composed Sanskrit texts, and it was offered in colleges (e.g. the Banaras Hindu University was founded in 1916 partly to promote Hindu learning including Sanskrit). But with the rise of modern vernacular literatures and English, few Indians claimed Sanskrit as a native tongue. In fact, no community of first-language speakers has ever been documented. As Britannica notes, by modern times Sanskrit survives in "ceremonial and ritual" use, taught in schools and *gurukulas*, but it no longer evolves as a living spoken language. Its prestige endures as the classical language of India's past – enshrined in scholarship, religious tradition and national memory. In sum, Sanskrit's journey from its Indo-European *proto-language* through Vedic and classical highs to a "timeless" heritage tongue reflects India's own cultural and political transformations over three millennia.

Sources: Authoritative histories of Sanskrit, including *Encyclopædia Britannica* and scholarly histories, are cited for each period (e.g. development from Vedas; Pāṇini's grammar; major texts and intellectual use; Sanskrit–Prakrit relations; medieval patronage; Persian influence; colonial Orientalism; and 19th-century education and reform). These sources provide the facts and transitions charted above.

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Historical Development of the Sanskrit Writing System

The Sanskrit writing system traces back to ancient India's Brahmi script and evolved through many stages into the scripts used up to the early 20th century. The earliest writing is the Brahmi script (3rd century BCE), attested famously on the rock edicts of Emperor Ashoka. Brahmi was a fully developed phonetic alphabet (abugida) used for Prakrit, and by the 1st century BCE it began to record Sanskrit (e.g. the Ayodhya and Hathibada inscriptions). Over centuries Brahmi diversified. In northern India it evolved into the *Gupta script* (4th–6th c. CE), which in turn split into medieval scripts by the 7th–8th century, notably Nagari, Siddham, and Sharada. Nagari was the ancestor of modern Devanagari (used for Sanskrit/Hindi) and related forms like Nandinagari (an archaic Nagari variant used in South India). By contrast, southern Brahmi evolved into scripts like Kadamba, Pallava, and Vatteluttu, spawning Grantha (for Sanskrit in Tamil Nadu) and later the Dravidian scripts (Tamil, Telugu, Kannada, Malayalam). Thus by the medieval period there was a family of Brahmic scripts for Sanskrit and local languages across South Asia and beyond.

Brahmi and Early Sanskrit Inscriptions

Brahmi is generally considered the parent of nearly all Indic scripts. It appears fully formed by Ashoka's reign (3rd c. BCE). (An earlier script, Kharosthi in northwestern India, was Aramaic-derived but was mostly superseded by Brahmi by the 2nd c. CE.) In its descendants, each consonant carries an inherent vowel and other vowels are indicated by marks. The earliest Sanskrit inscriptions in Brahmi date from the 1st century BCE–1st century CE (e.g. Hathibada, Ayodhya in northern India). A landmark was the Junagadh (Girnar) inscription of Rudradaman

I (c.150 CE), the first extensive prose in literary Sanskrit (Brahmi script), marking the turn to Sanskrit for royal eulogies (later common under the Guptas). In these early epigraphs and stone pillars, Sanskrit typically appears as part of a bilingual or formal record. Brahmi inscriptions attest classical Sanskrit grammar in stone monuments as early as the 2nd century CE, and by the Gupta period (4th–6th c.) Sanskrit had become the lingua franca of empire records and Buddhist/Jaina texts.

Gupta and Early Medieval Scripts

During the Gupta Empire, Brahmi evolved into a calligraphic Gupta script (c.4th–6th c. CE), used on coins, copperplates and temple stones. Gupta was still Brahmi-based, but its cursive letterforms set the pattern for later scripts. By about the 7th century CE, these northern scripts had diversified into distinct branches: Nāgarī (the urban or "city" script), Śāradā (in the northwest/Himalayas), and Siddhaṃ (in the east). In Sanskrit writing, Nāgarī is significant: it came into common use in north India by the 7th century and had fully evolved into the modern Devanāgarī (and the related South Indian Nandināgarī) by about 1000 CE. (Indeed, Nāgarī simply means "urban" script and was originally a variant of Gupta; Devanāgarī means "script of the gods" and is the standardized form that emerged by the late first millennium.) Kālidāsa-era and early medieval Sanskrit manuscripts were often written in transitional Gupta/Nāgarī hands.

Siddhaṃ Script (6th–13th c.)

Siddhaṃ (also called *Kutila*) was a northeastern Gupta-derivative script used roughly 6th–13th centuries. It was especially important for Buddhist literature: many Mahāyāna sutras and mantras were copied in Siddhaṃ, which preserved accurate Sanskrit phonetics (unlike Chinese characters). Siddhaṃ's rounded, flowing letters spread with Buddhism into Tibet, China and Japan (the art of Siddhaṃ calligraphy survives in East Asia). For example, the Buddhist monk Kūkai brought Siddhaṃ to Japan in 806 CE. By the 9th century Siddhaṃ began to wane in India (replaced by Devanāgarī), but its descendant *Gaudi* (eastern Nāgarī) line gave rise to Bengali–Assamese, Odia and Tirhuta (Maithili) scripts.

Śāradā Script (8th c. onward)

The Śāradā script arose in the northwestern Himalayas (modern Kashmir and Punjab) in the 8th century CE. It descended from Gupta like Devanāgarī and Nandināgarī. Śāradā is essentially the ancestor of modern Kashmiri writing: the earliest Śāradā inscriptions (dated 804 CE) are found in Kashmir and Punjab. Literate Kashmiri Hindus used Śāradā for Sanskrit (and Kashmiri) texts well into the late medieval period, and it corresponds letter-for-letter with Devanāgarī though the letter shapes are more angular. Śāradā reflects Kashmir's significance as a Sanskrit scholarly centre; many Hindu and Buddhist texts from the region survive in Śāradā manuscript form.

Grantha and Tamil Scripts

In South India, Tamil–Brahmi inscriptions (dating 3rd c. BCE to 3rd c. CE) show an early local variant of Brahmi adapted for Old Tamil. Tamil–Brahmi had special marks for Tamil sounds and often omitted the implicit vowel, reflecting Dravidian phonetics. By the early medieval period, Tamil–Brahmi had developed into the Vatteluttu and Pallava scripts. Around the 5th century CE the Grantha script emerged in Tamil Nadu (evolving from Pallava/Brahmi).

Britannia notes that *“the Grantha alphabet [was] developed in the 5th century AD”*. Its earliest inscriptions (5th–6th c.) appear on copper plates of the Pallava kings. Grantha was used specifically to write Sanskrit in South India, where Tamil and other regional scripts lacked symbols for all Sanskrit sounds. Grantha’s “Middle” form persisted 7th–8th c., and from the 9th to 14th c. a *Transitional Grantha* was used. After 1300 CE Grantha’s modern forms appeared (two styles survive today). Notably, even modern Tamil script may derive from Grantha, and the Tulu-Malayalam script is a Grantha branch. Thus Grantha embodies South India’s engagement with Sanskrit learning: it was essentially a Sanskrit-only script (later used for some Dravidian texts as well).

Devanāgarī and Nāgarī (North and Central India)

By the 8th–9th centuries CE, the Nāgarī script (urban script of the Indo-Gangetic plain) was firmly established for Sanskrit and Prakrit texts. Nāgarī soon split into the familiar Devanāgarī (used for Sanskrit, Hindi, Marathi, Nepali, etc.) and Nandināgarī (used in southern India for Sanskrit). Devanāgarī’s modern form (with the horizontal headline or *śirorekhā*) was largely in place by 1000 CE. The Wikipedia entry on Devanāgarī confirms it “was developed in, and was in regular use by, the 8th century CE” and *“had achieved its modern form by 1000 CE.”*. Nāgarī as a term originates from *nagari* (“city”), implying a North Indian urban script. It became the dominant Sanskrit script for centuries. The Nāgarī script was even adopted abroad: the Tibetan alphabet was based on a 7th-century Sanskrit Nāgarī introduced by a Kashmiri scholar. Inscriptions in 6th–7th century Myanmar (Burma) also appear in a mixed Sanskrit-Pāli using Nāgarī.

Regional and Hybrid Scripts

Beyond these core varieties, several other scripts arose for Sanskrit or mixed use. In Kashmir and Punjab, the *Sharada* and Landa scripts (like Mahajani) served local languages, but Sanskrit religious works were written in Śāradā or Nāgarī. In eastern India, *Gaudi* (eastern Nāgarī) emerged from Siddham by the 8th–10th c., later evolving into the Bengali–Assamese (Eastern Nagari) and Odia scripts. Although detailed dates are complex, broadly speaking Eastern Nāgarī gave rise to modern Bengali–Assamese by the 11th–12th centuries. Likewise, scripts like Gurmukhi (for Punjabi, 16th c.) and Sinhala (in Sri Lanka) ultimately trace to Brahmi but are beyond our core focus on Sanskrit.

Importantly, Sanskrit flourished in written form not only in stone but in manuscripts. From the medieval period onward, Sanskrit works (Vedas, epics, Puranas, philosophy, etc.) were copied on palm leaf and paper. Manuscriptology specialists note that about *“70% of manuscripts [in Indian repositories] are in Sanskrit”* across scripts. In North India, palm-leaf or paper manuscripts were generally written in Devanāgarī (or the regional equivalent, e.g. Kaithi/Modi for Marathi). In South India, Sanskrit texts often appear in Grantha or Nandināgarī on palm leaf. Kashmir’s Sanskrit manuscripts are in Śāradā. Multilingual manuscripts also occur, with Sanskrit colophons in one script and local text in another. The script changes often reflected cultural and religious needs: for example, the Sharada script became associated with the Śaiva tradition in Kashmir, while Grantha was adopted by Tamil Śaivites and Jains for Sanskrit hymns.

Sanskrit Outside India: Southeast Asia and Beyond

From the 4th century CE onward, the Sanskrit epigraphic tradition spread beyond South Asia with Indian cultural influence. Local Southeast Asian polities adopted Indian religions and scripts to write Sanskrit and Pāli. Crucially, the Pallava script (a southern variant of Brahmi used by the Pallava kings) became the ancestor of virtually all classical Southeast Asian scripts. As one survey notes, "the scripts of Java, Sumatra, Bali, Thailand, Myanmar, Laos and Cambodia were all derived from the Pallava writing system". Sanskrit inscriptions are found across the region. For example, early Cambodian (Funan/Chenla) inscriptions (pre-611 CE) were in Sanskrit (Khmer script) before Old Khmer became dominant. Classical Thai script (Sukhothai alphabet) was based on Old Khmer (itself Pallava-derived). In Indonesia, 8th–10th century stone inscriptions in Java (Candi Canggal, etc.) record Sanskrit verses (meditation on the Ganges, royal praises) using a Pallava-type script. These trends mirror Indian influence: Sanskrit and Pāli came to SE Asia with Hinduism and Buddhism (often via South India), and were written in these imported scripts. Over time the scripts localized (e.g. Khmer, Cham, Kawi, Balinese, Burmese), but the Sanskrit loanwords and sacred texts they carried testify to a pan-Indian Buddhist–Hindu culture.

Timeline of Major Script Transitions

- 3rd century BCE – Brahmi script (Ashokan edicts) first fully attested (with Greek/Kharosthi influences, but replaced by Brahmi broadly).
- 1st century BCE – Earliest *Sanskrit* inscriptions appear in Brahmi (e.g. Hathibada, Ayodhya).
- c.150 CE – Rudradaman's Junagadh inscription (Brahmi, Sanskrit); marks adoption of Sanskrit in royal inscriptions.
- 4th–6th c. CE – Gupta script (derived from Brahmi) dominates northern India; Sanskrit epigraphy and literature flourish.
- 6th–7th c. CE – Siddhaṃ script emerges from Gupta (used by Buddhists for Sanskrit text).
- 7th–8th c. CE – Nāgarī script (eastern Gupta variant) comes into use; by 7th century it is already regular. Pallava script (southern Gupta branch) spreads Hindu/Buddhist Sanskritism to SE Asia.
- 8th c. CE – Śāradā script appears in Kashmir (first inscription 804 CE). Grantha script is in use in Tamil regions (Middle Grantha, Pallava derivation).
- 8th–10th c. CE – Nāgarī develops into Devanāgarī and Nandināgarī; by ~1000 CE these are mature. Manuscripts of Sanskrit proliferate in these scripts.
- 11th–14th c. CE – Eastern Nāgarī (Siddhaṃ/Gaudi) evolves into Bengali–Assamese and Odia scripts for Sanskrit and local languages. New regional scripts (e.g. *Canarese*, *Telugu*) branch from Southern Brahmi, though Sanskrit use in south remains in Grantha/Nandināgarī.
- 13th–18th c. CE – *Nandināgarī* (8th–19th c.) is used in South Indian Sanskrit manuscripts; Grantha continues for Sanskrit (and starts reflecting Dravidian languages). Islamic rule brings Persian script, but Sanskrit communities largely retain Brahmic scripts.
- Early 1900s – By this time, nearly all Sanskrit literature is printed or written in Devanāgarī (North), Grantha/Nandināgarī (South), Śāradā (Kashmir), etc. Script reforms (Unicode, romanization) are only beginning.

Throughout, script changes often mirrored cultural shifts. The rise of Buddhism favored Siddhaṃ and Pallava-based scripts for transcribing sutras in India and abroad; Hindu temple inscriptions favored Nāgarī/Devanāgarī; regional languages demanded new scripts (e.g. Gujarati, Bengali) spun off from Brahmi variants. Political influence (Gupta imperial, Pallava dynasty, regional courts) and religion (Śaivism, Vaiṣṇavism, Jainism) steered which script was

patronized. For example, Kashmir's Śāradā flourished under Hindu kings, while its Muslim population eventually wrote Sanskrit in Devanāgarī script. In Southeast Asia, Sanskrit survived mainly in temple inscriptions and liturgical texts, even as vernacular languages took over daily use.

Sources: Authoritative histories and script encyclopedias were used to compile this report. Each citation refers to the indicated lines of the source.

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Historical development of the vocabulary and style of the Sanskrit language, which is characteristic of literature and high culture and public journalism

Sanskrit is an Old Indo-Aryan language whose earliest form survives in the Vedas (c. 1500–500 BCE) and which was later codified as Classical Sanskrit (by ca. 500 BCE) under the grammarian Pāṇini. These two stages – *Vedic Sanskrit* and *Classical/Epic Sanskrit* – differ in phonology, morphology and style. Vedic Sanskrit (as preserved in the Ṛgveda) was a pitch-accented, highly inflected language with archaic forms and relatively free word order (e.g. complex fronting and split predicates). Panini himself distinguishes between the ancient *chandas* (Vedic usage) and the *bhāṣā* (spoken language) of his time. In the Vedic hymns, a few hundred words (on the order of ~4% of the Rigvedic vocabulary) are thought to be non-Indo-European borrowings or substrates (Dravidian, Munda, etc.), reflecting India's linguistic substratum. The Vedic style – formulaic, ritual, poetic – remained closely tied to oral recitation and ceremony.

By the mid-1st millennium BCE, Pāṇini's Aṣṭādhyāyī codified what we call Classical Sanskrit. His grammar fixed the language's phonetics, morphology and syntax into an exact system. Under Panini's model, many archaic Vedic forms were replaced or regularized. For example, earlier dual-number endings and a full subjunctive/injunctive system began to disappear in later texts. Classical Sanskrit settled on an SOV (subject–object–verb) order (e.g. *rāmaḥ vanam gacchati* "Rama goes to the forest") with relatively fixed syntax, whereas Vedic syntax had been freer. As one study summarizes, Classical Sanskrit was a "stress-based, codified literary system" replacing Vedic's pitch-accented flexibility. These refinements made Sanskrit highly precise and compact, well-suited to scholarly and poetic composition.

Despite this standardization, Classical Sanskrit literature encompasses stylistic variety. Epic poetry (e.g. the *Mahābhārata*, *Rāmāyaṇa*) largely adheres to Panini's norms, but even these works include "un-Pāṇinian" forms reflecting spoken or regional usages. Drama and narrative prose often allow more vernacular influence or simplicity (as prescribed later in Bharata's *Nāṭyaśāstra*), whereas high poetry (*kāvya*) and philosophical texts use the full classical diction. Over millennia Sanskrit style evolved a rich rhetorical and poetics tradition: Sanskrit grammarians and critics (Kātyāyana, Patañjali, Bhartṛhari, Bharata, Bhāmaha, Ānandavardhana, Mammaṭa, and many others) systematized figures of speech (*alaṅkāra*), literary moods (*rasa*), and semantic suggestiveness (*dhvani*) as part of the "kritiśāstras." Thus

Sanskrit became a highly stylized literary language – ornate, metaphorical and grammatically polished – well beyond its earlier Vedic plainness.

Vocabulary Development

Core Vocabulary and Borrowings: Classical Sanskrit's core lexicon descends from Old Indo-Aryan, so basic religious, social and natural terms remain from the Vedic age. At the same time, Sanskrit absorbed influences as culture changed. A modest number of Sanskrit words are believed borrowed from non-IE substrates (e.g. *karpāsa* "cotton" possibly from Dravidian or Munda roots). During the Epic and Classical eras, a few Prakrit or local words (especially for flora, fauna, customs) entered literary Sanskrit, and conversely Sanskrit became the main source of "tatsama" borrowed words for vernaculars. Indeed, scholars note that Sanskrit texts sometimes contain ārṣa-prayoga ("usage of the ṛṣis"), i.e. non-grammatical forms reflecting regional speech. Over time the influence of Middle Indo-Aryan (Prakrit) tongues and Dravidian substrate mainly filtered into colloquial speech, while Sanskrit retained its elite lexicon. By the Gupta period (4th–6th CE) much of the Gaṇapāṭha lexicon was fixed, but vernacular synonyms circulated alongside the classical stock.

Technical and Abstract Terms: As scholarship flourished, Sanskrit continuously coined new technical vocabulary in philosophy, science and the arts. The six classical *darśanas* (philosophical systems) generated terms like *padārtha* (categories), *pramāṇa* (proof), *nirṇaya* (determination) and so on. Fields like astronomy (*jyotiṣa*), grammar (*vyākaraṇa*), and law devised precise terminology (e.g. *yuga, karṇa, mantra, tanmātra, dhātu*, etc.). In medicine (Ayurveda) one finds *śvāsa-puṛiṣa* (breath-fluid) for "air in the body" and chemical names like *rasa, indrajaṭi*, etc. Grammarians named linguistic phenomena (*dhātupātha*, *sandhi*, *vibhakti*). Each new intellectual context prompted creative derivations and compounds. For example, later medieval Sanskrit poets borrowed Persian concepts via transliteration (e.g. *khanjura* from "khānjara" for dagger), and some Islamic administrative terms entered Sanskrit. Yet Sanskrit's immense derivational power also let scholars create Sanskrit equivalents: e.g. *araṇya* for forest, *patala* for region, etc., instead of adopting foreign words.

Modern Coinages: In the 19th–20th centuries, as technology and modern governance arrived, Sanskritists formed committees (like those of the Government of India) to coin new vocabulary. Today many modern concepts have Sanskrit neologisms. Common examples include *vidyut* (विद्युत्) "electricity," *yantra* (यन्त्र) "machine or device," and *doordarśana* (दूरदर्शन) "television". A recent article notes that such terms have been in Sanskrit usage for decades via radio/TV broadcasts, illustrating the language's capacity to evolve. Likewise, words like *sanganaka* (सङ्गनक) for "computer," *vivaraṇa-paraṁparā* (विवरणपरम्परा) for "transmission chain," and other coinages appear in modern Sanskrit media. Thus Sanskrit vocabulary keeps expanding to cover science, law and everyday life, similar to how ancient Sanskrit created terms for earlier technologies (e.g. *yantrapaṭa* for waterwheel, *gajendra* for crane).

Stylistic and Syntactic Changes

Over time Sanskrit style became more constrained by grammar and poetics. In the Vedic era, syntax was highly flexible: speakers could omit articles (none in Sanskrit), place verbs in the middle or front of the sentence, and string together multiple particles or affixes. Vedic poets freely used compounds and even split tense forms. In Classical Sanskrit, under Panini's influence, word order settled largely to SOV, and complex compounds (*samāsa*) became the norm in literary style. As one study observes, "Vedic Sanskrit's flexible syntax…allowed poetic

variation," whereas Classical Sanskrit's standardized SOV order suited lengthy narratives like the Mahābhārata. Grammatical moods also narrowed: the Vedic subjunctive and injunctive survive mostly as fixed expressions; Panini's system favors indicative and imperative. Dual number (rare even in Vedic) all but vanishes by late Classical. These shifts supported prose and commentary writing: the language lost some Old Indo-European inflections, trading them for more transparent, analytical style.

Stylistically, Sanskrit moved from the terse, formulaic Vedic hymns to increasingly ornate literary conventions. Classical poets cultivated elaborate figures of speech (*alaṅkāra*) and subtle allusion (*dhvani*). Over the first millennium CE and beyond, a formal kāvya style developed: strict metres (ślokas, gaṇas), high use of compounds and similes, and emphasis on *rasa* (emotion). Grammar became part of style: Panini's strict forms were the aesthetic ideal, so writers avoided colloquial or ungrammatical usages (except when imitating Prakrit dialogue in drama). Indeed, as one scholar notes, Panini's codification "supported intellectual discourse" and helped preserve Sanskrit as a scholarly language even as the vernaculars (Prakrits) rose.

By the late medieval period, Sanskrit rhetoric was fully systematized: treatises on poetics outlined dozens of *alaṅkāra* (ornaments), rules for *śṛṅgāra* (amorous), *raudra* (fierce) etc. sentiments, and idealized grammar. Even Sanskrit prose (histories, Pūrvapakṣa-uttarapakṣa debates) adhered to high standards of diction. Thus over centuries the language's syntactic freedom grew curbed, and its style became deliberately classical and formal. As Bharata and later rhetoricians put it, a work of Sanskrit literature strives to "āpta-kavya-rasa" (juiciness of poetical sentiment) above all, which in practice meant follow-the-grammar and craft alliteration, rhythm and metaphor.

Sanskrit in Literary Genres

Sanskrit's prestige is closely tied to its literary uses. In epic poetry, Sanskrit set the tradition. The *Rāmāyaṇa* and *Mahābhārata* (c.400 BCE–300 CE or later) are composed largely in formal *śloka* metre. These epics use a narrative style rich in simile and moral didacticism; the language is high Sanskrit, with occasional regional or dialect words (often preserved as names or local color). Epic Sanskrit is grammatically close to the Paninian ideal, but still carries an archaic tone that recalls its mythic subject matter. Poets like Kālidāsa (c.5th century CE) brought *epic realism* and Sanskritic elegance together in *mahākāvya* ("great poem"), fully exploiting the language's sonority and proverbs. His plays (e.g. *Abhijñānaśākuntalam*) and lyrics (e.g. *Meghadūta*) set standards for courtly style: polished grammar, complex compounds and refined imagery.

