

Prakrit and Pali consonant clusters

Sanskrit language has a large number of complex consonant clusters counting 850+ and theoretically up to 7 consonants within a conjunct. These clusters get simplified in the Pali/ Prakrit languages which is a major phonological feature of the Middle Indo Aryan period.

The conjuncts of the following category can occur in Prakrit.¹

1. Geminate consonant, the geminate consonant may be aspirated, in that case the aspiration will appear only on the final consonant.
2. A homorganic nasal followed by a stop. Similar to Kannada/ Hindi they are represented using anusvara in the orthography rather than with a conjunct.
3. Nasal consonant or a semivowel like *l* followed by *h*.

1.

क्क क्ख गग गघ

च्च च्छ जज जझ

ट्ट ट्ठ ड्ड ड्ढ णण

त्त त्थ द्द द्ध ञ्

प्प प्फ ब्ब भ्भ म्म

य्य³ ल्ल व्व र्रश⁴ स्स

2.

क्क क्ख ञ् ञ्

च्च च्छ झ झ

पट पठ पड पढ

न्त न्थ न्द न्ध

म्प म्फ म्ब म्भ

3.

पह म्ह ल्ह

¹ These are a few exceptions in varieties like Magadhi variety sections of grammar where ska ṣṭa can occur which are anyway supported for Sanskrit words in the fonts.

² In Jaina Prakrit orthography

³ Śaurāśenī and Māgadhī varieties

⁴ Māgadhī variety

Pali

The consonant inventory of consonant clusters in Pali mostly remains the same with the Prakrit with some of the following additions and exceptions like

ञ, ञ्ह, ण्ह, ञ्ह, हँ, ञ्ह, ञ्ह, ह्र, स्म

Linguistically ञ्ह is a single sound in Vedic Sanskrit and Pali and it's the aspirated form of ञ, it's but written as a conjunct.

A few complex consonant conjuncts are also found which are commonly supported in most fonts for Sanskrit words.

The details from following book⁵ are given below

Conjuncts of similar consonants

Vagga-group similar conjuncts

(Ka-group) kka, gga,
(Ca group) cca, jja, ñña,
(Ṭa group) ṭṭa, ḍḍa, ṇṇa,
(Ta group) tta, dda, nna,
(Pa group) ppa, bba, mma,

Non-vagga group similar conjuncts

yya, lla, vva, (Being morphologically homogenous and interchangeable, it is also sometimes written as bba), ssa,

Vagga Conjuncts

(1st vagga) kkha, ggaha (2nd Vagga) ccha, jjha (3rd Vagga) tṭha, ḍḍha
(4th Vagga) ttha, ddha (5th Vagga) ppha, bbha (Refer to function of Sutta No. 29)

(Conjuncts with the last alphabet “**ñ**” of 1st Vagga) ñka, ñkha, ñga, ñgha
(Conjuncts with the last alphabet “**ñ**” of 2nd Vagga) ñca, ñcha, ñja, ñjha
(Conjuncts with the last alphabet “**ṇ**” of 3rd Vagga) ṇṭa, ṇṭha, ṇḍa, ṇḍha
(Conjuncts with the last alphabet “**n**” of 4th Vagga) nta, nthā, nda, ndha
(Conjuncts with the last alphabet “**m**” of 5th Vagga) mpa, mpha, mba, mbha

⁵ Kaccāyana Pāli Vyākaraṇaṃ Volume 2. Translated into English with additional notes, simple explanations and tables by A. Thitzana. PDF downloaded from here <https://store.pariyatti.org/kaccayana-pali-grammar-vol1-2> (pp 55 to 58)

Non-vagga Conjuncts

1. Dissimilar conjuncts with non-vagga “ya” (This type of conjuncts with “ya” are usually found in the grammatical texts)
(1st) kya, khya, gya, (2nd) cya, (3rd) ṭya, ḍya, ṇya (4th) tya, thya, dya, dhya, nya (5th) pya, phya, bya & vya, bhya, mya (non-vagga) lya, sya,
Dissimilar conjuncts with non-vagga “ra”
(1st) kra, kri, (4) tra, tri, dra, dri (5) bru
(with non-vagga “sa” & “ta”) stra
3. Two dissimilar conjuncts with non-vagga “la”
(1st) kla (5th) pla
4. Eight dissimilar conjuncts with non-vagga “va”
kva, khva, ṇva, tva, dva, nva (Non-vagga) sva, hva
5. One dissimilar conjuncts with non-vagga “sa”
sta as in Usto-shocked.
5. Nine Dissimilar conjuncts with non-vagga “ha”
ñha, ṇha, nha, mha,
(Non-vagga) yha, rha, lha, vha, ḷha,

Triple conjuncts

Note: Triple conjuncts are quite rarely found except a few words.

(1) ndri as in Indriya-faculty.

(2) ntvā as in Gantvā-having gone

Note: There is no quadri-conjuncts found in the texts. Keep in mind that these shown above are only a common list of conjuncts which used to be found in a wider source of Pāli literature, not a limitation of other possible

Kaccāyana Pāli Vyākaraṇam

forms of conjuncts. As a general rule of grammar, any acceptable conjunct coined within the confines of grammatical logic and relevant morphological applicability is still possible depending on the skill and discretion of the author. “Paṭādīhyalaṃ, Cyādīhi Īvaro, Sasvādīhi tudavo (See the underlined conjuncts)” are such examples among applicable possibilities found in this grammatical text.