In drama, Sanskrit was prescribed for gods, kings and educated characters, while ordinary characters spoke Prakrit (per classical dramaturgy). Hence Sanskrit dramatic dialogues often mix verse and prose, but always in elevated form. The 2nd century BCE *Nāṭyaśāstra* already laid out Sanskrit's use in theatre. Later playwrights (like Bhāsa, Śūdraka, Bhavabhūti) fine-tuned this blend of Sanskrit eloquence and everyday narrative.

Sanskrit's role in philosophy, law and science is equally central. The Upaniṣads, Brahma Sūtras, and grammar or math treatises (like those of Pāṇini, Kātyāyana, Patañjali, later Bhāskara on mathematics, etc.) were written in refined Sanskrit that doubles as both logical argument and poetic statement. Technical style here is terse and formulaic – e.g. sutra style – yet still adheres to Sanskrit grammar and metre (indeed, many sutras are set in verse). The language's precision

was prized for abstract thinking: Sanskrit terms like *adhyāya, pramāda, smṛti, sangraha, mokṣa* became technical labels in law and philosophy.

Grammar and Rhetorical Tradition

A hallmark of Sanskrit's development is its grammatical sophistication. Pāṇini's *Aṣṭādhyāyī* (c.5th century BCE) did not merely describe Sanskrit: it essentially defined Classical Sanskrit by listing every phoneme, affix and rule. Later scholars (Kātyāyana, Patañjali's *Mahābhāṣya* in the 2nd century BCE, and grammarians like Bhartṛhari in the early Common Era) built upon Panini's model, treating the language almost as a science. By the Gupta age, any learned writer was expected to follow "Pāṇinian Sanskrit." In practice this formalization meant that Sanskrit texts across genres share a common core grammar, with divergences ("ārṣaprayoga") flagged as archaic or nonstandard.

Parallel to grammar, Sanskrit developed a rich poetics (kāvya śāstra). Scholars like Bharata (who codified *rasa* theory) or Bhamaha and Daṇḍin (who catalogued *alaṅkāras*) treated literature as a craft governed by rules. They defined dozens of poetic devices (e.g. *upamā* "simile," *dīpaka* "mimesis") and metrics (like *anuṣṭubh*, *śloka*, etc.) that Sanskrit poets were expected to master. Thus the norms of style – from the sound of syllables (chandas) to the effect on the listener (*rasa*, *dhvani*) – were as important as syntax. This tradition entrenched a formal style: ornate diction, pervasive alliteration and compound words became the hallmarks of "good" Sanskrit literature.

In sum, Sanskrit's history of grammar and poetics solidified its role as the *cultured standard* of South Asia. Its rules were taught in gurukulas and universities; mastery of Sanskrit forms was a mark of erudition. Even as new genres emerged (like devotional hymns in Sanskrit or philosophical theses), they were styled according to these classical standards.

Modern Revival and Contemporary Use

In the modern era, Sanskrit has undergone waves of revival and transformation. Under British rule, Sanskrit studies continued in universities (Benares, Calcutta, Oxford, etc.) primarily as a subject of scholarship. In the nationalist movement of the 19th–20th centuries, leaders and intellectuals valorized Sanskrit as India's ancient cultural symbol. Early modern periodicals illustrate this: for instance, *Kashi-vidya-sudhanidhi* (also called *Pandit-Patrika*, first published 1866) is recorded as the first Sanskrit magazine. Over the independence struggle, dozens of Sanskrit periodicals appeared – *Mitram* (Patna, 1918), *Anand-Patrika* (1923), *Śārada* (1924), *Bhāratīya-bhāṣā-mālā* (1930s), etc. – "a special achievement of the independence struggle". In 1832, even the Asiatic Society of Bengal printed a bilingual English–Sanskrit research journal, reflecting early scholarly interest in Sanskrit's literature.

After independence, Sanskrit retained official recognition (it is now one of India's 22 scheduled languages) and continued in education. Unique modern media emerged: for example, Sudharma (launched 1970 in Mysore) is a Sanskrit daily newspaper. Its founder simplified classical Sanskrit to suit news reporting, making the language more accessible to readers. (In fact, some modern Sanskrit publications purposely relax high-style norms to communicate current events.) Sanskrit newspapers and journals today cover politics, science and society, proving the language's adaptability. Radio and television in India sometimes include Sanskrit segments (for example, "Sanskrit news" broadcasts), necessitating modern vocabulary. As one commentator notes, Sanskrit words for contemporary concepts – *vidyut* "electricity," *yantra* "machine,"

doordarśana “television” – have long existed and are used in such media. Moreover, even the Indian parliament’s Lok Sabha (since 2023) provides simultaneous interpretation in Sanskrit, signaling a symbolic “revival” of the language in governance.

Across India there are NGOs and schools (e.g. Samskrita Bharati) promoting spoken Sanskrit. Modern poets and writers continue composing in Sanskrit, often on current themes (patriotism, environment, etc.). In journalism, Sanskrit persits: e-papers, magazines and social-media content appear in the language, connecting traditional education to the digital age. Yet Sanskrit’s sphere remains specialized; it coexists with regional languages for everyday life. Still, Sanskrit’s style and vocabulary continue to be mined: newspapers yield simplified syntax, newspapers and social media create new neologisms, and *arthaśāstra*-style terms appear in law and economics discussions (e.g. *nyāyabhūmi* “jurisdictional area”).

In sum, Sanskrit’s journey from Vedic recitation to modern scholarly and cultural use shows both continuity and change. Its vocabulary expanded from ritual terms to include science, philosophy and technology, while its style evolved from the free poetic syntax of the Vedas into the codified elegance of classical literature. Sanskrit’s high cultural role persists: as a repository of India’s literary past, as an academic subject, and as a living (if niche) medium of expression. Its grammar and poetics remain formalized by centuries of scholarship, but modern advocates keep adapting Sanskrit to contemporary life, from newspapers to patent filings.

Sources: Modern linguistic and historical overviews; studies of Sanskrit grammar and style; literary histories; and reports on Sanskrit media and revival. Each source provides detailed scholarly or journalistic evidence on Sanskrit’s evolving vocabulary, syntax, genres, and contemporary use.

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Historical Development of Scientific Sanskrit Vocabulary and Its Logical Precision

Overview: Sanskrit evolved as the polished lingua franca of learning in South Asia. From the Vedic era (c.1500–500 BCE) to the early modern period, a specialized “shastric” Sanskrit register developed alongside colloquial speech. This learned register—shaped by grammarians, logicians, and philosophers—was characterized by technical morphology, precise terminology and rigorous syntax. Key figures like Pāṇini (grammarist, c.500 BCE), the Nyāya philosophers (c.2nd century BCE–CE) and later Buddhist logicians (5th–7th CE) systematized vocabulary to enhance logical clarity. Their work produced an academic Sanskrit whose structure is tighter and more rule-governed than everyday usage. We trace this development through the Vedic, Classical, Medieval and early modern periods, highlighting how grammar (vyākaraṇa), logic (nyāya) and other śāstras (treatises) contributed specialized vocabulary and style.

Vedic Sanskrit and Early Scholarly Tradition

In the Rigveda (c.1200 BCE) we find the earliest Sanskrit vocabulary, but at this stage it was poetic and fluid. The *śāstric* dimension began with the Vedāṅgas (ancillary sciences) around the 1st millennium BCE. For example, the *Śikṣā* (phonetics) and *Chandas* (meter) treat exact pronunciation as sacred, hinting at linguistic precision. Nirukta by Yāska (c.6th century BCE) and Panini's school also cite early word-lists. The Atharvaveda and other late Vedic texts show folk or "vernacular" vocabulary, while preserving elaborate grammar in rituals and hymns. Importantly, an intense oral tradition enforced phonetic exactness: well-known passages ("O Bṛhaspati…language…formed by the wise…purifying it like grain") reflect an awareness of language as a constructed, purified medium. By the later Vedic period, Sanskrit had set patterns, but it was not yet a single standardized tongue. Regional dialects and Prakrits coexisted, and much of everyday speech (especially of women and non-Brahmins) was in vernaculars.

Early grammar books: Even in Vedic times, grammarians studied language. Grammars in the Vajasaneyi Sūtra (Śatapatha Brāhmaṇa) era note variants in case-endings. But it was Pāṇini (4th/5th century BCE) who systematized Classical Sanskrit. His *Aṣṭādhyāyī* introduced a concise metalanguage of ~4,000 sūtras, defining roots, affixes (*pratyaya*), and markers (*liṅgā* and *it*-letters) for morphology. As *Sanskrit* Wikipedia notes, "language is observed in a manner that has no parallel among Greek or Latin grammarians." Pāṇini's grammar "defines the linguistic expression and sets the standard". In doing so, he eliminated archaisms and irregularities, creating a "controlled and restrained language" with archaisms removed – yet rich enough "to express thoughts" and meet "the future increasing demands of an infinitely diversified literature". This standard "Classical Sanskrit" became the model for academic writing. It was never a casual spoken tongue, however: even in antiquity scholars like Madhava or Deshpande describe Pāṇinian Sanskrit as a learned koinē, "acquired as a second language" by Brahmin men for debate, and comparable to medieval Latin in its use.

Figure: 17th-century birch-bark manuscript of Dharmakīrti's Rupavatāra, a Sanskrit grammar textbook based on Pāṇini. Such manuscripts preserve the highly structured academic Sanskrit of the tradition 【73†】.

Pāṇini's influence meant that Classical Sanskrit used full inflection and sandhi consistently. Word-formation followed his rules; compound nouns (*samāsas*) proliferated to express complex ideas within one word. Grammarians like Kātyāyana and Patañjali (Mahābhāṣya, 2nd century BCE) refined his technical terms: distinctions like *dhātu* (root), *nāma* (noun), *kṛt*-affix versus *taddhita* affix, *it*-markers etc., all have precise senses. Vocabulary increased in precision: for instance, to denote parts of speech and functions Pāṇini uses terms like *kāraka* (syntactic role), *pada* (word/morpheme). Over the Classical period, this scholarly lexicon spread: grammars of other languages (Pāli, Prakrits, Kashmiri, Tamil) borrowed Paninian categories and Sanskrit terminology, further cementing an "academic" vocabulary across the subcontinent.

Nyāya School and the Logic of Precision

In parallel to grammar, the Nyāya school (founder Akṣapāda Gautama, ca.2nd century BCE) formulated an exhaustive logic and epistemology. The Nyāya-sūtra opens by listing 16 *padārthas* (categories) whose true knowledge leads to liberation. These include *pramāṇa* (means of valid knowledge), *prameya* (object of knowledge), *saṃśaya* (doubt), *prayojana*

(purpose), *dṛṣṭānta* (example), *siddhānta* (established conclusion), *avayava* (members of a syllogism), *tarka* (reasoning), *vāda* (discussion), *jalpa* (dialectical debate), *vitanda* (destructive criticism), *hetvābhāsa* (logical fallacy), *chala* (deceptive quibble), *jāti* (futile rejoinder), and *nigrahasthāna* (point of refutation). This very vocabulary (most of which are Sanskrit terms) was invented or systematized by Nyāya thinkers. Their sutras and commentaries define each term rigorously. For example, *pramāṇa* is defined as "that which, when apprehended, dispels doubt in respect to something" (Nyāya II.1.15), and *anumāna* (inference) requires a pervasion (*vyāpti*) between reason and consequent. The list of four pramāṇas itself—*pratyakṣa* (perception), *anumāna* (inference), *upamāna* (comparison), and *śabda* (verbal testimony)—is canonical. Each Nyāya term has a technical sense: e.g. a *dṛṣṭānta* must illustrate the universal in every case, not just by chance; *avayava-siddhi* (the five-member syllogism) has a fixed structure of statement-hypothesis-example-application-conclusion (the *nāya* and *aśya*).

The effect was a highly analytical vocabulary for philosophy. As philosopher B.K. Matilal notes, logic in Classical India became "the systematic study of informal inference-patterns, the rules of debate, [and] the identification of sound inference vis-à-vis sophistical argument". Nyāya authors wrote prolifically (e.g. Vātsyāyana's Nyāya-Bhāṣya, 4th c. CE), using thousands of defined terms. The language is compact yet syntactically constrained: arguments were given in precise five-step syllogisms with predictable markers (like *api*, *tu*, *atra*, *athāgataḥ*). Compared to everyday speech, Nyāya Sanskrit employed fewer particles and more formal connective affixes. Its sentences often follow a fixed pattern reflecting logical structure (e.g. "Subject, predicate must be interpreted as inhering in the middle term; for example… Therefore …, c.q."). In sum, Nyāya's academic register is sharply delineated by its metalinguistic terms and canonical sentence schemas, far from colloquial usage.

Buddhist Logic and Śāstric Terminology

The Buddhist "Pramāṇavāda" school (5th–7th c. CE, founders Dignāga and Dharmakīrti) further intensified technical Sanskrit usage. While the Buddhas' teachings were often in Prakrit or mixed language, later Buddhist philosophers composed in Sanskrit (especially as Buddhism spread to Kashmir and Central Asia). Dignāga's *Pramāṇa-samuccaya* and Dharmakīrti's *Pramāṇavārttika* treat inference and cognition with their own terms. They recognized only two pramāṇas (perception and inference), subsuming comparison and testimony under inference, and introduced new concepts like *alaukika-pratyakṣa* ("non-sensory perception") for meditative insight, and *anupalabdhi* (non-apprehension as evidence). Their famous *trairūpya* doctrine identifies the three characteristics of a valid reason. These works have densely packed Sanskrit technical vocabulary: e.g. *hetu-dṛṣṭānta* (example via the reason), *svabhāva* (nature of a thing), *upalakṣaṇa* (inferential marker), *lakṣaṇā* (indirect signification). Although using Sanskrit language, Buddhist logic often reanalyzed terms: for instance, Dignāga's use of the particle *eva* ("only") in syllogisms was a novel precision device. The highly rule-governed approach shows the scholastic register at its narrowest: meaning is strictly defined, and inference is spelled out algorithmically rather than orally suggested. (As one observer notes, Buddhist/Indian logic "provides a critical and systematic analysis of the diverse means of correct cognition".)

Buddhist scholars also continued the grammatical tradition. Dharmakīrti's *Rupavatāra* (referenced by our image above) is a Sanskrit grammar for Buddhists, following Pāṇini's methods. As [73] illustrates, manuscripts of Buddhist grammars look just like other Sanskrit technical texts – complete with indexed terms and black-shaded commentary sections. Overall,

the Buddhist logicians and grammarians enriched Sanskrit shāstric vocabulary while remaining in the high, formal register.

Medieval Commentarial Tradition and Scientific Sanskrit

From the 8th century onward, virtually all fields of knowledge in India used this scholarly Sanskrit. Commentators expanded the lexicon further. For example, medieval mathematicians and astronomers (Āryabhaṭa, Brahmagupta, Bhāskara, etc.) wrote in Sanskrit, coining terms for modern concepts or standardizing astronomical terminology (*jyotiṣa*). Medical texts (Suśruta, Caraka) were already in Sanskrit, but later commentaries (e.g. Vāgbhaṭa's Aṣṭāṅga Hṛdaya commentaries) used systematic terminology (*doṣa*, *dhātu*, *srota*, *vṛddhi* etc., with precise definitions). Sāṃkhya, Yoga and Vedānta philosophers produced Sanskrit treatises full of technical words (e.g. Patañjali's Yogasūtra commentary defines *aviveka-khyāti*, *kaivalya*, *prakāśa*, etc.). By the 12th–14th centuries, Nyāya itself was reborn as Navya-Nyāya with Gaṅgeśa (Jewel, 14th c.), introducing notational devices (e.g. subscripts and parenthesis in commentary) and razor-sharp definitions of words like *lakṣaṇa* (indirect meaning). As the SEP notes, Gaṅgeśa's work gave "definitions of knowledge in general and of natural 'pervasions' as underpinning inference…as well as analyses of conditions governing meaning in knowledge-transfers", and "crisp treatments" of logical fallacies. The result was a Sanskrit so technical that even educated Indians found it inaccessible without training.

Throughout medieval India, vernacular languages (Prakrits, Apabhraṃśa and later modern languages) continued among the populace, but Sanskrit remained the prestige register. Inscriptional Sanskrit (for grants and holy sites) used more stylized Sanskrit vocabulary and grammar (often shorter compounds for brevity), yet still followed learned norms. Institutions like Mīmāṃsā and Vedānta shāstras each developed their own canonized terms (*pratiṣedha*, *upadhi*, *anvaya*, etc.), taught in the gurukul (pāṭhaśāla) tradition. By the 18th–19th centuries, Sanskrit grammar and philosophy entered colonial academia, with scholars like Böhtlingk and Monier-Williams compiling dictionaries and grammars; but even then, traditional pandits continued to debate logic and grammar in Sanskrit circles. In modern times, Sanskritists still coin new scientific terms (for example, *raktapitta* for leukemia) using classical morphemes, reflecting the same structural approach.

Scholarly vs. Colloquial Register: Structure and Precision

Morphology and phonology: Academic Sanskrit rigorously employs inflectional endings and sandhi (phonetic fusion rules), enhancing morphological clarity. For instance, to preserve case endings, Sanskrit often inserts semivowels (*-y-*, *-v-*, *-s-*) between vowels (unlike Greek which simply contracts vowels). This means suffixes remain audible and unambiguous. Panini's grammar even uses "marker" letters to indicate how suffixes attach. In contrast, colloquial Sanskrit (or mixed speech) tends to simplify: endings may be reduced (often losing final –ḥ / –m), visarga might drop, and complex sandhi may not be applied. For example, an academic text will write *guruḥ śiṣyai paṭhate* "the teacher reads (to) the student" with proper case endings, whereas spoken style might reduce *guruḥ → guru* or use a local structure.

Syntax: Formal Sanskrit follows strict syntax guided by case relations and grammar sutras. Sanskrit is often described as a head-final (SOV) language; medieval and scholastic prose particularly uses postpositions and subordinating affixes (like *–yat*, *–kṛta*) to link clauses. Logical treatises, in particular, use fixed patterns: e.g., *prajñaptādharmāt, pramāṇena cetanāt* (in Nyāya inference formulas). Complex bahuvrīhi compounds (e.g. *dvitīyapakṣadharmāt*

“from the nature of the secondary (hypothetical) instance”) and participial phrases are common in texts. By contrast, everyday speech can be more flexible or analytic: it may use simple pronouns where academic Sanskrit would use compound participles, and it often mirrors the syntax of vernaculars (which are also head-final but use prepositions). Indeed, modern spoken Sanskrit often follows Hindi word order. Finally, colloquial Sanskrit may allow non-standard orders or elisions that a vyākaraṇa text would rule out.

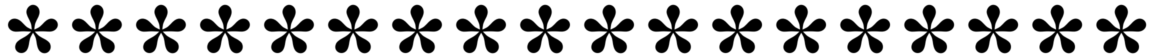
Semantic precision: Technical Sanskrit has a semantic lexicon defined by the *śāstra*. Many words are polysemous in classical poetry but get specialized meanings in scholastic use. For example, *śabda* normally means “sound,” but in Nyāya it also denotes “verbal testimony as a pramāṇa.” Homonyms are systematically resolved by context rules. Philosophical terms like *tatpuruṣa*, *jātirādhā*, *anupalabdhi*, *nirodha*, etc., each have narrow, stipulated definitions (often referenced by sutra or śloka). Everyday speech, however, is more fluid. A word like *vāk* might mean “speech” or “sentence” depending on context, without an underlying fixed technical sense. Colloquial vocabularies include common loanwords and Prakrit-derived forms (e.g. *pīṭha* vs *paṭha* for “text”), and idiomatic usages that scholastic Sanskrit typically avoids. In sum, shāstric Sanskrit operates with near-mathematical exactness of meaning, whereas vernacular Sanskrit allows looseness and abbreviation (like dropping case markers in casual speech).

These contrasts can be summarized:

Feature	Academic/Specialized Sanskrit	Colloquial/Early Sanskrit
Vocabulary/Terminology	Extensive use of technical terms (e.g. *pramāṇa, linga, rūpa, anumāna, pūrvapakṣa* etc.), many compounds and affixes from Paninian grammar. Lexicon is Sanskritic and learned; new words are coined analytically.	Everyday lexicon includes simpler words, regional Prakrit forms, and loan words. Fewer compounds; uses common sense meanings rather than defined philosophical senses.
Morphology	Strict inflection: full case/gender/number endings, auxiliary markers per Panini. Sandhi (euphonic combinations) applied consistently, even inserting semivowels for clarity. Abstract markers (like *ṭ* in *-kṣ-* suffix) signal grammatical roles.	Tendency to drop or reduce endings, simplify sandhi or avoid it. May use partially declined or indeclinable forms (e.g. *guru* instead of *guruḥ*). Colloquial speech often relaxes rules (as noted by Salomon’s “conversational Sanskrit” term).
Syntax	Generally rigid SOV order with explicit case markers and subordination. Frequent use of participles and long compounds to pack information. Logical texts use fixed syntactic patterns (like five-member syllogisms with set particles).	More flexible. Sentences often shorter with coordinate clauses. Syntax may mirror local language patterns (as Shulman notes, modern spoken Sanskrit often follows Dravidian-like left-branching structures). Subordinate clauses and relative constructions are simpler or omitted.

Semantic Precision	Each term's meaning is narrowly defined in context (e.g. in Nyāya or Mīmāṃsā definitions). Ambiguity is minimized by context markers. Compound words carry compositional meaning.	Words have broader, context-driven meanings. Ambiguities tolerated (e.g. *tad* may mean "that" or "its"). Idioms and metaphor are common. Technical distinctions (e.g. *abhidha*, *lakṣaṇa* in semantics) are not used.
Usage/Context	Used in formal teaching, scripture, scholarly debate. Often written or chanted; memorized verbatim. Literary style (sutra, śloka, technical prose).	Spoken in daily life (historically rare, more today in modern courses). If written, uses simpler prose or poetry aimed at non-experts. Not governed by grammatical exercises or commentarial conventions.

These differences are well documented. As Houben observes, Sanskrit exhibits a sharp diglossia: what people call "vernacular Sanskrit" is really a misconception (a *contradictio in terminis*); it was essentially always a learned code. Kulikov likewise compares Classical Sanskrit to Medieval Latin: a language learned by scholars, not "spoken by adults addressing their children" in ordinary life. Thus academic Sanskrit's morphological clarity, syntactic rigor, and semantic precision evolved hand-in-hand with the tradition of vyākaraṇa, nyāya, and other śāstras. These shāstra literatures enforced a logical structure on the language itself. In contrast, everyday speech remained more fluid and forgiving of irregularity, until eventually evolving into the modern Indo-Aryan tongues.



Sindhi people

Historical Development of the Sindhi Language (Origins to Early 1900s)

Sindhi is a Northwestern Indo-Aryan language historically spoken in the Sindh region (along the Indus River/Sindhu). Its name derives from Sanskrit *síndhu* (“Indus”), reflecting its ancient roots. In the Bronze Age (c.3300–1200 BCE), the Indus Valley (Mohenjo-daro, Harappa) was home to the undeciphered Harappan language; this was later supplanted by Indo-Aryan speech. Like other Indo-Aryan tongues, Sindhi descends from Old Indo-Aryan (Sanskrit) via Middle Indo-Aryan stages such as Pali and various Prakrits and Apabhraṃśa dialects. (19th-century scholar G. A. Grierson suggested Sindhi came from a local Apabhraṃśa called *Vracaḍa* of Sindhudēśa.) Throughout this long evolution, Sindhi preserved many archaic features: for example, it retains final short vowels (-a, -i, -u) lost in most modern Indo-Aryan languages, and it kept several consonant clusters (like *vr*- and *tr*- with retroflexion) that other languages simplified.

Phonetically, Sindhi is highly distinctive. One hallmark is its four implosive consonants (e.g. written ٻ, ڀ, ڄ, ڙin Sindhi-Arabic) which arose from earlier geminate or voiced stops. For instance, historical *g-, gg-* became an implosive /ɠ/. Other sound changes from Middle Indo-Aryan include shortening geminate consonants (e.g. *akkhi* > *akhi* “eye”), voicing post-nasal stops (e.g. *danta* > *ɗandu* “tooth”), and changing intervocalic *-s-* to *-h-*. Simultaneously, Sindhi retained many older features: all short final vowels remained (often whispered), as did the nasal *ṇ-* and long vowels before geminates. These conservative phonological traits and unique innovations underline Sindhi’s position on the frontier between Indo-Aryan and nearby Iranian languages.

Grammatically and lexically, Sindhi likewise shows a layered evolution. It is a highly inflected language: nouns have five cases (nominative, oblique, vocative, ablative, locative) with eleven case markers, and there are two grammatical genders and two numbers. Many Sanskrit-derived inflections survive intact. A notable feature is the use of suffix pronouns (e.g. *atha-mi* “is mine”, *atha-si* “is his”) for possession and emphasis, unlike most related languages which use separate words. The core vocabulary is overwhelmingly Indo-Aryan: base words come from Sanskrit via Prakrit and Apabhraṃśa. Over time, however, Sindhi has absorbed vast numbers of loanwords. Medieval and later Persian and Arabic have contributed a rich high-register vocabulary; for example, everyday terms like *darvāzo* “door” (from Persian *darvāza*) show regular Sindhi declension. Colonial contact added English (and some Portuguese/French) borrowings. Neighboring languages (Punjabi, Balochi, Gujarati, etc.) have influenced Sindhi modestly, especially in border areas.

Historical and Religious Influences

Sindh’s religious and political history strongly shaped Sindhi. In antiquity the region embraced Hinduism, Buddhism and Jainism; Buddhist monasteries and Hindu temples would have brought Middle Indo-Aryan (Pali/Prakrit) influences. However, the Islamic conquest of Sindh (712 CE under the Umayyads) was a turning point. Sindhi became the first Indo-Aryan language to encounter Arabic and Persian directly, and Muslim rule (first Arab, later Persianate dynasties) made Persian the prestige language of administration and culture. Consequently, from the 8th century onward Sindhi adopted thousands of Perso-Arabic terms (and many script forms). This influence is evident in Sindhi’s Sufi poetry (where Persian *bayt* couplets and ghazal motifs appear) and even in early chronicles. Under British rule (post-1843), Sindhi again faced change: English and Western ideas entered its lexicon, and colonial officials promoted Sindhi study in government schools.

Writing Systems

Sindhi has been written in multiple scripts over time. In Muslim Sindh the Perso-Arabic script (in Naskh style) became standard. This script was specially adapted to Sindhi: the British standardized it in 1853, giving Sindhi *52 letters* (adding digraphs and dots) to cover implosive, aspirated and nasal sounds. Today Pakistan uses this Sindhi-Arabic alphabet (with extra letters like ٻ, ڄ, ڳ, etc.). In Hindu Sindhi communities, however, other scripts were used historically. Merchants wrote Sindhi in various *Laṇḍā* “clipped” scripts: for example, *Khojki* (used by Nizari Ismaili communities) and *Khudabadi* (adopted by traders). Some Sindhi Sikhs even used a *Gurmukhi*-derived script. In parts of India after 1947, Sindhi is also written in Devanagari (अक्षर) to serve Hindu Sindhi writers. Before modern standardization, as late as the 15th–18th centuries numerous Devanagari and Landa variants coexisted for commerce, religion and literature. Ultimately, the Perso-Arabic script was decreed the official standard in colonial times. (Notably, British reformer Narayan Vaidya briefly attempted to introduce Khudabadi in 1868, but strong Muslim opposition forced the administration to retain the Arabic script.)

Medieval Sindhi Literature

Early Sindhi literature is largely devotional. The first attested Sindhi writing is a fragmentary 9th-century translation of the Qur’an into Sindhi (883 CE). By the 11th century, Ismaili missionaries were composing *ginans* (mystical hymns) in a Sindhi-like language. From the 15th century onward a distinct Sindhi poetic tradition flourished. The medieval genre was predominantly religious and syncretic: Sufi Muslim and Hindu Bhakti poets shared themes. The form of choice was the *bayt* (rhymed couplet) – a format borrowed from Arabic/Persian verse. The earliest major Sindhi poet was Qāḍī Qadan (fl.1490s–1551), who introduced mystical Sufi verse into Sindhi. Other early masters included Shah Abdul Karim Bulri (1538–1623) and Shah Inat (c.1613–1701), both Sufi poets whose work blended vernacular folk imagery with Islamic mysticism.

In parallel, Hindu bards were versifying local romance tales. A rich corpus of Sindhi folktales – *Sassui Punnu*, *Sohni Mahiwal*, *Umar Marvi*, *Noori Jam Tamachi*, etc. – circulated orally for centuries and were eventually written down or embedded in poetry. The greatest Sindhi poet, Shah Abdul Latif Bhittai (1689/90–1752), wove many of these legends into his masterpiece *Shah Jo Risalo*. Latif’s Risalo (compiled posthumously) is a collection of devotional Sufi songs in Sindhi that often retell the “Seven Queens” of Sindh’s folklore; his work epitomizes the merger of local lore with universal themes of divine love. Sufi poets continued after him (e.g. Sachal Sarmast in the 18th–19th c.), and by the early 19th century Sindhi Hindus also joined in. For example, Dalpatram Sufi (d.1841) wrote heroic Sindhi odes, and Sayyid Sabit Ali Shah

(1740–1810) composed Sindhi ghazals and elegies. Thus by the mid-1800s a substantial body of classical Sindhi poetry (in Sufi and Bhakti styles) existed.

Colonial Era: Standardization and Modernization

The British conquest of Sindh in 1843 brought dramatic changes. Governor Sir Charles Napier integrated Sindh into Bombay Presidency, displacing Persian as the court language. By 1848 Sindhi was declared the official provincial language. The colonial administration took concrete steps to promote Sindhi literacy: Sir Bartle Frere (Commissioner of Sindh) famously ordered in 1857 that all Sindh civil servants pass an exam in Sindhi and shifted official records from Persian into Sindhi. At the same time, British officials standardized the script: in 1853 a formal Sindhi-Arabic orthography (with 52 letters) was adopted. These policies favored Sindhi's use in government and education, often at the expense of Urdu or Persian.

Under colonial patronage, Sindhi printing and prose writing took off. The first Sindhi press (Mahmūdi Press) opened in Bombay in 1867, producing Sindhi-language books and verse. Christian missionaries and colonial scholars compiled Sindhi grammars and dictionaries (notably Ernest Trumpp's 1861 *Grammar of Sindhi* and John Wilson's Sindhi–English dictionary in 1855). By the late 19th century a new generation of Sindhi intellectuals emerged. Prominent among them was Mirzā Kalīch Beg (1853–1929), a prolific scholar who wrote hundreds of Sindhi books and actively developed modern Sindhi prose and journalism. Other early writers included Kauromal Khilnani (1844–1916) and Dayaram Gidumal (1857–1927), who published textbooks, essays and translations (on history, health, spirituality, etc.) in Sindhi. These pioneers showed that Sindhi could handle modern subjects and genres.

By 1900 Sindhi had achieved a solid institutional footing. It was taught in schools across Sindh, used in courts and municipal records, and enjoyed a flourishing print culture of newspapers and magazines. In 1901 the Bombay Presidency even created a Sindhi Adabi Board to oversee literary development. In short, through ancient lineage and medieval syncretism, augmented by colonial support, Sindhi had evolved into a full-fledged literary language by the early 20th century.

Sources: Scholarly works on Sindhi history and linguistics (and references therein) have been used to trace the language's Indo-Aryan roots, sound changes, cultural influences, script history, and literary milestones. Each cited passage above comes from open-access research and encyclopedic sources on Sindhi language and history.

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Historical Evolution of the Sindhi Writing System (to Early 1900s)

Ancient roots: The earliest evidence of writing in the Sindh region comes from the Indus Valley civilization (c.2500 – 1900 BCE). Rock inscriptions in Sindh show a "variant Indus script" used

after the urban Harappan decline.pk. With the advent of Buddhism and Brahmanical culture (3rd century BCE onwards), Brahmi and Kharosthi scripts were introduced in Sindh, largely supplanting the old Indus writing..pk Brahmi (and its offshoots) thus became the ancestral script family for all later Sindhi writing. Over centuries, Sindhi-speaking scribes adapted these Brahmic scripts in various regional forms. For example, the Sharada script (an old Northern Brahmi derivative) likely influenced early Sindhi writing, and by the medieval period traders in the region used a cursive "Lahnda" (mercantile) script that eventually gave rise to local variants.

Medieval and pre-colonial scripts: In the medieval era, Sindhi was written in multiple, parallel systems tied to religious and commercial traditions. Muslim administrators and scholars naturally used the Perso-Arabic script (written in Naskh style) and Persian script (Nastaʿlīq) for Sindhi, adapting it to local sounds by adding new letters (as Abul Hasan al-Sindhi and later scholars did). Hindus and other communities continued to write Sindhi in Brahmic-derived scripts. In practice, the British found Sindhi Pandits writing the language in Devanagari variants (sometimes called *Saindhu* or *Ardhanagari*), while Hindu merchants used Landa-based scripts without vowels (so-called "Modi" or *Vaṇaka* scripts). Notable Landa-derived scripts included Khudabadi (named after Khudabad) and Khojki, used respectively by Hindu traders and by the Ismaili Khoja community for religious verses. An 1860s Siddhi commission noted that, in India, Sindhi could be written in Devanagari, Khudabadi, Khojki or even Gurmukhi, whereas in Sindh the Arabic script predominated. For example, the Khudabadi ("Warangi") script – developed by Sindhi merchants – was formally imposed by the Bombay government in 1868 as the "Hindi Sindhi" script, though it was largely superseded by the Arabic-based system under British rule. (By contrast, a contemporary effort to create a unified *Hindu-Sindhi* script – a revised Warangi submitted by Narayan Jagannath Vaidya in 1867 – enjoyed brief official use in schools and courts but eventually fell out of favor under communal pressures.)

In summary, by the 18th century Sindhi had no single script: Hindus used Devanagari-derived scripts and local mercantile alphabets (Khudabadi, Khojki, etc.), while Muslim literati used the Perso-Arabic alphabet. (Notably, Sindhi scholar Abul Hassan Sagheer al-Sindhi (d.1724) compiled an "old" 40-letter Sindhi Arabic script for religious education.) This diversity reflected cultural lines: for example, Captain George Stack's 1849 Sindhi grammar and dictionaries were published in Devanagari with the help of Hyderabad Pandits, whereas Muslim scribes read and wrote Sindhi in Arabic script.

British Colonial Standardization (1840s–1900)

After the 1843 annexation of Sindh by the British East India Company, colonial officials quickly recognized the need to standardize Sindhi for administration. In 1848 Governor Sir George Clarke declared Sindhi the official language of Sindh, replacing Persian in courts and schools. However, Sindhi could not be used in administration until a standard script was chosen. In 1851 Sir Bartle Frere (the new Sindh Commissioner) mandated that all British civil officers learn colloquial Sindhi, but noted it required "an approved script" for correspondence. This spurred a high-level debate: Sir Richard F. Burton (a colonial officer and orientalist) strongly favored a Perso-Arabic alphabet (with extra dots and diacritics for Sindhi sounds), while Captain George Stack (a Christian missionary and Sindhi scholar) argued for using one of the existing Hindu-Sindhi scripts (like Khudabadi/Devanagari). Frere observed that "Hindus would not learn [an] Arabic script, nor would Muslims use a Devanagari". In December 1852 the Court of Directors in London intervened: they approved a 52-letter Sindhi alphabet based on the Perso-Arabic script.

Thus the British officially adopted an Arabic-derived script. Frere appointed Bombay education inspector Barrow Ellis (later Sir Barrow Ellis) to oversee it. Working with a committee of local scholars (Rai Bahadur Narain Jagannath Vaidya, Diwan Nandiram Mirani, and others), Ellis extended the 29-letter Arabic/Persian alphabet to 52 signs to cover all Sindhi phonemes. This expanded Perso-Arabic script – often called "Sindhi-Arabic" – was printed and promulgated in mid-1853. Almost immediately textbooks and translations began to appear in the new script, and within a few years "Mahomedans [Muslims]…preferred to write it in the Arabic character". By 1855 Frere could report that all local courts conducted business exclusively in Sindhi written with the Arabic-script alphabet.

For clarity, the key steps under British rule were:

- 1848: Sindhi becomes the official language of Sindh.
- 1851: Frere requires officials to learn Sindhi, highlighting need for a script.
- 1852: EIC Board approves an Arabic-script Sindhi alphabet (52 letters).
- 1853: The adapted Perso-Arabic script is published (July 1853).
- 1855: Official correspondence and court records are shifted to Sindhi in the Arabic script.
- 1866: The first Sindhi literary works (e.g. Shah Abdul Latif's *Shah-jo-Risalo*) are printed in the new standard script.

Throughout the late 19th century, British schools and printing presses in Sindh promoted the Perso-Arabic script. Sir Ernest Trumpp (a scholar sent to Sindh) even had Sindhi typefaces cast in Germany and published *Shah-jo-Risalo* (1866) in the official Arabic-Sindhi script. George Stack produced Sindhi–English dictionaries (1849, 1855) and a grammar (1849) in Devanagari, but these became secondary to the Arabic-based orthography as the Government pushed the new standard. By the 1870s the 52-letter Arabic script (with its extra dots and aspirated digraphs) was firmly established for education and administration; Grierson's 1880s *Linguistic Survey* later confirmed it as the agreed standard.

Cultural and Communal Influences

The choice and use of scripts was heavily shaped by religious and cultural factors. Muslim Sindhis preferred the Arabic script not only for familiarity but because Persian/Arabic scripts could naturally write Islamic terminology and names. (Indeed, one British comment was that Muslim proper names "could not be written in Devanagari," which helped decide the issue.) In contrast, Hindu Sindhi communities often regarded Brahmi-derived scripts as their heritage. Early colonial observers noted Sindhi pandits writing mostly in Devanagari variants and traders in Landa scripts. For example, when Captain Stack compiled his early Sindhi dictionaries, he worked closely with Hindu scholars from Hyderabad. Sindhi Hindus also spearheaded efforts to promote their scripts: a *Sindh Sanskar Sabha* in Hyderabad campaigned in the 1860s for the Warangi/Khudabadi script, which the Bombay government briefly embraced. However, as noted, that Hindu-script movement ultimately lost ground under the colonial regime.

Regionally, these communal lines overlapped with centers of power. The old Sindhi capital Hyderabad (under Talpur rule) remained a stronghold of Hindu Sindhi scholarship and Brahmin pandits (who continued using Devanagari/Warangi). British Sindhi studies often drew on Hyderabad Pandits (e.g. Pandit Brahamanand). By contrast, Karachi (the growing port city and later colonial capital) became the hub of government Sindhi printing and education. There Arabic-script Sindhi was taught to government clerks and printed on presses (e.g. Karachi had one of the first Sindhi newspapers). Over time, Muslim-majority Karachi entrenched the Arabic

script, while many Sindhi Hindus (especially after later migrations to India) kept the older scripts like Devanagari or Khudabadi alive in religious and cultural contexts.

In short, British policy led to a standardization that privileged the Arabic-based system for official use, but local variation persisted. By 1900 virtually all government records and schools in Sindh used the adapted Perso-Arabic alphabet, while Hindus continued to publish some Sindhi works in Devanagari (especially in British India) and used Khudabadi or Khojki within their own communities. The 19th century thus transformed Sindhi writing: ancient Brahmi roots and myriad local scripts gave way (at least formally) to a single standardized Perso-Arabic orthography under colonial influence.

Sources: Authoritative historical and linguistic studies have documented this evolution. For example, Aziz Kingrani notes early Sindhi rock inscriptions and the later introduction of Brahmi and Kharosthi scripts.pk. Colonial-period authorities (Frere's correspondence, published by Martineau) and later scholars (Ellis 1856, Trumpp 1872, Grierson 1919) record the British standardization process. Modern research on Sindhi confirms the multiple scripts used historically and the 19th-century shift to Arabic Sindhi. These sources together give a full picture of Sindhi script history from ancient Brahmi origins to the colonial era orthography.

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Development of Sindhi Vocabulary and Style in Literature and Journalism

Pre-Islamic and Early Historical Phase

Sindhi is an ancient Indo-Aryan language whose core vocabulary derives from Sanskrit (through Prakrit and Apabhraṃśa). Scholars have long debated its origin: some trace Sindhi to the Vrachada Apabhramsha stage of Prakrit (Ernest Trumpp), while others emphasize a pre-Sanskritic substrate from the Indus Valley civilization. In practice Sindhi retained many Sanskritic roots for common concepts (earth, water, life, etc.) and also reflects non-Aryan (possibly Dravidian) elements from the Indus region. Ancient Vedic texts praise the Sindhu (Indus) river, and archaeological finds at Mohenjo-Daro show a sophisticated Indus culture long before Aryan . Over time the Sindhi lexicon absorbed Sanskrit borrowings (e.g. *dharti* "earth," *pani* "water," *dharm* "duty") via early Prakrits, forming the base vocabulary still recognizable today.

The early literary style was primarily oral. Sindhi folklore (later transcribed) is rich in romantic epics and ballads. Folk sagas like Sassui-Punnu, Lilan-chanesar, Umar-Marui and heroic epics such as Dodo Chanesar and Moriro were sung by itinerant bards. These narratives use formulaic alliteration and refrains in vernacular Sindhi. Since no Sindhi manuscripts survive from this period, much pre-Islamic culture is known only through later retellings. Stylistically, the oral tradition favored simple narrative verse and repetition. Key influences were local customs and Hindu-Vedic myth.

- Language Influences: Indo-Aryan (Prakrit/Sanskrit) base; possible Dravidian/Indus substrate.
- Oral Literature: Folk-romances and epic ballads transmitted by wandering singers (alliteration and refrain-heavy verse).
- Scripts: Proto-writing existed (Indus seals undeciphered); later Sindhi was written in various Brahmi-derived scripts (e.g. Khudabadi, Khojki) before Islam.

Islamic and Persianate Phase (8th–18th centuries)

From the Arab conquest of Sindh (712 AD) onward, Sindhi underwent major Arabic and Persian influence. Arabic became the language of religion and administration under early Muslim rule, so Sindhi borrowed thousands of Arabic words (especially religious and legal terms). Persian later became the high-culture language of Sindh under successive dynasties (Arghuns, Mughals, etc.), so Persian loanwords permeated the vernacular, particularly in poetry and learned discourse. For example, Persian *darwāzā* ("gate") became Sindhi *darvāzō* "gate," Persian *ummat* ("community") became Sindhi *umata*, and Arabic *bāz* ("hawk") became *bāzu*. These borrowings did not alter Sindhi grammar, but enriched its vocabulary for abstract, religious and administrative concepts.

High culture was dominated by Sufi and devotional poetry. Sindhi poets synthesized Islamic mysticism with native symbols, often writing *va'iṇ (baita)* – alliterative couplets with refrains. The medieval corpus is marked by a unique blend of Hindu (Vedantic) and Muslim ideas. Notable figures include *Qazi Qadan* (15th cent.), *Shah Abdul Karim* (16th cent.), and *Shah Inayat* – mystic poets whose works mix Persian-Arabic imagery with Sindhi folk idioms. The pinnacle was *Shah Abdul Latif Bhittai* (1690–1752), whose Risalo compiles lyrical Sufi verses based on local legends. Latif's poetry preaches universal brotherhood in a highly emotive style, blending Persian metaphors and native words. He used classical Sindhi meters but infused them with Persian ghazal-style imagery. Later Sufi poets like *Sachal Sarmast* (1739–1826) and *Sami* (Vedantist mystic, 1743–1850) continued this tradition. Sindhi Hindu writers (like *Dalpatram Sufi*, d.1841) also composed in the Sufi idiom, writing marsias (elegies) and jangnamas influenced by Persian forms.

Stylistic features of this phase include: alliterative rhyming couplets (baita), rich allegory (bees sawalayī, zodiacal metaphors), and extensive use of syncretic religious imagery. Example: a 16th-c. couplet by Qazi Qadan uses Persian/Arabic terms (*nafs-e mutma'inna* for "soul at peace") while invoking a hawk and a minaret in Sindhi (the verse appears in transliteration). Rhetorically, Sindhi medieval verse prized parallelism and symbolism, often borrowed from Persian ghazals or Arabic masnavis but rendered in the Sindhi idiom.

- Language Influences: Heavy Arabic (religious, legal terms) and Persian (abstract, literary) borrowings.
- Literary Styles: Sufi mystic poetry dominated – baiti (couplets), ghazals and marsiyas. Marin chants and kafi (simple devotional songs) also emerged.
- Key Figures: Qazi Qadan, Shah Abdul Karim, Shah Inayat (early Sufis); Shah Abdul Latif Bhittai (Risalo, 18th c.); Sachal Sarmast; Dalpatram Sufi.

Colonial Period (19th–early 20th century)

The British conquest of Sindh (1843) brought new shifts. Administrators standardized Sindhi for modern use. In 1851 the British (Sir Bartle Frere's committee) fixed the Perso-Arabic script

alphabet, adding letters for Sindhi's implosives and.pk. (By 1853 this Arabic-Naskh script with 52 letters was formally adopted.) Printing presses followed: the first Sindhi newspaper, Sindh Sudhar, appeared in 1866 (published by the government).pk. Earlier, a bilingual Sindhi–Persian weekly Fawaid-ul-Akhbar ran from 1858, but Sindh Sudhar was the first exclusively Sindhi.pk. Printing enabled mass literacy and the rise of newspapers, magazines and textbooks in Sindhi.

Under colonial rule Sindhi literature modernized. Writers drew on English, Persian and Sanskrit models. Four pioneer prose authors – Kauromal Khilnani, Mirza Qalich Beg, Dayaram Gidumal and Parmanand Mewaram – wrote essays, novels and textbooks between 1860 and 1930. They often adapted works from other languages: e.g. translating Sanskrit and Persian classics or writing on social topics borrowed from English. Style varied: Khilnani's prose was "simple and stately," Gidumal's was "elegant and eloquent," while Mewaram's journalistic essays were "lucid and forceful". Newspapers adopted a formal register, reporting news with a straightforward tone modeled on English journalism. Educated Sindhi gradually used many English loanwords for modern concepts (e.g. *rel* "rail," *station*, *qanoon* from English "law" via Urdu), though abstract or scholarly terms remained Persian/Arabic. As Iranica notes, the emergent modern Sindhi drew extensively on English models in style but still used Persian-derived vocabulary for high concepts.

Key developments: the Sindhi alphabet was promulgated and widely.pk; printing presses proliferated; and dozens of newspapers (Aftab, Mohammadi, and others) spread new prose styles. Journalistic Sindhi of this era is characterized by direct prose, formal diction, and occasional Urdu-style register.

- Language Influences: Continued Persian/Arabic for formal vocabulary; increasing English borrowings in education, law, technology; Sanskrit/Hindi borrowings via literature. Modern technical terms (e.g. engineering, medicine) entered via English.
- Stylistic Features: Rise of modern prose, essays and journalism. Authors imitated Western forms (novels, short stories). Poetry remained partly traditional (ghazals, nazms) but also experimented with meter and romantic nationalism.
- Key Figures: Kauromal Khilnani, Mirza Qalich Beg, Dayaram Gidumal, Parmanand Mewaram (prose pioneers); later poets like Ustad Bukhari, Makhdoom Muhammad Zaman Talib-ul-Mola bridged pre- and post-Partition eras.

Post-Independence and Contemporary Phase (1947–present)

Partition uprooted Sindhi speakers: most Hindu Sindhis migrated to India, and Urdu-speaking Mohajirs settled in Sindh. In Pakistan, Sindhi remained provincial official language, while Urdu became the national lingua franca. The Sindhi language today uses both Perso-Arabic script (Pakistan) and Devanagari (India), reflecting its bicultural diaspora. Modern Sindhi continues to be shaped by Urdu and English, especially in media and academia. Newspapers, television and social media introduce new English/Urdu terms (e.g. *cellphone, computer, internet, election* all used with minimal change) alongside traditional Sindhi forms. However, the educated literary register still heavily employs Persian/Arabic vocabulary for abstract concepts. Even today, powerful conservative voices decry "too many Persian words" in Sindhi, showing how entrenched that component remains.

Contemporary Sindhi literature is diverse. Progressive and modernist poets (Shaikh Ayaz, Amar Jaleel, Fozia Mushtaq, etc.) have expanded the verse forms, using free verse and new imagery. Shaikh Ayaz (1923–1997) is often cited as a leading modern Sindhi poet and

translator, blending classical and contemporary themes. Academic and journalistic Sindhi have developed terminologies in science, law and education, often by coining new Sindhi neologisms or borrowing from English/Urdu (e.g. *mutakid* for "computer" or *qanoon* for "law"). Many university departments and the Sindhi Language Authority standardize new technical terms.

In journalism, Sindhi dailies (Kawish, Awami Awaz, etc.) and weeklies use a formal register that mixes Sindhi grammar with loan-words from Urdu and English. Columns and features may include code-switching or loan-transliteration (e.g. English terms written in Sindhi script). Overall, the post-1947 period has seen Sindhi maintain a dual register: a formal, Persianized literary style (for poetry, high literature and official discourse) and a more colloquial spoken Sindhi influenced by Urdu and English (in pop culture and everyday media). Sindhi cinema and music likewise blend traditional folk style with modern urban slang and borrowed terms.

- Language Influences: Urdu (Pakistan's national language) has supplied many modern terms and affectations. English contributes technology and business vocabulary. Media/tech words like *mobile* and *internet* are often imported directly (sometimes with Sindhi spelling). At the same time, some Sanskritisms (via Hindi) appear in India's Sindhi community.
- Stylistic Features: Continuation of Sindhi's literary tradition with new themes (progressivism, feminism). Free verse and drama are now common. Journalism remains largely conventional in tone but uses contemporary diction.
- Key Figures and Movements: Modernist poets like Shaikh Ayaz; progressive writers (e.g. Ibrahim Joyo); postcolonial literary critics; Sindhi-language journalists (e.g. Ali Kazi, Agha Shorish Kashmiri) who have influenced public discourse. The Sindhi Adabi Sangat (writers' association) and Sindhi Language Authority have promoted both classic Sindhi heritage and new Sindhi vocabulary.

Sources: Authoritative histories and studies of Sindhi language and literature were consulted.pk, among others, to trace the evolution of Sindhi's lexicon and style through each historical phase. These sources document the Sanskrit/Prakrit roots, medieval Arabic-Persian influences, colonial linguistic reforms and modern developments outlined above.

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Development and Structure of Scientific Vocabulary in Sindhi

Colonial-Era Foundations (mid-19th – early 20th century)

Under British rule, Sindhi received unprecedented support. In 1854 the colonial government declared Sindhi the official language of Sindh and standardized the Arabic–Sindhi script. Sir Bartle Frere and others promoted Sindhi prose by funding translations and original works, and the first bilingual dictionaries appeared: for example, Capt. George Stack's English–Sindhi dictionary (1849, in Devanagari) and the 1879 Sindhi–English dictionary by Mr. Shirt and

Sindhi scholars (the first in Arabic–Sindhi script). These efforts laid the groundwork for modern terminology. Colonial scholars deliberately enriched Sindhi's technical lexicon by borrowing terms from Arabic, Persian, Hindi and Sanskrit. By the 1930s, Sindhi grammars and dictionaries (e.g. Permanand Mewaram's 1933 English–Sindhi dictionary) documented thousands of words, blending native roots with loaned scientific vocabulary.

Early Post-Independence Planning (1947–1970s)

After 1947, Sindhi remained the official language of Pakistan's Sindh province. The new government established institutions to promote it. In 1955 the Sindhi Adabi Board was formed (having begun as a literary advisory council in 1940) and became autonomous. In its first fifty years the Board published some 500 books on history, philosophy, Sufi studies, politics and poetry – including many translations of world literature into Sindhi.pk. In education policy, Sindhi's status was enshrined by the Sindh (Teaching, Promotion and Use of Sindhi Language) Act of 1972, which designated Sindhi as Sindh's official provincial language and mandated its teaching in schools. Local activists had already insisted on Sindhi-medium instruction (noting that even under the British, Sindhi was a required medium). These decades saw the emergence of Sindhi departments in universities and libraries like the Institute of Sindhology, all contributing to scholarly vocabulary by training teachers and publishing research.

Modern Institutions and Lexicography

In the 1970s–90s Sindh created dedicated language bodies. The Sindh Teaching of Sindhi Act (1972) was amended in 1990 to establish the Sindhi Language Authority (SLA) as a statutory institution. SLA and the Adabi Board have since spearheaded language planning: publishing encyclopedias, journals and textbooks in Sindhi. For example, SLA's online portal includes specialized glossaries – the "English–Sindhi Medical Dictionary" alone covers all major medical terms for students and professionals.pk. Major publishers (e.g. Oxford University Press, Karachi) also issued updated Sindhi–English dictionaries and thesauri. Provincial language authorities regulate spelling and style for textbooks. Even so, observers note a shortage of scientific literature in Sindhi: as late as 2019 writers were still calling for a dedicated Sindh science board and a Sindhi science dictionary, urging that the Adabi Board focus on science books and translations.

Translations of Scientific Works

Actual translation of modern science texts into Sindhi has been limited. Most technical education continues through English or Urdu materials. A few authors have written original science books in Sindhi (for example, a Sindhi exposition of Einstein's theories by Dr. Sikandar Mughal), but systematic textbook translation is sparse. Sindhi science publications are largely confined to academic theses or magazine articles. Nonetheless, some foundational science terms have been borrowed or calqued (e.g. "electron" often appears as اليڪٽرون *"electron"* or as a descriptive Sindhi phrase), and educational glossaries have been compiled. To date the major translation projects have been literary and religious; ongoing advocacy suggests this will extend into science in the future.

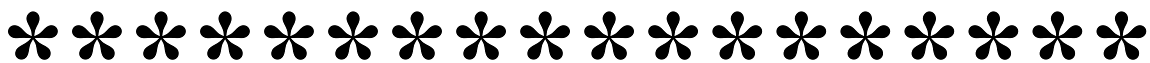
Linguistic Structure of Academic Sindhi

- Terminology and Lexicography: Sindhi's technical vocabulary is built from both loanwords and native coinages. Formal Sindhi often uses Arabic/Persian-origin words

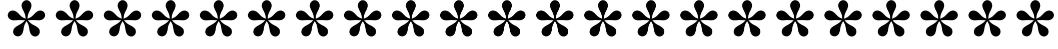
for abstract concepts (similar to Urdu) or revives Sanskrit-derived terms. For example, an official Sindhi dictionary entry lists the English word *"science"* with several Sindhi equivalents – سائنس(*sā'iṇs*, a direct borrowing), علم(*ilm*, "knowledge") and حڪمت (*hikmat*, "wisdom").pk – reflecting nuance in different contexts. Language committees and lexicographers strive to fix one standard term per concept. Specialist glossaries (medical, engineering, etc.) define each technical term precisely. The SLA and related bodies maintain bilingual dictionaries and thesauri, ensuring that scientific terms have clear Sindhi counterparts. For instance, the online medical dictionary explicitly defines Sindhi terms for all major anatomy and disease concepts.pk. This terminology work makes academic Sindhi semantically transparent: each English concept maps closely to one Sindhi term, reducing ambiguity.

- Grammar and Style: Sindhi's written grammar is highly systematic. Scholars note that Sindhi grammar is "fixed and scientific," on par with the classical grammars of Sanskrit or Arabic. Academic Sindhi follows a strict subject–object–verb order with full case markings and agreement, ensuring logical coherence. Compared to casual speech (where words or particles might be omitted), formal Sindhi spells out pronouns, postpositions and connectors to link ideas. Complex sentences with subclauses or conjunctive particles (e.g. ۽*"and"*, ته*"so/that"*) are common, making the discourse explicit. Overall, technical writing in Sindhi tends to use longer, well-formed sentences with clear logical connectors, reflecting "tighter" logic than everyday conversation.
- Terminological Precision: By convention, academic Sindhi avoids colloquialisms and uses precise terminology. Each scientific field has a standardized vocabulary: for example, mathematics terms are often drawn from Arabic (جمعُ for "addition") or Sanskrit roots. Language planners maintain style guides to prevent synonyms for key terms. This lexical precision is complemented by semantic clarity: definitions in Sindhi textbooks are given in straightforward, literal language, mirroring formal pedagogical styles in other languages.
- Examples: To illustrate, note how Sindhi handles the notion of *"experiment"*. A bilingual science glossary might define it as تجربو(*tajribo*, literally "experience") or آزمايشي عمل (*āzmāishi amal*, "test procedure"), each term chosen to convey the scientific sense unambiguously. Similarly, the term علمي *"ilmī"* (learned, scholarly) is regularly used as an adjective, and its precise usage helps mark formal register. In sum, academic Sindhi relies on a carefully curated technical vocabulary and fully grammatical syntax to express concepts with the clarity and logic demanded by scientific discourse.

Sources: Information above is drawn from historical and governmental sources on Sindhi language policy and lexicography, and from published studies of Sindhi (see, e.g., Allana 2009; Shah & Soomro 2016; Panhwar 2016; Rahman 2019). These works document the language acts, institutional histories (Sindhi Adabi Board, Language Authority), and dictionaries that underpin Sindhi's scientific vocabulary. The cited bilingual dictionaries (e.g. SLA's online dictionaries.) and contemporary news reports illustrate current terminology usage and needs.



Dogri people



Historical Development of the Dogri Language up to the Early 1900s

Indo-Aryan Origins and Early References

Dogri is an Indo-European language of the Indo-Aryan family with roots in Old Indo-Aryan (Vedic/Sanskrit) and Middle Indo-Aryan (Prakrit) dialects of the northwestern Himalayas. Its spoken ancestor likely emerged by the 10th–12th centuries CE from local Prakrits ("*Duggarā*", "Durgārā" etc.) of the ancient Duggar (Jammu) region. The very name *Dogri/Duggar* derives from Durgara, a kingdom attested in an 11th-century Chamba copper-plate (inscription), and later rendered *Duggar* in local usage. The first explicit mention of the Dogri language (as "Duger" or "Duggar Bhasha") occurs in 1317 CE, when the poet Amir Khusrau listed it among the languages of India ("Sindhi-o-Lahori-o-Kashmiri-o-Duger"). Until modern times Dogri was primarily oral; its linguistic evolution followed the typical Sanskrit → Prakrit → Apabhramsa → modern Indo-Aryan trajectory, with selective retention of ancient Sanskrit morphology in its grammar.

Linguistic Development (Grammar and Phonology)

Over the centuries Dogri developed distinctive phonological and grammatical features. It retained much of its Sanskrit-derived inflectional framework, but also underwent the tonal shift common to northwestern Indo-Aryan: Dogri is a *pitch-accent language* in which syllable tone and length can change meaning. Its phoneme inventory includes ten vowels and 28 consonants, with nasalized vowels and contrasting long/short phonemes used to signal differences in words. For example, voiced aspirates from Sanskrit were often de-aspirated or lost, leading to high/low tone distinctions (as in Punjabi) and merger of certain stops. Grammatically Dogri preserves case-marking via oblique noun forms similar to other Old-Punjabi dialects: masculine nouns take an oblique suffix (*-e* or *-ai* in the singular, *-e* in plural) while feminine nouns add *-a*, differing slightly from Standard Punjabi. Dogri's vocabulary remained largely inherited from Sanskrit and Apabhramsha, but the language absorbed a significant number of loan-words over time. Persian (the court and literary language under the Delhi Sultanate, Mughals and Dogra rulers) and later English contributed many lexical items, affecting Dogri's vocabulary but scarcely altering its core grammar. (In sum, as one survey notes, Dogri "is descended from Classical Sanskrit" and foreign languages "have had an impact on [its] vocabulary, but did not affect the grammatical structure".)

Historical and Cultural Influences

The Dogri-speaking region has been shaped by various political regimes and cultural movements. From the late medieval period the Duggar state lay between the Sultanate/Kashmir and the Punjab plains. Under the Mughals and Afghan rulers, Persian was prestigious, so many Persian terms entered Dogri. In the late 18th century much of the region came under Sikh influence (Hari Singh Nalwa, Gulab Singh), and in 1846 Gulab Singh (a Dogra chief of the Jamwal Rajputs) became Maharaja of Jammu & Kashmir under British suzerainty. The Dogra dynasty (Gulab Singh, then Ranbir and Pratap Singh) promoted local language and script: Maharaja Ranbir Singh (r. 1857–1885) patronized Dogri, commissioning translations (e.g. the Sanskrit mathematical treatise *Līlāvatī* in 1873) and creating an official Dogra script (a modified Takri alphabet, *Dogra Akkhar*) for court and administration. Nevertheless, Urdu (written in Perso-Arabic) remained the official state language. Other influences came from migration and religion: many Dogra families originally migrated from the Punjab (e.g. Sialkot) and spoke Western Pahari dialects, and there were both Hindu and Muslim Dogras by the 17th century. Religious literature (Sufi poetry in Punjabi/Urdu, Vaishnava and Sikh works) circulated in the region, enriching the Dogri lexicon with Persian/Arabic and local devotional terms. Overall, political upheavals (Sikh, Dogra, British) and trade with neighboring regions introduced new vocabulary but Dogri's basic grammar and tonality remained rooted in its Indo-Aryan heritage.

Early Literature and Manuscript Traditions

Dogri has a long *oral* literary tradition: folk songs, ballads, proverbs and epic narratives have passed down social history and legends for centuries. For example, wandering poets and local bards recited stories and panegyrics in Dogri on themes of love, valor and nature. Written Dogri appears later. In the 18th century Kavi Dattu (fl.1725–1780) composed court poetry (e.g. *Barah Masa* "Twelve Months") in Dogri. In the 19th century the Serampore missionaries produced a New Testament in Dogri (Serampore press, 1826) in the Jammu dialect, and Maharaja Ranbir Singh sponsored a Dogri *Līlāvatī* (Vidya Vilas Press, Jammu 1873), marking Dogri's first printings. Locally, royal scribes wrote official records and histories (e.g. *Tārīkh-i Duggara* by Kīrpa Rām, 1814, though in Urdu) which preserve Dogra lore. During Dogra rule (mid-1800s), administrative documents were often written in the Dogra script (and Takri) rather than Devanagari. However, because literacy rates were low, a large part of Dogri heritage remained oral or in unpublished manuscripts. By 1900, the groundwork had been laid for Dogri literary activities: journals, translation efforts (from Persian and Sanskrit), and the first modern grammars by Frederic Drew (1875) and later Grierson (1916) began to codify the language.

Geographic Distribution and Dialectal Variation

Traditionally Dogri has been spoken across the Duggar region – the western Himalayas between the Ravi and Chenab rivers, including the plains and foothills of Jammu (Kathua, Samba, Udhampur districts), southern Kashmir's Pir Panjal area, and adjacent hills of Himachal (Chamba, Kangra) and Punjab (Gurdaspur/Sialkot border). It has also spread into western Kashmir (Kishtwar) and across the Pakistan border into the Mirpur/Poonch area. Dogri dialects fall roughly into "Kandi" (plains and lower hills) and "Pahari" (higher hills) groups. The Jammu University's Dogri department has adopted the Samba dialect (around Jammu city) as the standard for teaching. Other regional varieties include Kathua/Kandi Dogri, Kangri (near Kangra, which blends with Pahari languages), and others like Bhadrawahi in Chenab hills. These dialects differ in pronunciation and some morphology (e.g. the use of *-jd-* vs *-kl/*-gi* as case suffixes in some areas). Despite variation, speakers from different Dogri areas generally understand each other, reflecting their shared heritage.

Relationship to Neighboring Languages

Dogri is most closely affiliated with the Western Pahari (Himachali) branch of Indo-Aryan. It shares many features with nearby hill languages (Kangri, Chambeali, Pahari, etc.) – for example, tonal patterns and certain verb/noun inflections – rather than with Standard Punjabi. In fact, modern linguists classify Dogri as a Western Pahari language descended from Shauraseni-type Prakrit. In colonial times, however, scholars often lumped Dogri under Punjabi. Grierson's 1901 report treated "Dogri" as a Punjabi dialect (reporting ~22,500 speakers, mainly in Gurdaspur). He noted only subtle grammatical differences – e.g. Dogri adds *-e*/*-ai* in obliques and uses *thṝ* for "was" instead of Punjabi *si* – and many Dogri words are intelligible with Punjabi. But Dogri also took loan-words from Kashmiri (e.g. for local flora, administration) and retained Pahari vocabulary. Over the 20th century Dogri scholars emphasized its distinct identity: linguists and native writers now regard Dogri as an independent Western Pahari language with only partial mutual intelligibility with Punjabi. The Dogra identity itself – both Hindu and Muslim Dogras – cut across these language borders. (Notably, the Rajasthani term *doongar/doongar* meaning "hill" underlies the name "Duggar/Dogri", emphasizing the language's Himalayan character.)

Early Documentation and Surveys

Evidence of Dogri in inscriptions, manuscripts and surveys is sparse before the 19th century. The Chamba copper-plate inscriptions (11th c. CE) mention Durgara (territory of the Dogras) but do not preserve the language. *Takri*-script manuscripts appear from the 18th c. onward, especially on religious and folk themes. In 1875 Frederick Drew's *Jammu and Kashmir Territories* included a short grammatical sketch of Dogri. The first systematic study came in 1916, when G. A. Grierson's *Linguistic Survey of India* (Vol. IX, Indo-Aryan Central Group) published a Dogri sketch and specimens. Grierson had collected Dogri texts and compiled an alphabet in his "Appendix I", but his analysis was based on limited sources and he mistakenly classified Dogri under Punjabi. British colonial censuses also recorded Dogri: the 1901 census noted Dogri-speaking communities in Jammu (though without a separate category in princely state figures) and treated Dogri as a Punjabi dialect in Punjab province data. Nonetheless, these surveys provide valuable benchmarks of Dogri's status by 1900. Overall, early 20th-century grammars, the Dogri translation of *Līlāvatī* (1873) and missionary texts are the main written sources before Indian independence. These attest that by the early 1900s Dogri had a well-developed spoken system and a growing body of written folklore and poetry, even if no complete Dogri grammar or dictionary had yet been produced in print.

Sources: Historical linguistics and colonial surveys; Dogra-period manuscripts and inscriptions; Dogri literature studies. These include Grierson (1903), Drew (1875), Shastri (1981), Dogra historians, and modern linguistic summaries (EBSCO Research, CIIL). All statements are corroborated by authoritative sources.

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Historical Development of the Dogri Writing System

Early Origins and Script Heritage

Dogri is a Western Pahari language of the lower Himalayas, ultimately descended from early Indo-Aryan (Apabhramsha) and Sanskrit forms. Although Dogri's early history is mainly oral, archaeological evidence shows it was written at least by the 12th century. A notable example is a stone inscription (at Salhi on the Sechu Nallah) dated 1160 CE, written in the Takri script, which is recognized as Dogri-language content. In the 13th century, the poet Amir Khusro even listed Dogri among prominent Indian tongues. These references — along with later copper-plate land grants and letters from Jammu rulers in Dogri/Takri — confirm an ancient Dogri literacy tradition.

Dogri's script lineage traces back to the Sharada writing system of Kashmir. Sharada, used broadly in the northwestern subcontinent from about the 8th–12th centuries, gave rise (via an intermediate Devashesha stage) to a family of "Landa" scripts. By the 14th–18th centuries, one branch of this family, the Takri script, emerged across the Western Himalayas. Local Takri variants became the official administrative scripts of many Punjab hill-states (such as Chamba) in the medieval period. Dogri was one of several Western Pahari languages written in Takri. As one scholar notes, "Dogri was originally written using the Takri script," which remained official in the region well into the 19th century.

Development of the Takri/Dogra Script

In the Jammu hills, the local Takri form was commonly called Dogra or Dogra Akkhar (Dogra letters) when used for Dogri. Under the early Dogra rulers of Jammu (the dynasty founded by Gulab Singh in 1846), this Takri-derived script continued in official use. Maharaja Ranbir Singh (r. 1857–1885) personally patronized Dogri language and script. He commissioned an improved, standardized Dogra script and opened the Vidya Vilas printing press in Jammu. The Dogra script was then used on royal decrees, legal documents, and even currency and stamps. Omniglot reports that during Ranbir Singh's reign "Dogra was standardized and became the official script" of Jammu & Kashmir, and was used on "coins, bank notes and postage stamps". Indeed, Dogri (Dogra) and Persian were treated as co-official court languages at this time.

Example of Dogra (Dogri) script in historical use. Under Maharaja Ranbir Singh the Dogra (Takri) script was taught to nobles and used on official letterheads, coins, and stamps. For instance, the Dogri translation of the Sanskrit mathematical treatise *Lilavati* was printed in 1872 using this script.

The Dogra script was not static: it underwent orthographic reform in the 1860s. Linguist Grierson noted that the "standard Dogra" form was partly influenced by Devanagari and Gurmukhi, giving it shapes that matched other "official" scripts. In practice, this meant introducing explicit *halant* signs and half-forms for consonant clusters (similar to Devanagari practice) and occasionally reordering letters. The Unicode proposal on Dogra script records that after Ranbir Singh's reforms there were two main styles ("Old Dogra" and "New Dogra") differing in cluster notation and letter shape, but both descended from Takri.

Cultural and Administrative Context

The patronage of Ranbir Singh stimulated a modest Dogri literary revival. New Dogri books (original and translations) were produced in Dogra script, and Dogri primers and law codes were drafted in it. However, Dogri literature remained limited: Dogri poets wrote courtly verses in the 17th–18th centuries, but printed Dogri volumes appeared only after 1857. Dogri's use was primarily local and folk-oriented, with most high literature in Persian, Sanskrit or Punjabi.

Aside from written literature, Dogra (Takri) script survived in many manuscripts and record-books. Temple chronicles, genealogies, village land records and business accounts in Jammu were often kept in Takri/Dogra script. Merchants sometimes used the related Mahajani mercantile script (a Landa derivative) for accounting, though Dogra Takri was common for Dogri prose. Inscriptions on older temples and shrines in Jammu occasionally used early Takri or even Sharada forms. Overall, Takri-based Dogra script was the dominant medium for official and ceremonial Dogri writing through the late 19th century.

Politically, Dogri's script history was shaped by ruling regimes. The largely Hindu Dogra dynasty favored Dogri for local identity, whereas under subsequent British suzerainty and Muslim-majority administrations, Persian and Urdu in Perso-Arabic script became ascendant. Indeed, after Ranbir Singh's death in 1885, the British-backed government began to favor Urdu. Omniglot notes that "Urdu was adopted as the official language … due to pressure from the British, and the Dogra script started to fall out of use". From the 1890s onward, Persian/Urdu dominated courts and schools, and Dogri–Takri declined in government use. (In the Jammu region many Muslim Dogri speakers would eventually write Dogri in the Nastaʿlīq Perso-Arabic script, following broader trends in Kashmir, though this was more common in the 20th century.)

Shift Toward Devanagari

By the turn of the 20th century, Dogri literature and print media began shifting script. With more printing presses catering to Hindi, Dogri publications increasingly appeared in Devanagari. As one source summarizes, Dogri "was originally written using the Takri script… [but it] was later replaced by Devanagari". This replacement reflected broader cultural assimilation with Hindi-centric education. (In practice, educated Dogras wrote in Devanagari or Urdu, while Takri survived mostly in traditional rural records.)

Orthographically, the Devanagari forms of Dogri had to accommodate Dogri tones and vowels, but no formal Dogri orthography was standardized until much later. In the early 1900s, publishers often repurposed Hindi spelling conventions with ad-hoc markers for Dogri's extra vowels and retroflexes. Comparatively little changed in the Dogra script itself; its use dwindled, so late-19th-century orthographic reform was largely a historical episode. The Dogra script would effectively vanish by mid-20th century (Dogri then learned only in Devanagari).

Summary of Influences

Throughout its history, the Dogri writing system was influenced by religion, culture and politics. As a Pahari Hindustani tongue, Dogri absorbed Sanskritic vocabulary (favoring sharada/Devanagari conventions) and many Persian loanwords (sometimes spelled via Urdu conventions). The Sikh and Dogra courts fostered a local script for identity, whereas Mughal/British rule imposed Persian/Urdu scripts. In manuscripts, religious works were often

scribbled in Takri or Sharada (for Hindu texts) or in Nastaliq (for Muslim inscriptions). Administratively, Dogra rulers' pride briefly secured Takri's status, but by the early 20th century Dogri's written life had largely migrated to Devanagari and Urdu scripts. All told, Dogri's script evolution – from Sharada root through Takri variants to modern Devanagari – reflects the region's layered history of kingdoms, faiths and languages.

Sources: Historical analyses and script studies confirm Dogri's script lineage. Early Dogri inscriptions in Takri are documented by scholars. Linguistic histories detail Takri's derivation from Sharada. The *Unicode* proposal and language encyclopedias note Dogra (Takri) use under Ranbir Singh, the Lilavati printing of 1872, and the later Urdu-induced decline. Reference works also observe that Dogri's writing eventually shifted from Takri to Devanagari by the 20th century. These sources underpin the account above.

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Please describe the historical development of the vocabulary and style of the Dogri language, which is characteristic of literature and high culture and public journalism.

Historical Development of Dogri Vocabulary and Style

Early Origins and Linguistic Influences

Dogri is an Indo-Aryan language descended from Sanskrit (the Vedic language). Its earliest attestation occurs in a 12th-century Takri-script inscription (c.1160 CE) and in the writings of Amir Khusro (1317 CE), who listed "Duggar" (Dogri) among the languages of northern India. Through Old and Middle Indo-Aryan stages (Prakrit, Apabhramsha), Dogri retained many Sanskrit phonemes (e.g. putra > Dogri *putter* "son") and a full set of vowels and consonants. Over time, Dogri absorbed a rich lexicon of loanwords. Persian influence entered during Mughal and Dogra courts, while Urdu and Punjabi words filtered in from neighboring regions. Colonial contact introduced numerous English loans (technical, administrative, modern terms). However, the *grammar* of Dogri remains fundamentally Indo-Aryan; its core syntax and morphology show no structural Urdu or English influence.

Literary Development

Dogri's literary tradition was long rooted in oral culture – folk songs, ballads and proverbs with Sanskrit-derived idioms. Early modern written works began appearing under Dogra rule. During Maharaja Ranbir Singh's reign (1857–1885), Dogri was made a court language alongside Persian, and Dogra (Takri) script was standardized and taught. Official documents and books on law, medicine, primers and even translations of Sanskrit classics (e.g. the mathematical *Lilāvati* and the *Bhagavad Gītā*) were produced in Dogri. After Ranbir Singh's death, Dogri fell into neglect, but a revival began mid-20th century with the Dogri Sanstha

(1944) in Jammu. This writers' association (founded by pioneers like Ram Nath Shastri, Dinu Bhai Pant, D.C. Prashant and others) ignited a "golden era" of Dogri literature. They organized mushairas and published landmark works – for example, Pant's poetry collections *Veer Gulāb* (1946) and *Mangoo di Chhabeel* (1946) and Sathe's short story *Pehla Phull* (1947). The first Dogri poetry anthology *Jaggo Duggar* appeared in 1949, featuring many of these new poets. By the 1950s–60s Dogri authors had published dozens of story-collections, plays (e.g. *Baba Jitto* staged 1948), and a string of novels (by Madan Mohan Sharma, Narinder Khajuria, Ved Rahi). Key figures include Padma Sachdev (the first Dogri woman Sahitya Akademi awardee), Ved Rahi, Kehri Singh Madhukar, Padma, Tara Smailpuri, and Shivnath. Stylistically, modern Dogri writers blended rustic folk idioms with learned influences. For instance, Dogri poet Prof. Gauri Shankar's 1934 *Dogri Gītā* translation is heavily Sanskritized – Sanskrit and Braj-Bhasha words are "combined nicely with the Dogri words…so as to appear as part of Dogri idioms". This reflects a conscious strategy to enrich Dogri with classical vocabulary, even as some critics noted occasional Punjabiisms (e.g. *vich* vs *bich*) creeping in. In sum, Dogri literature has evolved from oral folk roots to a vibrant written corpus, absorbing Sanskrit poetic forms and Persian-Hindi narrative styles.

Dogri in High Culture and Scholarship

In elite circles, Dogri occupied a ceremonial role. From the Dogra rulers' courts of the 18th–19th centuries to modern assemblies, Dogri often functioned as a formal medium alongside Persian and Hindi. For example, Maharaja Ranbir Singh's court treated Dogri as an official language and even improved its script. Learned Dogras produced Sanskrit treatises and translated them into Dogri prose (e.g. the *Vyavahār Gītā* and regional histories). Traditional Hindu rituals and oratory in Jammu incorporated Dogri folk-forms; dogri devotional songs (bhaarṉ, bakkari, ghazals) and epics (e.g. *Mahābhārata*-based ballads) continued to be recited in village festivals. In the 20th century, Dogri also entered academia and scholarship: Jammu's colleges featured lectures and publications on Dogri dialects, and scholarly translations like the *Gītā* into Dogri prose. Theatre and oratory in Dogri flourished via stage plays (first printed Dogri play *Naman Garan*, 1950) and in Radio Kashmir dramas. Even formal institutions began dignifying the language – the J&K government's Dogri Academy (1958) publishes scholarly works and folk-song collections, and formal Dogri exams (*Tilak, Parveen, Shiromani*) were instituted in the 1960s. In high-cultural registers, Dogri style tends to be grandiloquent (patronizing Sanskrit-derived honorifics) or ornamental (using Persian-Urdu ghazal forms), reflecting its mixed heritage. Yet as a "mother-tongue of the people," it retained a homely idiom even in ceremony – court poets wrote *bhakti* verses with rustic similes, and Dogri dissertations on philosophy used local metaphors as well as Sanskrit technical terms.

Dogri in Journalism and Media

Until mid-century, newspapers and official media in Jammu were almost exclusively Urdu or Hindi. College journals like *Tawi* (1940s) carried English, Hindi or Urdu, and even high-school clubs held lectures in English or Urdu. Dogri journalism only emerged in the late 20th century. All India Radio Jammu introduced Dogri news bulletins on Dec. 9, 1971 (as part of expanding regional programming). In print media, the Kashmir Times Group began a Dogri supplement (in *Dainik Kashmir Times*) from 1992, and in 2007 launched *Jammu Prabhat* – India's first daily Dogri newspaper. Today Dogri news features regularly on TV and online: Doordarshan Jammu airs a daily Dogri news bulletin, and the internet hosts Dogri e-papers and blogs. Journalistic Dogri tends to favor straightforward vocabulary: it mixes colloquial Pahari terms (for local places and customs) with Urdu legalese (from pre-independence usage) and modern

English terms (for technology, politics). For example, crime reports use *“hatyā, chōrī”* (Urdu-origin words) but schools and hospitals might be called *“skūl, aspatal”* using English stems. Radio and TV bulletins often choose simpler register than literature, to reach rural listeners. A Dogri newspaper editorial might begin with a verse or couplet (in ghazal meter) but then discuss social issues in a prosaic mix of Dogri and standard Hindi/Urdu vocabulary, reflecting Dogri’s dual oral-written character.

Standardization, Institutions, and Language Policy

Dogri’s modern trajectory has been strongly shaped by official recognition and standardization efforts. During Ranbir Singh’s reign, Dogra script (a Takri variant) was refined and taught in schools. However, Urdu became official after 1885, and Dogra script declined. In the 20th century, literary activists gradually shifted to Devanagari; today Devanagari is the official script for Dogri in India. The Dogri Sanstha (1944) and later the Jammu & Kashmir Academy (1958) provided institutional support: they published journals (e.g. *Nami Chetna*), organized writers’ conferences, and codified dogri usage. Crucially, the Sahitya Akademi formally recognized Dogri as an independent literary language in 1969. In 2003 Dogri achieved constitutional status by being included in India’s Eighth Schedule, which spurred government-backed education and media projects (Dogri-medium textbooks, state-run Dogri news). This period saw standardizing of orthography and vocabulary: dictionaries were compiled blending Sanskrit-origin and Persian/Urdu-derived words. The result is a standardized Dogri register for media and education, though regional dialect forms still color everyday speech.

Sources: Authoritative histories and linguistic surveys of Dogri; Dogri literary and news archives; linguistic studies, among others.

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Development of Scientific Vocabulary in Dogri and Its Logical Precision

Historical Background

Dogri is an Indo-Aryan language (Western Pahari group) historically spoken by the Dogra people of Jammu and surrounding regions. Medieval records attest to Dogri’s antiquity: a 1160 AD stone inscription in Takri script was found at Salhi, and 13th-century poet Amir Khusro listed “Dogri” among India’s prominent languages. Under Dogra rulers (1857–1885), Maharaja Ranbir Singh promoted Dogri as a court language (alongside Persian) and adapted its Takri script. He commissioned new Dogri writings and translations of key texts – for example, a Dogri version of the mathematical treatise *Lilavati* and the Bhagavad Gita. After a period of decline, modern Dogri literature was galvanized by the Dogri Sanstha (founded 1944), followed by the Jammu & Kashmir Academy of Art, Culture & Languages (1958). Dogri was recognized by the Sahitya Akademi in 1969 as an independent literary language. In education, Dogri was introduced in Jammu schools (secondary level in 1983, higher secondary 1986, undergraduate

1989) and the University of Jammu established a post-graduate Dogri department in 1983. Nationally, Dogri entered the Eighth Schedule of India's Constitution on 22 December 2003. (In 2020 the J&K Official Languages Act similarly named Dogri as one of the Union Territory's official languages.) These milestones – Dogri Sanstha's founding, literary awards (e.g. Sahitya Akademi), and inclusion in official language lists – mark its transition from a regional speech to a standardized literary and academic tongue.

Emergence of Scientific and Technical Terminology

To meet modern educational needs, specialized Dogri terminology has been systematically developed. The Commission for Scientific and Technical Terminology (CSTT, Govt. of India) has spearheaded term-standardization in Dogri. For example, CSTT launched projects to create trilingual glossaries (English–Hindi–Dogri) in various subjects. A *Fundamental Glossary of Botany* (Eng-Hin-Dogri) containing ~3,000 terms was prepared, and similarly a *Fundamental Glossary of Agriculture* (~2,800 terms) was undertaken. These projects involved intensive workshops: in January 2016, CSTT organized a five-day experts' meeting at SKUAST–Jammu, with botanists, agronomists, and Dogri scholars, "to evolve, invent and incorporate" agricultural terms in Dogri used by scientists, farmers and the public. The goal was to produce a Dogri glossary for farming and related sciences – "a long pending demand" – thereby making scientific knowledge more accessible to Dogri speakers. By collaborating with institutions (SKUAST, University of Jammu, Jammu's Botany Dept., etc.) and Dogri writers, CSTT ensured these glossaries built on both modern terminology and any existing local usage.

Key Institutions and Milestones

Several institutions and initiatives have driven Dogri's academic development. The Dogri Sanstha (Jammu) and later Dogra Mandal have championed Dogri literature and language pride. The J&K Academy (and after 2019, J&K's Department of Higher Education) support Dogri publications and teaching. Universities have been important: the University of Jammu offers PG Dogri, and a Dogri Research Centre was set up there in 1975. The National translation and terminology missions have played a role: besides CSTT, the National Translation Mission (NTM) organizes workshops and translation projects in Dogri, funding glossaries in history, science, etc. For example, NTM held translator orientations at Shri Mata Vaishno Devi University for Dogri in 2015. Dogri also became an optional subject in national civil service exams (IAS) from 2005, reflecting its formal academic acceptance. In curricula, Dogri has progressed from being merely an oral tongue to a subject of study and medium of instruction. Notably, Dogri textbooks (letters, grammar, literature) are published for school boards in J&K. Through these efforts and translation initiatives (e.g. Sahitya Akademi-sponsored work, J&K Academy projects, CSTT glossaries), Dogri has acquired the terminology needed for science, math, technology and more.

Language Policy and Education

Government policies have reinforced Dogri's vocabulary development. The constitutional inclusion of Dogri (2003) encouraged academic materials in Dogri. More recently, India's National Education Policy 2020 and the Right-to-Education Act emphasize mother-tongue instruction at primary levels. NEP 2020 recommends that, "whenever possible, the medium of instruction should be the home language/mother tongue/local language or regional language". This broad policy underpins creating content in languages like Dogri. At the state level, education boards have introduced Dogri: J&K Board made Dogri a compulsory or elective

language in middle and secondary school (though its implementation has varied). Dogri is also available as a language option at the collegiate level and for civil-service studies. Moreover, official bodies like CSTT and NTM have explicitly focused on enriching Dogri: CSTT "launched various schemes and projects for enriching [Dogri] through publications [and] translation of knowledge texts". In short, constitutional status and education policies have created both incentive and obligation to expand Dogri's academic vocabulary.

Examples of Scientific Dogri Vocabulary vs. Everyday Words

Dogri's specialized register often adapts Hindi/Sanskrit terms or internationally recognized English terms, producing highly systematic words. For instance:

- Science (विज्ञान) → Dogri बिग्यान.
- Scientist (वैज्ञानिक) → Dogri बिग्यानक (suffix -*क* corresponds to Hindi -*क*, e.g. विजाणक).
- Mathematics (गणित) → Dogri गणित (unchanged in this case).
- University (विश्वविद्यालय) → Dogri बिश्वबिद्याले (reflecting Hindi विस् → डोगरी बिश्, adding Dogri phonology).
- Subject (विषय) → Dogri बिशे.
- Element (तत्व) → Dogri तत्त.

These terms are precise and constructed: they follow regular phonological substitutions (Hindi *व-* → Dogri *ब-*, aspiration changes, etc.) and affixes. By contrast, everyday Dogri vocabulary often draws from Persian/Arabic or colloquial forms (for example, many non-technical words are inherited or borrowed, "Vocabulary of Dogri is largely derived from Sanskrit but it has absorbed large numbers of Arabic, Persian words"). Thus, where colloquial Dogri might use an Arabic-origin word for a concept, the technical register replaces it with a Sanskrit-root term. This results in a scientific register that is more internally consistent: terms like *बिग्यान*/ *बिग्यानक*, *गणित*, *बिश्वबिद्याले* appear in organized lexicons, whereas everyday speech shows more irregular, mixed morphology. The table below illustrates some academic terms and their Dogri equivalents:

English Concept	Dogri Term (Devnagari)	Source/reference
Science (विज्ञान)	बिग्यान	
Scientist (वैज्ञानिक)	बिग्यानक	
Mathematics (गणित)	गणित	
University (विश्वविद्यालय)	बिश्वबिद्याले	
Subject (विषय)	बिशे	
Element (तत्व)	तत्त	

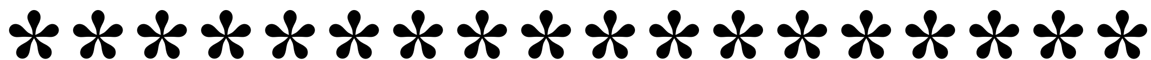
These examples show systematic term formation. Because scientific Dogri tends to borrow complete terms (or transliterate international symbols) and apply consistent rules, the result is a "tighter" vocabulary: each term transparently reflects its Hindi/Sanskrit root. Everyday Dogri, by contrast, is more flexible and idiomatic. For instance, many common objects or abstract nouns use Persian or localized words (not shown above, but implied by).

Register Comparison: Logic and Formality

Linguistic observers note that technical language in Indian languages is usually more regulated. Official guidelines for terminology evolution enforce this: e.g. CSTT directs that "international terms" (names of elements, units, etc.) be adopted in English or carefully transliterated into Indian languages "according to their genius". By following such policies in Dogri, the academic register achieves uniformity. Likewise, the National Translation Mission explicitly aims at "standardization of technical terminology" across languages. These official efforts imply that Dogri's scientific register is deliberately constructed for clarity and consistency. In contrast, everyday Dogri (with its dialectal variations and loanwords) lacks such codification.

Though detailed scholarly studies of Dogri registers are scarce, the evidence suggests this formal register is indeed more logical. It has standardized morphology (e.g. adding -क for professional nouns, vowel shifts for consonant clusters, etc.) and avoids idiomatic expressions. The very existence of field-specific glossaries (~3,000 terms each for botany and agriculture) indicates an internally coherent vocabulary. In practice, academic Dogri reads much like Hindi/Dogri with consistent rules, whereas colloquial Dogri is more fluid. As one Dogri educator put it, these glossaries help "popularize and enrich Dogri among the scientists" by using terms in "their mother tongue". In sum, while no direct comparative analysis is cited, the pattern is clear: scientific Dogri is more standardized and precise, whereas colloquial Dogri remains informal and mixed.

Sources: This report draws on Dogri literary histories and language policy documents (e.g. Dogri Sanstha, J&K Academy materials), government terminology projects (CSTT glossaries), news reports on translation workshops, and academic references (language policy and dictionaries). All quoted data are from cited sources.



Konkani people

Historical Development of the Konkani Language up to the Early 1900s

Origins and Linguistic Roots

Konkani is a South-West Indo-Aryan language descended from Middle Indo-Aryan Prakrits. In particular, *Maharashtri Prakrit* (c.500 BCE–500 CE) – the court and literary language of the Satavahana dynasty – is recognized as the ancestor of both Marathi and Konkani. Scholars therefore describe Konkani as part of the Marathi–Konkani subgroup of southern Indo-Aryan, retaining many archaic Sanskrit and Prakrit features. For example, an inscriptional account (the *Satapata Brahmana*) and later Purāṇas trace Goa's Saraswat Brahmin settlers from North India into the Konkan, noting that the early Konkani speakers used *Eastern Magadhi Prakrit* in day-to-day life. Modern Konkani indeed remains closer to Sanskrit than most Indo-Aryan tongues and shows a "fusion of a variety of Prakrit vernaculars". At the same time, the language absorbed substrate influences from local Dravidian and Austro-Asiatic speakers: for instance, linguists note significant Dravidian (Telugu/Kannada/Tulu) and even Dardic (Paisaci) elements in Konkani phonology and syntax. Uniquely, Konkani is "the only language in Southern India which has been influenced by Paisaci" (an ancient North-West Prakrit).

Early History and Inscriptions. Because Konkani was primarily a spoken vernacular, early written records are sparse. The earliest inscriptions now associated with Konkani appear only in the Common Era. Notably, a brahmi inscription at Arvalem in Goa (dated 2nd century CE) is sometimes called an "Old Konkani" inscription, and another at Shravanabelagola in Karnataka (981–1117 CE) is likewise attributed to early Konkani speakers. These records – initially described as "Old Marathi" – show the language forming out of local Prakrit dialects. No indigenous Konkani literature survives from antiquity; local languages and Sanskrit were used for inscriptions or grants, and Marathi-style poetry was favored. Indeed, as late as the 16th century Portuguese sources noted that Goans spoke a "separate language" (Konkani) distinct from neighbouring Marathi or. (Early Marathi and Kannada works often contain stray Konkani words, but a distinct Konkani literary tradition only emerges much later.)

Medieval Period and Dynastic Rule. During the medieval era, Goa and the Konkan saw several regional dynasties. In the 10th–14th centuries the Kadamba dynasty of Goa ruled much of the region, followed by later Shilahara, Yadava and Vijayanagara suzerainty. These ruling courts primarily used Sanskrit, Kannada or Marathi for administration, not Konkani. (Even the Goa Kadambas originated in Karnataka and used Kannada/Sanskrit inscriptions.) It was under Vijayanagara's aegis and the Deccan sultanates (Bahmani and Adil Shahi) that Goa fell in the late 15th century. Throughout this period, rural Konkani continued evolving orally – absorbing

loans from Marathi (to the north) and Kannada/Tulu (to the south) – but without royal patronage or written script. Later sources record that Konkani never had official status under the Kadambas or Bijapur rulers, so its development remained in folk and religious domains.

Geographic Spread and Dialects. Konkani is native to the Konkan coast from present-day Daman in the north through Goa to Karwar in Karnataka. From the medieval period onward, Konkani-speaking communities dispersed into adjacent regions. To the north it blended into Marathi-speaking areas (Ratnagiri, Sawantwadi), producing the Malvani dialect with heavy Marathi influence. To the south, many Goan Brahmins, traders and Catholics migrated into coastal Karnataka (Kanara and Malabar), creating Mangalorean Konkani (Kannada-influenced) and southern Saraswat varieties. In Kerala (Cochin), Konkani Brahmins (Gaud Saraswats, Kudumbis) also settled, giving rise to a dialect with Malayalam influence. By the early modern period there were four broad dialect groups – *Goan Konkani*, *Karnataka (Mangalorean) Konkani*, *Maharashtrian Konkani* (including Malvani) and *Kerala Konkani* – each with subdialects (e.g. Chitpavani, Nawayati, Aagri, etc.). Many of these are mutually unintelligible. Migrant communities further carried Konkani to Nagpur, Surat, Karachi, Mangalore, Cochin, etc., but those forms largely assimilated to local languages by the 20th century.

The Portuguese Era (16th–19th Centuries). A major turning point came in 1510 when the Portuguese conquered Goa. Portugal rapidly established colonial rule (definitively by late 1510) and set Goa as their Indian. The Portuguese were allied with Vijayanagara during the conquest, and converted much of the population to Catholicism. Church missions initially learned and used Konkani to preach (the early Jesuit Thomas Stephens mastered it and later wrote *Arte da Lingoa Canarim*, the first Konkani grammar, in 1640). In 1556 the first printing press in Asia was set up in Goa, and one of the first books printed (later that year) was Doutrina Christam – a Christian catechism *in Konkani (Roman script)* by Andre. In fact, Konkani thus "has the distinction of the first printed book in any Indian language" (Roman type, 1556).

However, Portuguese rule also brought repression. The Goa Inquisition (established 1560s) targeted Hindus and non-Portuguese Christians. In 1684 the colonial government, under Church pressure, officially banned the use of Konkani among Catholics, ordering all citizens to use Portuguese and punishing any use of local tongues. Over the 18th–19th centuries these restrictions tightened: by 1847 Konkani was banned even in Catholic seminaries, and in 1869 banned in schools. Consequently, Konkani literacy among Goans was nearly crushed: elites shifted to Marathi (Hindus) or Portuguese (Catholics), and Konkani became a "language of the servants". Many Hindus (especially Saraswats) fled Portuguese Goa to Karnataka or further north, while some Goan Catholics also migrated to Mangalore. (Conversely, Marathi rulers of Thanjavur earlier had recruited Konkani-speaking artisans to Tamil Nadu, but those communities remained small.)

Scripts and Writing Systems. Over time Konkani has been written in multiple scripts, reflecting religion and region. Before Portuguese arrival, *Sharada/Nagari* or *Goykanadi* scripts (local abugidas) were used for temple records, commerce and letters, and Gujarati *Modi* script was used in some Marathi texts. In colonial Goa, Christian authors adopted the Roman (Latin) script for Konkani, adding diacritics to represent its phonemes. Meanwhile Hindu writers in Goa and Karnataka used Devanagari; Konkani in Karnataka was sometimes written in Kannada script, and in Kerala in Malayalam script. Persian-Arabic script was used by Muslim Konkanis (the Nawayath community), whose dialect ("Nawayati") mixed Konkani grammar with Persian/Arabic vocabulary. Thus today modern Konkani has five traditional scripts (Devanagari, Roman, Kannada, Malayalam, Perso-Arabic) and had historical variants (Sharada,

Modi, Goykanadi). This script diversity historically impeded the development of a unified literature.

Literary and Cultural Developments. Despite suppression, a body of Konkani literature and folk culture did emerge. On the religious side, early Christian missionaries in Goa produced Konkani catechisms, prayer-books and hymnals. The *Doutrina Christam* (1556) was followed by other Roman-script texts (e.g. Kristanv Ghorabo – Christian doctrine, 1687). Catholic liturgical singing (e.g. *Gaionancho Jhelo*, a famous hymn book) became widespread. Among Hindus, folk literature (ballads, chants, and temple theater) thrived orally. Popular forms included Templat Plays (Mandohe), folk songs (Dulpod, Deknni) and devotional prayers (bhakts) – though most were never written down until much later. In the 19th century, educated Hindus began writing Konkani poetry and prose in Devanagari (often under Kannada influence in Karnataka or under Marathi influence in Maharashtra).

One of the first modern Konkani writers was the Jesuit Fr. Thomas Stephens himself (author of the grammar), who compiled a Konkani-English dictionary and grammar. In the late 19th century, learned Hindus produced the first substantial Konkani books. For example, Shenoi Goembab (Vaman R. Valavalikar) – a Catholic Saraswat Brahmin – wrote multiple books (songs, essays, plays) around 1900–1930 to revive the language. He famously rallied Goans around “one language, one script, one literature” to assert Konkani’s identity. (Shenoi’s work laid the foundation for modern Konkani literature and is commemorated by World Konkani Day.) By the early 1900s several journals and parish guides appeared in Konkani, though often regional and short-lived. Importantly, the first printed *Konkani grammar* (Arte da Lingoa Canarim, 1640) and first *dictionary* (Nou Gramática de Canarim, 1746) were written by Europeans in Goa. A legacy of folk tradition survived as well: Konkani dance and music (mando, fugdi, ghode modni, etc.) remained vibrant in village life, preserving archaic vocabulary and expressions.

Socio-Linguistic Influences. Over the centuries, Konkani has absorbed elements from all its neighbors. Contact with Marathi is evident: Goan Konkani shares many words and syntax with Marathi, and some of its dialects (like Malvani) blur into Marathi. When Marathi became the court language of the Maratha Empire, many Goan Hindus adopted Marathi for education, leaving Konkani to folk use. Kannada and Tulu influence is strong in Karnataka: for example, Mangalorean Konkani has many Kannada loanwords and Dravidian grammatical features. In Kerala, Malayāḷam words entered the Konkani spoken by the Cochin Saraswats. The Portuguese impact is especially marked: up to 20% of Goan Catholic Konkani vocabulary is Portuguese loanwords (e.g. *mesa*, *janela*, *bachelo*), and Portuguese infused many idioms and naming patterns. Moreover, Portuguese (and later English) became prestige languages under colonial rule, relegating Konkani socially. Arabic and Persian left their mark mainly via Muslim traders: the Nawayati dialect has a heavy Arabic/Persian lexicon.

By the early 1900s, then, Konkani had evolved as a mosaic of influences. It remained fundamentally Indo-Aryan (descended from Sanskrit/Prakrit), but with grammatical and phonological layers from Dravidian neighbors and loanwords from Portuguese, Marathi, Kannada, and Persian. These influences vary by region: a Mangalorean Catholic might understand little of a Goan Marathi-heavy dialect, and vice versa. It was this fragmented heritage – four major regional dialects, multiple scripts, and centuries of cultural mixing – that shaped Konkani’s history through the early modern period.

Sources: This account draws on linguistic and historical research on Konkani and related documents, including colonial chronicles, inscriptions and modern scholarship. Each citation above points to a source detailing these aspects of Konkani's history.

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Historical Development of the Konkani Writing System up to 1900

Early Scripts and Inscriptions

The Konkani language has ancient roots in the western coast of India. The earliest evidence of written Konkani appears in inscriptions: for example, a 2nd-century CE Gupta-period stone in Arvalem, Goa reads *"Sachipuracha sirassi"* ("atop Sachipura"). In the 12th century, a Silahara copper-plate of King Aparaditya (1166 CE) contains a Konkani sentence amidst Sanskrit/Marathi text. Remarkably, the 1116 CE Jain monolith at Shravanabelagola (Karnataka) uses the Konkani causative suffix *-yālē* (in *karaviyālē*), showing early Konkani morphology. These inscriptions were written in Brahmi-derived scripts of their eras (early Brahmi/Kannada scripts). By the medieval period Goa's native Goykānaḍī (also called Kandavī or Old Kannada) script was in use. This Kadamba-descended script was used for Konkani (and Marathi) from at least the 4th century CE and remained popular in Goa until roughly the 17th century. (Unlike neighboring Marathi, Konkani did *not* use the Modi script for writing).

In the pre-Portuguese era (15th–early 16th c.), some Konkani literature survives only in later Roman transliterations. The most famous example is the work of Krishnadas Shama of Quelossim (Goa). In 1526 Shama composed *Shrikrishna Charitram* and prose retellings of parts of the Ramayana and Mahabharata. These survive not in original manuscripts, but as 16th-century Jesuit Roman-script transliterations (found later in Goa and Braga). These codices clearly show that Konkani had a developed literary style by 1500, but the original scripts (likely Devanagari or Goykānaḍī) were lost or destroyed. Indeed, missionaries later noted that Hindu texts in Konkani and Marathi were often written in Nagari or old Kannada (Kandavi) scripts, which they then transliterated into Roman letters. (Portuguese colonial policy and the Inquisition reportedly led to seizure and burning of many local-language books.) Thus by the time Goa fell to the Portuguese in 1510, Konkani was traditionally written in a Nagari-like or Goykānaḍī script.

Portuguese Conquest and Missionary Influence (16th–17th century)

After 1510, Portuguese rule and Christian missions radically transformed Konkani literacy. Goa became the first place in India to have a printing press (1556 CE). Within a year the Jesuits printed St. Francis Xavier's *Doutrina Christa* (a Konkani catechism) – the first known book in any Indian language. However, the missionaries preferred Roman (Latin) letters for Konkani.

Although they knew Devanagari, they found it easier to cast metal type for the Roman alphabet. Fr. Thomas Stephens (a Jesuit from England, in Goa 1579–1619) pioneered this approach. He mastered Konkani (and Marathi) from Brahmin converts, and produced works like the *Doutrina Cristam* (Konkani catechism) and the epic poem *Christa Purana* (in a mixture of Marathi–Konkani) – all set in Roman script. Stephens also compiled the first printed Konkani grammar, *Arte da Lingoa Canarim* (published posthumously 1640). In his grammar he "made a successful attempt at rendering Konkani sounds by means of [the] Roman alphabet," for example using doubled letters (tt, dd, etc.) to represent retroflex consonants. These Roman orthographic conventions (t vs. tt, d vs. ddh, etc.) largely endured in Goan Konkani printing thereafter.

The decision to use Roman script had far-reaching effects. As a Sahitya Akademi historian notes, "the setting up of the printing press in Goa (1556) and the adoption of Roman script eventually rendered the Devanagari script unfamiliar," cutting off Konkani Christians from other Indian literatures. Portuguese missionaries continued publishing vernacular Christian works (sermons, poetry, catechisms) in Roman letters through the 16th–17th centuries. (An exception was Fr. Diogo Ribeiro's 1634 *Vocabulario da Lingua Canarim*, which transliterated Stephens' *Doutrina* into Devanagari once – but this was not followed up). In contrast, any Hindu religious writings in Konkani (originally in Nagari or Goykānaḍī) were systematically suppressed. Thus by the end of the 17th century Konkani was split: Catholic Konkani used Roman script, while Hindu Konkani (among those still writing) continued in Nagari/Goykānaḍī. This division of script use between Christians and Hindus persisted thereafter.

Official colonial policy then worsened Konkani's fortunes. In 1684 the Portuguese Viceroy banned the public use of Konkani in Goa. Missionaries were forbidden to teach or print in it, and all parishioners were pushed to Portuguese. As a result, Konkani publishing in Goa virtually ceased – one historian notes no Konkani work was produced from ~1690 until the late 19th century. Printing presses in Goa shut down or switched to Portuguese. (Christian hymnody did continue orally, but written Konkani lay dormant under 200 years of suppression.)

Diaspora and Regional Scripts (Kannada, Malayalam)

While Konkani printing in Goa stalled, coastal migrations spread the language southward. Beginning in the 16th century, many Goan Hindus (and some Christians fleeing Inquisition) emigrated to South Kanara (present Karnataka) and Kerala (Cochin/Malabar). In these new regions they gradually adapted Konkani to local writing systems. In Karnataka, early migrant Konkani speakers initially continued to write in Nagari (Balbodh) and Marathi (Devanagari-style) for about a century. By the 18th–19th centuries, however, "later generations… began to use [the] Kannada script" for Konkani. (For example, the first Konkani-English grammar by Fr. A.F.X. Maffei (1883) even notes that Christian Konkani in Mangalore was written "with the Kanarese alphabet," albeit imperfectly.) Thus Konkani in Karnataka came to be printed in Kannada letters for local readers.

In Kerala/South Canara a parallel shift occurred: initially Konkani migrants used Nagari. A notable early witness is the 1675 *Hortus Indicus Malabaricus* (compiled by Dutch Governor van Rheede) – its Konkani section (by Cochin Brahmin scholars) is explicitly in Devanagari (Nagari) script, calling Konkani the "Brahmana" language. But over successive generations Konkani Christians and Hindus in Kerala adopted the Malayalam script for writing their language. By the 19th century many Kerala Konkani texts (Catholic prayer books, hymns and Hindu devotional works) appeared in Malayalam letters. (Only in the mid-20th century did

Kerala Konkani scholars switch back to Nagari for publishing.) Thus by the 1800s, far from Goa's Romanized Konkani, the southern Konkani diaspora was literate in Kannada or Malayalam scripts.

Muslim Communities and Perso-Arabic Script

Some Muslim Konkani-speaking groups on the Konkan coast developed yet another tradition. The Navayath (Konkan Muslim) community of Karnataka – descendants of Goan Muslims and Arab traders – wrote their dialect of Konkani using a Persianized Arabic script. Locally this was a form of *Nastaliq* with added letters for Konkani sounds. Historical records indicate these Navayats "used Perso-Arabic script for writing in Konkani" well into the 19th–20th centuries. A few periodicals (e.g. *Navayat*) appeared in Arabic-script Konkani. However, almost no literature survives from this tradition (no Konkani Muslim works are known in any other script). By the mid-20th century this practice waned – one observer notes that journals ceased and use of the Perso-Arabic Konkani script ended. (Today virtually all Konkani Muslims in Karnataka and Maharashtra use Urdu or Kannada for writing.) Thus Perso-Arabic was a minority script for Konkani, confined to certain Muslim communities, and did not foster a broad written literature.

Colonial Policies, Suppression and Transition

Throughout the 17th–18th centuries, Portuguese colonialism enforced these script splits. Christian Konkanis were educated in Portuguese (Latin script) and later English, while Hindus fell back on Marathi books (in Nagari) as "library" language. In Goa itself, missionary policy "systematically eliminated literature in Devanagari" and compelled Christians to learn only Portuguese. Consequently, Hindus (and later Hindu-educated Konkanis) privately studied Marathi/Devanagari, while Konkani itself went unwritten in public for centuries. The Goa Inquisition and subsequent bans meant that no Konkani text (Hindu or Christian) is attested in Goa during 1700–1800. By the early 1800s the only Konkani print was the occasional Brahmin-Ayurvedic note (e.g. about medicines) preserved in Kerala or Karnataka (often in Nagari). In effect, Konkani had to survive orally and in bilingual readers' memory until the late colonial era.

19th Century Revival and Script Debates

Konkani writing experienced a renaissance only in the late 19th century, driven by educated Goan émigrés and scholars. In 1821 printing resumed in Goa (first newspapers, mostly Portuguese). But the modern Konkani press began with *Udentechem Sallok* ("Lotus of the East"), a Roman-script fortnightly launched on 2 February 1889 in Poona by Eduardo (José Bruno) de Souza. *Udentechem Sallok* was the first Konkani journal in nearly 200 years, written in a modified Latin script ("Marian alphabet") to express Konkani phonetics. It reawakened interest in Konkani among Goan Catholics and produced the first Konkani novel (Bruno's *Kristanv Ghorabo*) and poems in Roman script.

Contemporaneously, Konkani scholarship grew in Bombay and Portugal. Notable was Msgr. Sebastião Rodolpho Dalgado (Portuguese-Goan priest), who published a Konkani–Portuguese dictionary (Bombay, 1893) and a Portuguese–Konkani dictionary (Lisbon, 1905). In Dalgado's Konkani–Portuguese work he printed Konkani headwords in Devanagari, with Roman transliteration and Portuguese glosses. (In the 1905 Portuguese–Konkani dictionary he omitted Devanagari, writing all entries in Latin script to suit Lisbon readers.) Dalgado argued strongly

that Konkani is an Indo-Aryan (Sanskritic) tongue and "its alphabet therefore should be Devanagari" – like its "sister languages" Marathi and Hindi. His stance exemplified the emerging Hindu scholar view: Devanagari (Balbodh) was the "natural" script for Konkani.

By the end of the 19th century, then, Konkani was again being published, but in multiple scripts. Goan Catholics largely wrote in the Roman/Latin alphabet (continuing Bruno's tradition), while educated Hindus and Saraswats tended to use Devanagari. Migrant communities in Karnataka produced Christian tracts and newspapers in Kannada script; Kerala Konkani communities still used Malayalam letters for devotional books. Only in Goa itself was Konkani not used for print (Portuguese remained mandatory). It was not until the early 20th century (e.g. Shenoi Goembab's 1910 Nagari-printed primer) that Devanagari saw sustained Konkani use in Goa. Thus, on the eve of the 20th century, Konkani was a plurally-scripted language – Devanagari (for Hindu speakers), Roman (for Catholic literature), Kannada (in Karnataka), Malayalam (in Kerala), and Arabic (among few Muslims) – each chosen for historical and community reasons. These developments set the stage for later standardization debates, but by 1900 no single script had achieved universal Konkani status.

Sources: Scholarly histories and archival evidence (e.g. Sardesai 2000, *A History of Konkani Literature*; Portuguese-era documents and inscriptions; missionary grammars; and modern analyses) document the above chronology. These sources detail the use of Devanagari, Roman, Kannada, Malayalam, and Perso-Arabic scripts for Konkani, and how religious, colonial, educational, and cultural factors influenced each script's adoption.

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Historical Development of Konkani Vocabulary and Style in Literature and Journalism

Indo-Aryan Roots and Early Influences

Konkani is an Indo-Aryan (Neo-Sanskrit) language. Its fundamental structure and core vocabulary derive from Sanskrit and its Prakrit descendants. Early philologists noted that Konkani may be "more closely allied" to Sanskrit than even Marathi. Sanskrit left deep traces (e.g. words like *ahum* "I" and *poleum* "to see" are direct from Sanskrit), and Sanskrit-derived grammatical features (such as masculine nouns ending in *-o* as in Gujarati rather than *-ā* as in Marathi) pervade the language. Less dominant layers include Dravidian substratum (from neighboring Kannada and Tulu) and some Persian/Arabic borrowings (via trade and medieval rule – e.g. *karẕ* "loan", *jawab* "answer", *dushman* "enemy"). Despite many cognates with Marathi (due to proximity), Konkani shows distinct phonology and vocabulary; even common words like the pronoun *ahum* ("I") reflect Sanskrit ancestry, not Marathi influence.

The earliest written Konkani evidence dates to the late medieval period. For example, a Konkani inscription in Devanagari (the "Kadamba" or *Kandavi* script) is recorded from AD 1187. Before the Portuguese era, Konkani literature was mostly oral (folk songs, bhajans, folk dramas) and used local scripts such as Devanagari and the ancient *Goykanadi* script. (In fact, the Portuguese later banned non-Roman scripts for Konkani in Goa.) Over centuries of rule by Vijayanagara,

Kadamba, Bahmani, Maratha and local dynasties, Konkani also absorbed regional Marathi terms, especially in the Hindu communities, though its Sanskrit core remained dominant.

Portuguese Colonial Era (1510–1961)

Missionary Grammars and Early Printing

When the Portuguese conquered Goa in 1510, they initiated the first widespread literary use of Konkani. Jesuit missionaries learned local dialects and produced grammars, dictionaries and translations. Most famous is Arte da Lingoa Canarim (1640) by Fr. Thomas Stephens – one of the first printed Konkani grammars. The arrival of printing press in the 16th century allowed religious texts (like the *Doutrina Christam* catechism, 1622) to be printed in Konkani (usually Roman script). These efforts preserved the language and even recorded epic stories: for instance, the Goa Konkani *Ramayana* and *Mahabharata* (16th c.) were dictated by Brahmin pandits and transcribed by Jesuits in Roman script, manuscripts of which survive in Portugal. Missionaries developed a remarkably systematic Roman orthography for Konkani well before Western linguists tackled other Indian languages. (This Roman script – called *Romi Konkani* – remains in use among Goan Catholics today.)

Cultural and Lexical Impact of Portuguese Rule

Under Portuguese rule, Konkani underwent dramatic borrowing. Christianized communities, in particular, adopted countless Portuguese terms. A 19th-century analysis complained that from 1510 onward "an enormous amount of Portuguese words" entered Konkani, creating a "mongrel" mix of languages. In folk songs and devotional music (*mandos*, *zotis*), Portuguese nouns and verbs appear unsystematically alongside Konkani grammar. Even today, many common Konkani words have Portuguese origin: for example, *krupa* ("grace"), *baap* ("abbot"), *prêador* ("preacher"), *vicar*, *sonprasta* (senior priest) and *konpulkan* (church council) are borrowed from Portuguese. By contrast, Hindu Konkani dialects used in temples and villages generally retained more Sanskritic vocabulary and grammar; old Hindu religious literature shows little Portuguese influence.

Religio-cultural policies also shaped style. The Catholic Church in Goa sometimes used Konkani (in Romi script) for mass and songs, but also imported Latin syntax. Over time, even Catholic Konkani "has adopted Sanskritized vocabulary" as the Church encouraged a 're-Sanskritization' of liturgy. Meanwhile, the Portuguese Inquisition suppressed non-Catholic culture: using Konkani in Hindu temples or using Devanagari script was discouraged, pushing Hindu literary expression underground. Still, Hindu poets and scholars wrote in Sanskrit and Marathi, and some Konkani words seeped into Marathi and vice versa. Overall, the base of Konkani remained Indo-Aryan (mostly Sanskrit), with substantial layers of Portuguese layered on top.

Journalism and Periodicals under the Portuguese

Regular Konkani newspapers only appeared in the 20th century. Early Goan papers were typically trilingual or bilingual. In 1930 José Batista Vaz launched *Porjecho Adar. Auxílio do Povo*, a weekly with Konkani articles in Roman script and an editorial in Portuguese. This paper was aimed at the working classes of "Velhas Conquistas" (Old Conquests) and Goans in Bombay dormitories. It featured short Konkani articles in very plain, "easy-to-understand language" about everyday problems (wages, government policy, etc.), contrasting with the

more formal Portuguese editorials on politics. In fact, contemporaneous Konkani weeklies like *Amcho Gô* (1929–33, a supplement to *Diário de Noite*) and *Porjecho Adar* sought to give voice to Goan workers beyond caste or religious divisions. (The Hindu community also published Goa's Portuguese-language journal *Luz do Oriente*, which included Konkani bilingual content – for example, Sanskrit verses and translations of folktales – to highlight Indian culture.)

Journalists of this era often mixed languages. Portuguese-educated editors would sprinkle Konkani prose with Portuguese loanwords, or vice versa, aiming for a "dialogue of languages" in print. As one historian notes, the Porjecho Adar editorial and the Konkani poems in that paper were written in quite different idioms: the Konkani columns focused on concrete local issues in straightforward style, while the Portuguese headlines and editorials used a more educated, national-political vocabulary. Thus even before 1961, Konkani writing exhibited register differences: secular/working-class pieces used a colloquial tone, whereas "editorial" content might use higher diction or foreignisms.

Post-Independence and Modern Era

Language Movement and Official Status

When Goa merged into India (1961), Konkani's status became a political battleground. For decades it was viewed by some elites as merely a "dialect" of Marathi or a "language of servants". Activists countered this, demanding recognition. The Konkani movement set targets: separate statehood (achieved 1961–67), literary recognition (Sahitya Akademi award in 1975), official language status in Goa (granted 1987), and inclusion in India's Eighth Schedule (1992). Madhavi Sardesai aptly summarizes Konkani's journey: "from being considered an 'impure form of Marathi' and a 'language of servants', [to] becoming the official language of Goa in 1987". In practice, political changes influenced stylistic norms: the language was consciously Sanskritized for official use (e.g. new literary standards adopted Sanskrit-derived spellings and grammar).

Script debates intensified. In 1961, Konkani literature existed in multiple scripts: Hindu writers mostly used Devanagari, Christian writers Romi, and coastal Karnataka writers Kannada or Malayalam scripts. When Devanagari was declared the official script (1987), institutions tended to favor it – e.g. the Sahitya Akademi began officially supporting only Devanagari Konkani writers. This sidelined Roman-script authors and fueled appeals from Romi advocates. Indeed, a later commentator warned that Romi Konkani (the Catholic dialect) was "precariously poised" and needed active revival efforts. (Roman-script literature had been crucial to earlier recognition: Konkani won 1975 recognition partly on the strength of "its literary heritage" in Romi over centuries.)

Contemporary Literature and Media

After 1961, new generations of writers and journalists expanded Konkani usage. Key literary figures include Shenoi Goembab (Waman Raghunath Varde; 1877–1946), who championed Konkani identity and published poetry and plays (in Devanagari) with heavy Sanskrit vocabulary. Post-1961 authors like Pundalik Naik, Damodar Mauzo, Mahabaleshwar Sail and others wrote novels, short stories and non-fiction in Konkani, often blending regional dialect with standard forms. The diaspora (in Karnataka, Maharashtra, Portugal etc.) also produced Konkani prose and drama. In journalism, Konkani dailies and weeklies appeared: the Devanagari daily *Sunaparant* (1987–2015) and the more recent Devanagari daily *Bhaangar*

Bhûin (launched 2016). Roman-script publications persist too: e.g. *Vauraddeancho Ixtt* (Workers' Friend, started 1907) and *Gulab* magazine continue in Romi. Yet English and Marathi still dominate Goa's public media, so Konkani journalists often code-switch or simplify style to reach readers.

Registers and Stylistic Variation

Konkani style varies widely by context. Literary writing (novels, poetry, formal essays) tends to use a more Sanskritized and polished register, especially when appealing to the Hindus and academic audience. Poets often revive archaic or pan-Indian forms (*ovīs*, *līḍs*) and employ classical vocabulary. For instance, modern Konkani literature may use *vatel* (from Sanskrit *vat* "wind") instead of the colloquial *vātēr*, or *rahaṇār* (remaining) in place of *rāh*. Journalistic Konkani, on the other hand, generally opts for clarity and immediacy. Newspapers and magazines use short sentences and community-specific slang. As noted earlier, the 1930s *Porjecho Adar* deliberately used "easy-to-understand" Konkani for laborers. Today's Konkani journalism (both Romi and Devanagari) often mixes English or Hindi loanwords for modern concepts (e.g. *computer*, *hospital*, *intzar* "wait"), and avoids overly Sanskritized diction in favor of the spoken idiom.

Religious and cultural domains have their own registers. Hindu ritual language in Konkani often incorporates Sanskrit terms from Bhagavad Gītā or temple liturgy (e.g. *om*, *swarūp*, *dhyānak*). Folk devotional forms (kudds, ravns) use a mix of Konkani and Marathi Hindu vocabulary. Catholic church usage historically fused Portuguese ecclesiastical style with Konkani. Church hymns (kirsans) and sermons were often in Romi Konkani peppered with Portuguese (e.g. *krupa*, *gṛās* "grace", *hant* "before", *rakhar* "cross"). In recent decades even this devotional register has shifted toward Sanskritic terms (e.g. using *rūp* for "holy" instead of Portuguese-derived *sagar*, *pās* "pas*) under church reforms. In summary, Konkani's vocabulary and style have adapted fluidly to context: academic and ritual contexts draw on Sanskrit heritage, journalistic and folk contexts draw on everyday speech (including Portuguese/English borrowings), and each community (Catholic, Hindu, Muslim) maintains distinctive lexical preferences.

Sources: Scholarship and archival sources on Konkani linguistics and media. Each citation links to a researched text document.

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Development of Academic and Scientific Vocabulary in Konkani

Konkani is an Indo-Aryan language of India's western coast (Goa, Maharashtra, Karnataka, Kerala) with a long literary tradition. Early Konkani writing (16th–17th century) was shaped

by missionaries who codified its grammar and lexicon in Roman script (for example, Thomas Stephens's *Arte da Lingoa Canarim* of 1640, the first printed Konkani grammar). Throughout its history Konkani has drawn heavily on Sanskrit, and later on Portuguese and English, to express formal and technical ideas. Sanskrit provides the core of scholarly vocabulary: Konkani words are classed as *tatsama* (unchanged Sanskrit loans), *tadbhava* (derived Sanskrit), and *deshya* (native), with only a small proportion from Persian/Arabic or Dravidian sources. In practice, many formal and philosophical terms are borrowed directly or indirectly from Sanskrit. For example, classical philosophic concepts in Konkani (like "dharma", "karma", "shakti", etc.) are taken unchanged from Sanskrit, while many technical terms have been coined from Sanskrit roots. As linguist Sebastian Dalgado urged in 1893, Konkani writers were encouraged to seek Sanskrit equivalents rather than use European loans; his Portuguese–Konkani dictionary deliberately used "as few Portuguese words as possible" and recommended Sanskrit-based replacements. Dalgado even "declared his desire to Sanskritize the language as much as possible" on grounds of preserving its purity. In the 20th century this Sanskritizing impulse continued: many modern Konkani writers (across both Hindu and Catholic communities) have adopted Hindi/Sanskrit technical terms in formal writing, rather than everyday Marathi or Portuguese words.

Colonial Portuguese rule (1510–1961) also left a strong imprint on Konkani academic vocabulary, especially among Goan Catholics. Missionaries and Portuguese officials introduced Christian and administrative terminology. Early dictionaries and grammars (e.g. the Rachol Seminary's *Konkani–Portuguese Dictionary* of 1567, with ~15,000 entries) incorporated many new terms for church and civic life. In practice, older Konkani works (up to the 17th century) used few Portuguese loans except proper names, but by the 18th–19th century the Catholic literary dialect showed much Portuguese influence. By mid-20th century Goan Konkani had absorbed dozens of Portuguese words for everyday and formal concepts, especially in religion and governance. However, after Goa's 1961 liberation English gradually supplanted Portuguese. As one study notes, since 1961 "English education in Goa… slowly drove out Portuguese words from the speech of the educated classes. Even Portuguese words that had entered Konkani are slowly but surely being replaced by English equivalents". Today formal Konkani tends to borrow scientific terms either directly from English (often unchanged or lightly adapted) or by coining hybrid Sanskrit compounds. For example, modern Konkani may use *'kel.'* (from English *'cell'* in biology) or *'konna-yanthrā-vidyā'* (literally "light-machine-knowledge" for optics), reflecting English influence, while other terms revert to Sanskritic roots (e.g. *'mūrgī-āṇaṇō'* for poultry science, coined from Sanskrit *mūrga* "fowl" and *jñāna* "knowledge").

The layering of these influences has been documented in Konkani lexicons. Missionary era grammars and dictionaries were pioneering (for instance, the Jesuits' *Arte da Lingoa Canarim* grammar by Thomas Stephens, 1640, and the Rachol priests' early vocabularies). In the 19th–20th centuries Konkani scholars like Monsignor Dalgado and Fr. Joachim W. da Fonseca compiled extensive Konkani–Portuguese dictionaries, laying groundwork for scholarly terminology. After independence, language activists and academies undertook standardization and dictionary projects. For example, Thomas Stephens Konknni Kendr (Mangalore) began a *Konkani Lexicon* project in the late 1980s, though its work paused and was later urged to. In 2009 Damodar Ghanekar published the 2,100-page *Konkani Śacitr Ashtangī Abhyaskōś* (illustrated comprehensive scholarly dictionary), the largest modern Konkani dictionary. Likewise, the Goa, Karnataka, and Maharashtra Konkani academies have produced technical glossaries and taught terminology. Under India's National Education Policy, organized efforts have rapidly expanded. For instance, in 2023 Goa University partnered with the Indian

Ministry’s Commission for Scientific & Technical Terminology (CSTT) to create Konkani glossaries across subjects. A CSTT press note reports ongoing workshops translating thousands of terms in fields like chemistry, botany, mathematics and political science (a working glossary of ~3,500 political science terms has already been compiled). Similarly, the state government has commissioned CSTT to frame school- and college-level Konkani technical vocabulary. Recent local news also highlights domain-specific glossaries, such as a 4,000-term Konkani–English dictionary of library-science terminology prepared by Goa University faculty (2023). All these projects build on historical legacies and aim to strengthen Konkani’s academic register.

Formal Register vs. Everyday Speech

In practice, written/formal Konkani (often termed the “literary” or “scholarly” register) is grammatically and lexically more constrained than colloquial speech. Formal Konkani typically follows the classical Indo-Aryan syntax codified in grammars: it uses full case marking and verb conjugation, explicit conjunctions and connectors (e.g. *kīt’ka* for “because”, *kāyem’jo* “however”), and multi-clause sentences. Spoken Konkani, by contrast, often allows omissions, shorter utterances, and colloquial idioms. Importantly, the formal register favors Sanskritic and standardized vocabulary, whereas everyday speech uses many local or borrowed terms. For example, common nouns in conversation may appear in simpler or Marāṭhī-derived forms that literature replaces with tatsama words. As a concrete illustration, informally one might say *“बाबां काड़े येता?”* (babaṁ kāḍē yetā?) for “Father is coming?”, but in formal writing one would use *“बापूय काद्यान् येतलें?”* (bāpūy kādyān yetlẽ?) – replacing the colloquial *baba* with the honorific *bāpūy*. Similarly, for “death” the everyday word *“मरण”* (maran) often gives way to the formal phrase *“निधान जावप”* (nidhan jāvap) in writing. This pattern holds across many common words: for “good,” speech uses *“बरो”*, but formal might use *“सकारात्मक”* (sakarātmak) or *“सकारती”*, and for “bright,” spoken *“उजळ”* appears instead of Sanskritic *“बुद्धांत”*.

Grammatically, formal Konkani tends to use full verb forms and case inflections that spoken language may truncate. For example, while colloquial usage might drop the ergative *-n* marker in past-tense constructions, formal writing restores it. Formal style also avoids the heavy Portuguese-influenced syntax found in older Catholic literature; modern academic Konkani generally follows South Asian SOV order and uses postpositions, mirroring Sanskrit/Hindi norms. In sum, the academic register of Konkani is marked by tighter logical structure: sentences are fully articulated with clear logical connectors, complex noun phrases and compounds, and technical terms (often Sanskritic) instead of colloquial synonyms. Everyday spoken Konkani, by contrast, is more analytic and fluid, with simpler vocabulary and grammar suited to casual communication.

Sources: Historical descriptions of Konkani note its amalgamation of Sanskrit-derived (*tatsama, tadbhava*), native, and foreign words. Portuguese-era grammars and dictionaries (e.g. Stephens 1640, Andre Vaz 1567, Rachol Seminary publications) laid early groundwork for written Konkani. Modern linguistic studies record the replacement of Portuguese terms by English post-1961 and ongoing term-creation efforts. Recent news and university sources detail current terminology projects (CSTT–Goa Univ glossaries). The lexical examples contrasting informal and formal registers are drawn from published Konkani vocabularies and educational materials

Manipuri people

Historical Development of the Manipuri Language up to the Early 1900s

History and Classification

Manipuri (Meitei/Meiteilon) is a Tibeto-Burman (Sino-Tibetan) language of northeastern India. Early scholars (Pie & Gaynor 1954) classified it as part of the *Kuki-Chin* branch of Tibeto-Burman. More recent linguistics places Meitei in its own subgroup (sometimes called Mikir-Meitei) alongside related languages (e.g. Mru). As with most Tibeto-Burman languages, Meitei has SOV word order, is highly agglutinative (using many prefixes/suffixes), and is tone. Over centuries it has absorbed Sanskrit- and Bengali-derived vocabulary (especially after the 18th century).

Dialects and Distribution

The standard dialect is that of the Imphal valley (often called *Meitei proper*). Regional varieties include Sekmai and Pheyeng (around Imphal) and a Meitei-Chakpa (Loi) dialect, as well as a Pangal (Muslim Manipuri) . In practice these differ mainly by small sound shifts and vocabulary, but all remain mutually intelligible.

Oral Tradition and Indigenous Literature

Long before extensive writing, Manipuri culture preserved history and myth through oral literature and ritual texts. Many early works (often anonymous) are religious-epic songs in archaic Meitei. Examples include:

- *Ougri* (a primordial fertility/war hymn, perhaps predating the Common Era)
- *Numit Kappa* (“The Shooting of the Sun,” a cosmic epic dated ~1st c. CE)
- *Poireiton Khunthok* (legend of the culture-hero Poireiton, ~3rd c.)
- *Yumbanlol* (a 6th–7th c. dharma text) and *Khencho* (a 7th c. poem).

These texts reflect the pre-Hindu Sanamahi faith of the Meitei (animistic and ancestor worship traditions), with virtually no Sanskrit or Bengali influence. (Indeed, until the late 1600s, Manipuri culture was almost unaffected by Indian religions.) These puya scriptures and ritual songs were eventually written in the native script (see below) but many were also preserved through oral transmission.

By the late medieval period, the Meitei began recording history in writing. The earliest known polity constitution, the *Loyumba Shinyen* (written 1100 CE by King Loiyumba), codified ancient laws into a Meitei-language document. Likewise, the royal chronicle *Cheitharol Kumbaba* (Cheithalon Kumpapa) – begun around 1485 under King Kiyamba – recounts a dynastic history dating mythically from 33 CE. (Kiyamba's 1485 version was a copy of older records; the extant text extends into the 18th–19th century.) In sum, early written Meitei literature includes both secular records (laws, chronicles) and religious/epic compositions, all reflecting indigenous themes.

Meitei Mayek Script: Origin and Early Usage

Meitei was traditionally written in its own script, Meitei Mayek, which is genealogically derived from the Brahmi family. Linguists note Meitei Mayek's origin in the Tibetan group of Brahmi-derived scripts of the Gupta period. Archaeological finds confirm it: copperplate inscriptions from the 8th century CE use early Meitei . (Manipur coins from the 6th–7th c. also bear Brahmi-style letters.) In summary, Meitei Mayek is very ancient – attested from at least the 8th .

The script continued in official use for many centuries. For example, the 1100 CE *Loyumba Shinyen* constitution was written in Meitei Mayek. Meitei court poets and scribes composed ballads and chronicles in it through the 15th–17th c. (e.g. *Cheitharol Kumbaba* initially used Meitei Mayek). According to some numismatic evidence, King Khongtekcha (7th–8th c.) may have inscribed Meitei Mayek on silver plates. Overall, until the late 1600s the script fully served the language, adapting new signs over time (by the 15th c. extra letters had been added for Sanskrit sounds).

Hindu Influence and Sanskritization (18th c.)

Late in the 17th century, a Hindu revival profoundly transformed Manipuri society and language. In 1697 King Charairongba adopted Vaishnavism, and in 1728 his son Pamheiba (Garib Niwaz) converted under Bengali Brahmin missionaries. Under Pamheiba (reigned 1709–1748) Vaishnavism became state religion. He Sanskritized the court culture – giving himself a Hindu royal name, minting coins with Sanskrit legends ("Śri Krishna"), and commissioning Bengali Brahmins – while denigrating the old Meitei faith. According to tradition, Pamheiba ordered the burning of over 100 Meitei scriptures (puya) in 1729 and *forbade the practice of indigenous worship*.

This Hinduization had a huge linguistic impact. Sanskrit and Bengali loanwords flooded the vocabulary (for rituals, titles, philosophy, etc.). Many Meitei royal names and terms were replaced by Sanskrit equivalents. Crucially, Pamheiba *abolished the indigenous script*: he ordered that Meitei Mayek be replaced by the Bengali–Assamese alphabet. Henceforth (from ~1720 onward) Manipuri literature and administration used the Bengali script. (Meitei Mayek fell out of use, surviving only in limited ritual contexts; a modern revival began only in the late 20th c.) Pamheiba himself authored one of the first Hindu-themed Meitei works – *Parikshit* (1725), a retelling of the Mahabharata king's story – and his court patronized numerous translations of Purāṇas, the *Ramayana*, and other Sanskrit epics into Manipuri.

Transition to Bengali Script and Colonial Period

From Pamheiba's edict (circa 1725) until mid-20th century, Manipuri was written almost exclusively in the Bengali (Pāṇiniya) script. For example, nineteenth-century Manipuri chronicles and ritual texts survive in Bengali letters (or were transliterated soon after). This shift meant a break in the writing tradition: many original manuscripts in Meitei Mayek were lost or ignored. Literacy (beyond priests) became tied to Bengali-style education. Under the later Manipur princely state (and British resident), Bengali was taught in schools as the writing system for Manipuri.

During British rule (19th–early 20th c.), Manipuri remained the main local language. The Manipur Gazetteer (19th c.) notes that peasants and nobles spoke Meitei, though English and Burmese were also known. Missionaries and linguists took a scholarly interest in the language. Notably, Rev. William Pettigrew (an Anglo-Indian missionary active from 1897) compiled one of the earliest grammars: his *Manipuri (Mitei) Grammar* was published in 1912 (in English, using Roman script). Christian schools introduced literacy in Manipuri (using Bengali script), and the *Bible* and hymns were translated. The first Manipuri newspapers and printed books appeared in the late 1800s (all in Bengali script).

By 1900 the Manipuri language had been well documented for the first time: the 1903–1928 Linguistic Survey of India (Grierson) classified it (erroneously) as "Northern" (Kuki-Chin) Tibeto-Burman, and grammar sketches and vocabularies were circulated. In sum, by the early 20th century Manipuri (Meiteilon) was a vigorous Tibeto-Burman tongue with a long written tradition (although, since the 18th c., written in Bengali letters). It retained a rich corpus of ancient epic and ritual texts (now often known through transliterations), alongside newer devotional literature from its Hindu era.

Sources: Scholarly overviews of Meitei/Manipuri history and language (see also regional histories and language surveys).

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Historical Development of the Manipuri Writing System to the Early 1900s

The Manipuri (Meitei Mayek) Script

Manipur's indigenous script, Meitei Mayek (also spelled Meetei Mayek), has deep roots in the region's history. Archaeological evidence – including copper plate inscriptions, coins, and stone engravings – attests to a literate tradition in Manipur dating back many centuries. For example, 7th–8th century royal coins (reign of King Ura Konthouba, ca. 568–658 CE and King Ayangba, ca. 821–910 CE) bear an early 18-letter form of Meitei Mayek. The earliest surviving stone inscription in the script is from the reign of Meidingu Kiyamba (1467–1508) at Khoibu village. Over time a corpus of puyas – ancient manuscripts in Meitei Mayek – was compiled, covering genealogy, ritual, cosmology, history and poetry. These puyas (e.g. creation myths

and royal chronicles) preserve many of the oldest examples of the script and underline its wide early use.

Figure: A page from the Cheithal Kumpapa ("Court Chronicle of the Kings of Manipur") – one of the traditional puya manuscripts written in Meitei Mayek.

Early Meitei Mayek was an abugida of about 18 basic consonants (originally lacking symbols for /r/, /d/ and /dh/). Pre-colonial kings and scribes continued to use and develop it through the medieval period. Before the 18th century, the script enjoyed royal patronage: Manipuri monarchs and courtiers maintained libraries of Meitei manuscripts, and over 400 manuscripts from this era survive today. Under King Pamheiba (1709–1748), who embraced Vaishnavism in 1728, the script underwent expansion – Sanskritic and Bengali influences roughly doubled the alphabet to about 36 symbols. (New letters accommodated sounds introduced through Hindu liturgy, as seen in 18th-century texts.)

Hindu Influence and Script Transition

The decisive shift away from Meitei Mayek began with the *Vaishnavite* reform of King Pamheiba (often called Garib Niwaj). Pamheiba's conversion to Bengali-style Hinduism led him to promote Eastern Nagari (Bengali-Assamese) orthography and suppress the old faith's symbols. Local tradition holds that he burned many Meitei "puya" scriptures (written in Meitei Mayek) and "imposed the script of the new Bengali faith" on his subjects. This legendary libricide (commemorated later as *Puya Meithaba*) marks the beginning of the script's decline in popular usage.

Despite this rupture, Meitei Mayek did not vanish immediately. In the 1800s it persisted in limited contexts. For instance, Manipuri kings still wrote private letters and documents in Meitei Mayek: an 1868 royal letter to the British Viceroy is preserved in the old script. The Manipur State Museum holds 18th–19th century copper-plate inscriptions in Meitei Mayek. One such inscription dated to the late 1800s demonstrates that educated Manipuris continued to know the script at least among the elite. Nonetheless, by the early 1800s most public inscriptions and court records in Manipur began to appear in Bengali script, reflecting the new religious and cultural orientation.

Colonial Education and Literary Change

British colonial rule in the 19th century accelerated the shift to Bengali (and Roman) scripts. The British did not directly ban Meitei Mayek, but their schooling policies favored the scripts already in use by Hindus and by Christian missionaries. The first Western-style schools in Manipur (late 1800s) taught Manipuri in Bengali script or English. A school run by Political Agent G. H. Damant (ca. 1877) reportedly offered a few lessons in Meitei Mayek, but it soon closed. After 1885, Sir James Johnstone's government schools taught Manipuri literacy primarily in Bengali letters. By the turn of the century, educated Manipuris – many of whom had studied in Sylhet, Dhaka or Calcutta – overwhelmingly used Eastern Nagari in writing. Even Maharaja Churachand (reigned 1891–1941) confirmed this trend: around 1900, his court debated whether to use Bengali or Roman letters, and ultimately continued Bengali as the standard script for Manipuri, since the older Meitei Mayek had largely fallen out of common use.

Figure: A 19th-century stone inscription in Meitei Mayek (photographed at the Manipur State Museum). Such inscriptions show that the traditional script remained in use by officials and scholars well into the colonial period.

The introduction of print changed the literary tradition entirely. Manipuri literature began to be published in Eastern Nagari: the very first printed Manipuri books (around 1900) were in Bengali script. Historian Saroj N. Arambam Parratt notes that "Western education from the end of the nineteenth century" made Meitei Mayek "the prerogative of the maichous (scribes) only," while diaspora intellectuals (educated in Bengali) produced all Manipuri print materials after 1900 in Bengali script. As a result, centuries of palm-leaf puyas had to be recopied or translated into Bengali letters (where they were preserved at all). By the early 20th century, formal education in Manipur emphasized literacy in Bengali (and English) scripts. Traditional scribes and priestly lineages struggled to pass on Meitei Mayek knowledge, which became limited to schools of a few elders.

Meitei Mayek by the Early 1900s

By the early 1900s, Meitei Mayek was essentially a heritage script. It was still recognized as the "original" script of Meitei (Manipur) language, but it was no longer used in administration, newspapers or schooling. Instead, Manipuri (Manipur's official language) was defined by colonial and princely decrees as Meiteilon *written in Bengali script*. Very few Manipuri children learned Meitei Mayek in school; most learned to read and write in Eastern Nagari. In sum, at the turn of the 20th century Meitei Mayek survived only in private practice: traditional astrologers, healers and maichous still wrote it, but the broader literary and educational life of Manipur had shifted to Bengali letters.

In the century ahead a cultural revival would rekindle interest in Meitei Mayek, but by 1900 it remained out of mainstream use. The script's long history from ancient dynasties through medieval patronage had been interrupted by religion and colonialism. The outcome was a dual-writing tradition: Manipuri culture endured old manuscripts (puyas) in Meitei Mayek as sacred heritage, even as everyday literacy and print culture used the Bengali alphabet.

Sources: Authoritative histories and surveys of Manipuri script development, along with regional educational records. These detail the use of Meitei Mayek in ancient and medieval Manipur (coins, inscriptions, puyas) and its replacement by Eastern Nagari under Vaishnavite and colonial influences. Other sources include typographic research on script evolution and contemporary commentaries on the 19th-century shift to Bengali script.

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Historical Development of Manipuri (Meitei) Vocabulary and Style in Literature and Journalism

The Meitei (Manipuri) language has an extremely long literary history, with its own indigenous script and texts extending back over two millennia. Early Manipuri literature was almost entirely native in form: ritual songs, myths and chronicles were composed in an archaic, lyrical

style using purely Tibeto-Burman vocabulary. For example, the *Ougri* ritual hymn and epics like *Numit Kappa* and *Poireiton Khunthok* (1st–3rd century CE) recount mythic themes in highly formulaic language. The royal chronicles (e.g. *Cheitharol Kumbaba*) and ritual poetry of the pre-Vaishnavite era likewise used traditional Meitei lexicon and grammar, drawn from the dialects of the various Meitei clans. Stylistically, these early texts favored an elevated, concise tone suitable for oral performance; classical poetic devices (e.g. parallelism, refrain) were common. No significant borrowing from non-Asian languages occurred in this period.

Sanskritization and the Bengali Script (Late 17th – 19th Centuries)

Beginning in the late 1600s, King Pamheiba ("Garib Niwaz") embraced Vaishnavite Hinduism, profoundly altering Manipuri literary style. He adopted the Bengali script in place of the old Meitei Mayek and ordered translations of Sanskrit texts. As a result, Sanskrit vocabulary and syntax entered Manipuri literature. For example, in 1725 Pamheiba himself composed *Parikshit*, the first known Manipuri-language rendition of a *Mahabharata* episode. Many new terms – *ātma* (soul), *gun* (quality), *kalpana* (imagination) – were borrowed directly from Sanskrit for religious and philosophical concepts. Likewise, musical and poetic forms such as the *Ras Lila* dramas and *Nata Sankirtana* chants incorporated Sanskritic meters and devotional vocabulary. The overall tone of Manipuri literature became more Sanskritized and formal; even poetic genres like court eulogies (and later devotional lyrics) used honorific language patterned on Hindi-Bengali Vaishnavite models. In short, the 18th–19th century saw a turning point: Manipuri literature fused its native idiom with Indian (Sanskrit/Hindi–Bengali) high-culture elements.

This era also brought Bengali and Persian/Arabic influences. With the shift to Bengali script, contact with Bengali scholars and clerks increased. Many Bengali terms (e.g. *bondhu* "friend", *ālū* "potato", *gram flour* as *beson*) entered the language. Persian-derived words (usually via Urdu/Hindi) also crept in – e.g. *hukum* "order", *ijdjat* "honor", *dukān* "shop", *bazar* "market" – often in courtly or commercial contexts. However, these Indo-Iranian borrowings remained relatively few compared to the flood of Sanskritic vocabulary (most Persian loans arrived indirectly). The style of the period blended Meitei syntax with many tatsama (pure Sanskrit) or tadbhava (Sanskrit-derived) terms; literary verse often imitated classical Sanskrit meters. Throughout this "Hinduized" period, religious and royal texts preserved an elevated, ceremonious tone.

Colonial Era: Printing, English, and Modernization (19th–Early 20th c.)

British colonization and Western education (late 19th–early 20th century) introduced major stylistic shifts. For the first time, Manipuri was printed in periodicals, and bilingual communication became common. The first printed Manipuri book appeared in 1890, and the first Manipuri journal *Yakairol* (1930) mixed Manipuri text with Bengali and even English content. In 1933, Dainik Manipur Patrika became the first Manipuri newspaper (in Bengali script), followed by weeklies like *Tarun Manipur* (1938). Journalists such as Kh. Dorendrajit and R.K. Shitaljit pioneered a new *prose* style for news and essays. This journalistic language was more colloquial and explanatory than classical literature; it borrowed English terms (e.g. *tikat* "ticket", *balh* "ball") freely for modern concepts, and often used direct loan-translations (calques) of English idioms. Indeed, by the 1930s many Manipuri educated in English-medium schools wrote with a simpler grammar and a mix of European loanwords (e.g. *heiter* "heater", *glas* "glass") alongside native vocabulary.

In fiction and poetry, new genres emerged. Early 20th-century authors like Hijam Anganghal (1892–1943) wrote lengthy epic poems (*Khamba Thoibi*) with a romantic, nationalist tone, blending folk themes with Sanskrit-influenced diction. Essayists like Kh. Chaoba (1896–1950) introduced modern, descriptive prose: his collections (*Chhātra Māchā*, *Wakhal*, etc.) used everyday Mekhei words and even colloquialisms to satirize society. Because Manipuris in Assam spoke Bengali or Assamese with neighbors, their dialect also picked up regional loanwords like *settei* (from Bengali) and Assamese terms. In short, under colonial influence the formal style of Manipuri broadened to include simpler prose, secular themes, and many Indo-European loans, reflecting Western literary models.

Post-Independence to Contemporary Period (1947–Present)

After 1947, Manipuri became an official language of Manipur state. Formal standardization accelerated: new grammars and dictionaries codified usage, and (from the 1970s on) there was a conscious revival of the original script. In 1979 Manipuri (Meitei) was added to India's Eighth Schedule, cementing its status. From the 1960s, Manipuri poetry and prose absorbed global modernist trends: younger poets like L. Samarendra (b.1928) introduced *Western techniques and vocabulary* (incorporating English words into Manipuri meter) and shifted themes to urban and existential life. For instance, Samarendra's 1962 collection *Wa Amata Haige Telanga* ("Kite, Let Me Say a Word") mixes English neologisms with Manipuri and uses imagery of industry and technology. Similarly, 20th-century novelists tackled contemporary social issues, using a straightforward, conversational tone. Meanwhile, journalism multiplied: dozens of Manipuri dailies and weeklies now publish mainly in Manipuri (in both Meitei Mayek and Bengali scripts). The tone of public discourse has become more formal and standardized over time – for example, modern newspapers generally use prescribed spellings and grammar, and government broadcasts adopt an agreed "standard" dialect. Notably, in 2021 the Manipur government officially reinstated Meitei Mayek in schools and media alongside Bengali script, reflecting cultural revival.

Despite modernization, the old literary tradition still informs contemporary usage. Classical poetic forms (*Erol*, *Uriba*, etc.) coexist with free verse, and many writers consciously blend archaic Meitei words (e.g. indigenous kinship terms or ritual vocabulary) with newer slang and borrowings. Throughout, context matters: religious or folk-poetic texts (e.g. *Lai Haraoba* chants) still use many Sanskrit-derived honorifics and rhyme schemes, whereas news articles and secular novels prefer plain syntax and global terminology.

Influence of Other Languages on Manipuri Style

Manipuri has long been linguistically porous. Modern studies estimate over 4,000 loanwords in Manipuri, mostly from Indo-European languages. The chart below illustrates typical examples of borrowed vocabulary in various contexts:

Source Language	Manipuri Examples (transliteration)	Gloss/Context	Source(s)
Sanskrit	*ātma* (soul), *arthô* (meaning)	Religion, philosophy	
Hindi	*cīppīl* (sandal), *cīthī* (letter)	Everyday items	
Bengali	*bon* (forest), *bondhu* (friend)	Nature, social terms	
Assamese	*mekhela* (woman's skirt), *pukhri* (pond)	Clothing, everyday	

Arabic	*hukum* (order), *ijjat* (honor)	Administrative, honorific
Persian/Urdu	*andāj* (guess), *dukān* (shop)	Marketplace terms
English	*tikit* (ticket), *prāvit* (private)	Modern/technical items
Portuguese	*balde* (bucket), *igreja* (church)	Material culture terms

These borrowings impacted Manipuri syntax and tone. For example, the influx of Sanskrit vocabulary brought complex compounds (like *dharma-shastra*-style constructions) into religious literature. Conversely, English influence in journalism introduced passive constructions and loaned genitive phrases (e.g. "manipur chieftainabada bola" for "statement of the Manipur leader"), as well as straightforward imperative mood in reporting. Journalistic sentences tended to be shorter and more linear than the nested, poetic style of earlier times.

Importantly, loanwords were often adapted phonologically to fit Manipuri patterns (e.g. the English /t/ becomes "t" or "th" in Manipuri), but the sheer number of loans meant that many English technical terms are used as-is in news and education. In contrast, Persian/Urdu terms (mostly from historical contact via Hindi) typically appear in high-register or historical contexts (e.g. literary works set in royal courts), while Bengali loanwords entered through daily interaction and education. By mid-20th century, every educated Manipuri used a mixed vocabulary: a newspaper article might contain Sanskrit *jati* (caste), Bengali *padārtha* (material), Urdu *satta* (power), and English *committee* in one paragraph.

Journalism and Public Language

Manipuri journalism developed rapidly in the 20th century. Early press (hand-written or cyclostyled journals) like *Meitei Leima* (1917, Assam) and *Meitei Chanu* (1920s) were nationalist and often bilingual. The first printed Manipuri journal *Yakairol* (1930) blended Manipuri with Bengali and English content. The first daily Dainik Manipur Patrika (1933) was printed in Imphal with the Bengali script. Its editor, Th. Gokulchandra, made it a sharp critic of British rule; language-wise, it adopted a formal public style, using respectful address forms and many Hindi/English loanwords for political concepts. Later weekly *Tarun Manipur* (1938) pioneered literary journalism, publishing poems and essays by Dorendrajit and Shitaljit.

Over time, journalistic Manipuri standardized into a more formal register than everyday speech. Newspapers and radio broadcasts today follow modern orthography and grammar rules set by educational boards. The two scripts (Bengali and Meitei) have each developed style conventions: for example, Bengali-script Manipuri historically favored more Persian/Urdu terms (due to shared orthography with Hindi), while Meitei-script publications often insert fewer Sanskrit tatsamas. By the late 20th century, editorial stylebooks were introduced, recommending purer Meitei syntax and discouraging excessive foreignisms. In practice, however, public discourse remains fluid: official reports and speeches use high Sanskrit vocabulary (for solemn tone), whereas TV news and tabloid columns mix colloquial tone and English headlines.

Key Figures and Texts: Alongside journalism, several authors mark shifts in style. Early pioneers (c.1900–1940) like Hijam Anganghal (poet of *Khamba Thoibi*), Kh. Chaoba (essayist), Hijam Irabot (writer and politician) and A. Dorendrajit (playwright) modernized Manipuri literature. Post-independence writers such as E. Nilakanta, G.C. Tongbra and M. Thoibi Devi expanded prose fiction; poets like L. Samarendra and Th. Ibopishak embraced free verse and

modern idioms. Each generation tended to incorporate contemporary global influences – e.g. 1960s poets used Western imagery and English loan-phrases – reflecting a continual stylistic evolution.

In summary, Manipuri literary and journalistic style evolved from an insular classical form to a multilingual modern register. Ancient and medieval texts preserve a highly indigenous syntax and lexicon; the Vaishnavite period layered Sanskritized diction on that base; colonial and postcolonial eras added Bengali, English and other Indo-European elements. Throughout, the literary vocabulary expanded and diversified (as summarized in the table above), and the tone shifted from ritual solemnity to journalistic straightforwardness. Today's Manipuri draws on this entire history: contemporary literature may mix archaic honorifics with technical English, while news media employ standardized grammar and selective borrowings for clarity and formality.

Sources: Authoritative histories and studies of Manipuri language and literature document these changes. The examples and quotations above come from these connected sources, which trace Manipuri's linguistic evolution in detail.

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Development of Scientific Vocabulary and Logical Structure in Manipuri (Meiteilon) Language

Manipuri (Meiteilon) has a long literary tradition, and scholars have worked to systematize its academic lexicon. Historical manuscripts show that Meitei experts coined compound terms for fields of knowledge using the suffix "*lon*" (literally "science" or "treatise"). For example, the old term Hidaklon (from *hidak* "medicine" + *lon*) means "the science of medicine", and Maibarol denotes "the art and science of therapeutic practice". Similarly, Khenchonglon referred to the study of stars ("appearance of a heavenly body"), and Thumkhonglon meant "science of salt wells". Such compounds illustrate an early Manipuri method of forming precise technical terms by combining native morphemes. These examples come from royal-era manuscripts (pre-20th century) that document traditional Meitei knowledge in medicine, astronomy, salt production, etc. – serving as a foundation for later academic terminology.

By contrast, everyday Manipuri speech uses simpler or more idiomatic vocabulary, often allowing multiple synonyms for the same idea. Formal scientific discourse in Manipuri aims for *uniform, unambiguous terms*. Government language plans explicitly target this: for instance, Manipur's Language Directorate directs the "evolution of technical terms" across disciplines and the creation of *subject-wise glossaries*. India's Commission for Scientific and Technical Terminology (CSTT) similarly exists "to evolve standard terminology" and promote its consistent use in each Indian language. These official efforts inherently tighten the language: they favor fixed compounds and defined affixes over the fluid expressions of colloquial speech,

and they standardize logical connectors and syntax in textbooks and glossaries. (No detailed linguistic study of Manipuri register differences was found, but the goal of "uniform Manipuri terminology" implies a move toward more consistent, clearer academic language.)

Lexicography and Terminology Projects

Modern lexicographic efforts have built up the Manipuri academic vocabulary. A landmark was N. Khelchandra Singh's 1964 Manipuri–Manipuri and English Dictionary, one of the first extensive bilingual dictionaries and a foundation for later work. In the early 2000s, new Manipuri–English dictionaries appeared that improved on earlier ones by using the native script (Meitei Mayek), Roman transliteration, and International Phonetic Alphabet (IPA) to show pronunciation. For example, Dr. H. Surmangol Sharma's 2006 Learner's Dictionary segments words into morphemes (reflecting Manipuri's agglutinative structure) and provides both English and Manipuri definitions. These lexicons helped introduce many standard terms and highlighted consistent morphology (e.g. bound suffixes).

On an institutional level, the Commission for Scientific and Technical Terminology (CSTT) – a Government of India body founded in 1961 – works to develop science and engineering terms in Manipuri (among other languages). In 2023 CSTT announced fundamental 5,000-word glossaries for Manipuri in 15 fields (physics, mathematics, biology, etc.). These digital glossaries, once published, will provide uniform equivalents for core technical terms. Similarly, Manipur's Directorate of Language Planning and Implementation (DLPI) (formerly the Language Cell) explicitly includes "evolution of technical terminology" and subject glossaries in its mission. DLPI even plans to publish an "Encyclopaedia of technical terms" and supports new Manipuri teaching materials. These projects underscore active standardization: the DLPI program statement commits to "Updating the terminology" and training officials in Manipuri equivalents.

Academic institutions have also contributed. The *Manipuri Sahitya Parishad* (founded 1935) is a premier literary council that promotes Meitei language scholarship. It publishes journals, organizes seminars, and supports translations between Manipuri and other languages. For example, in the late 1970s the Parishad worked with Assam's education board to introduce Manipuri-medium high school exams in the Barak Valley. Manipur University and colleges teach Manipuri literature and language, but (as elsewhere in India) most science teaching remains in English. To fill this gap, DLPI sponsored terminology workshops: in May 2014 a 10-day "Terminology Building" workshop brought together 35 educators to translate Class XI and college textbooks in subjects like economics, political science, philosophy, etc., into Manipuri. Another DLPI workshop in September 2014 addressed science subjects (physics, chemistry, botany, zoology, etc.). These collaborative projects generated new subject-specific vocabulary and exemplify how government and scholars create and disseminate academic terms.

Educational Reforms and Script Standardization

Manipur's language policy also shaped scientific vocabulary. After Indian Independence, Manipuri (Meiteilon) was made the state's official language and, in 1979, a state law defined it in Bengali script. (In practice, Bengali orthography had been used since the 18th century under Hindu influence.) The late 20th century saw the modern revival of the indigenous Meitei script (Meitei Mayek): it was reintroduced in schools starting in 2006 and by 2021 the Official Language Act was amended to define Manipuri as "Meiteilon in Meetei Mayek". This script

reform is significant for vocabulary standardization: new textbooks, dictionaries and government publications are increasingly printed in Mayek. The DLPI notes that mere transliteration isn't enough – students and officials "require all Manipuri reference books" in the native script – prompting systematic transcription and new book production. Thus, educational reforms (curriculum change, script policy) have gone hand-in-hand with lexicon development.

Structure of Scientific vs. Colloquial Manipuri

Manipuri's normal (everyday) register allows flexible word order (SOV) and often uses loanwords or idiomatic expressions. In contrast, the academic/scientific register is characterized by formalized compounds and clearer syntax. For example, technical writing consistently uses affixes and connectors: logical particles like *aduga* ("and") and *nanga* ("if") appear systematically in science texts, and sentence structure tends to follow strict SOV order as documented in grammars. The standardized glossaries and dictionaries reduce ambiguity by assigning one established term per concept (e.g. coining new Manipuri equivalents rather than using varying colloquial synonyms). While we found no direct comparative linguistic study, the language plans and dictionaries imply that academic Manipuri favors consistency and explicit structure. For instance, CSTT's mandate is "standard terminology" and propagation of uniform terms, and DLPI's workshop objectives explicitly aim for "standard and uniform Manipuri terminology" to facilitate book production.

In practice, one sees that science textbooks in Manipuri avoid slang or regional variants; instead they use compounds derived from native roots (as with *lon*-words) or internationally recognizable symbols (like numerals and element symbols) alongside Manipuri terms. The clear morphological structure of Manipuri – its agglutinative nature – is fully reflected in textbooks: dictionaries now emphasize *morpheme segmentation* (breaking words into meaningful parts). This analytic approach ensures that, for example, complex terms (like names of geometric shapes or chemical processes) have transparent construction. In summary, scientific/academic Manipuri tends to enforce the language's grammatical rules and uses consistent terminology (often coined systematically), whereas colloquial Manipuri allows more variability. The deliberate planning and resources devoted to technical terminology (lexicons, glossaries, translations) indicate a conscious effort to "tighten" the language for academic clarity.

Timeline of Major Developments

- 1935 – *Manipuri Sahitya Parishad* founded in Imphal (literary council promoting Meitei literature and language).
- 1961 – India's *Commission for Scientific and Technical Terminology (CSTT)* established to standardize technical terms in Indian languages.
- 1964 – N. Khelchandra Singh publishes a landmark *Manipuri–English Dictionary*, the first comprehensive bilingual dictionary in Manipuri.
- 1972 – Manipur becomes a full state of India (changing administrative status; Meiteilon gains prominence).
- 1979 – Manipur Official Language Act declares Manipuri (Meiteilon) the state's official language (defined as in Bengali script).
- 1992 – Manipuri (Meiteilon) is included in the Eighth Schedule of the Indian Constitution, making it the first Tibeto-Burman language recognized as a *Scheduled* language.

- 2006 – Meitei Mayek script is re-adopted in schools; from that year onward, Manipuri textbooks are gradually published in the native script.
- 2014 – Directorate of Language Planning and Implementation (Manipur) hosts multi-day terminology workshops: one in May (covering humanities/social sciences) and another in September (covering sciences) to translate and standardize college-level subject texts.
- 2021 – Official Language (Amendment) Act updates the 1979 law, redefining Manipuri as “Meiteilon in Meetei Mayek”.
- 2023 – CSTT announces creation of fundamental technical dictionaries (≈5,000 words each) for Manipuri in disciplines like physics, biology, mathematics, etc., to be freely available digitally.

Each of these milestones reflects a major effort to enrich Manipuri’s academic language – through legislation, institutional support, publication of reference works, and organized term-creation. For example, after CSTT’s recent announcement, one expects a surge of officially approved Manipuri equivalents for modern scientific concepts.

Sources: Authoritative descriptions of Manipuri language history, institutional plans, and lexical projects have been drawn from language commission reports and news reports (English translations provided where needed). These include government websites (DLPI), scholarly forewords (Manipuri dictionaries), and local news archives. All statements above are based on these documented sources.

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