

The Sanskrit Inscriptions of the Reservoirs of Gujarat

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Gujarat is rich in its unique cultural heritage. The grand tradition of art, architecture, sculpture and literature has been handed down from generation to generation with amazing continuity. Yet some periods of its history are outstanding epoches in which intense cultural growth and prosperity find their splendid expression.

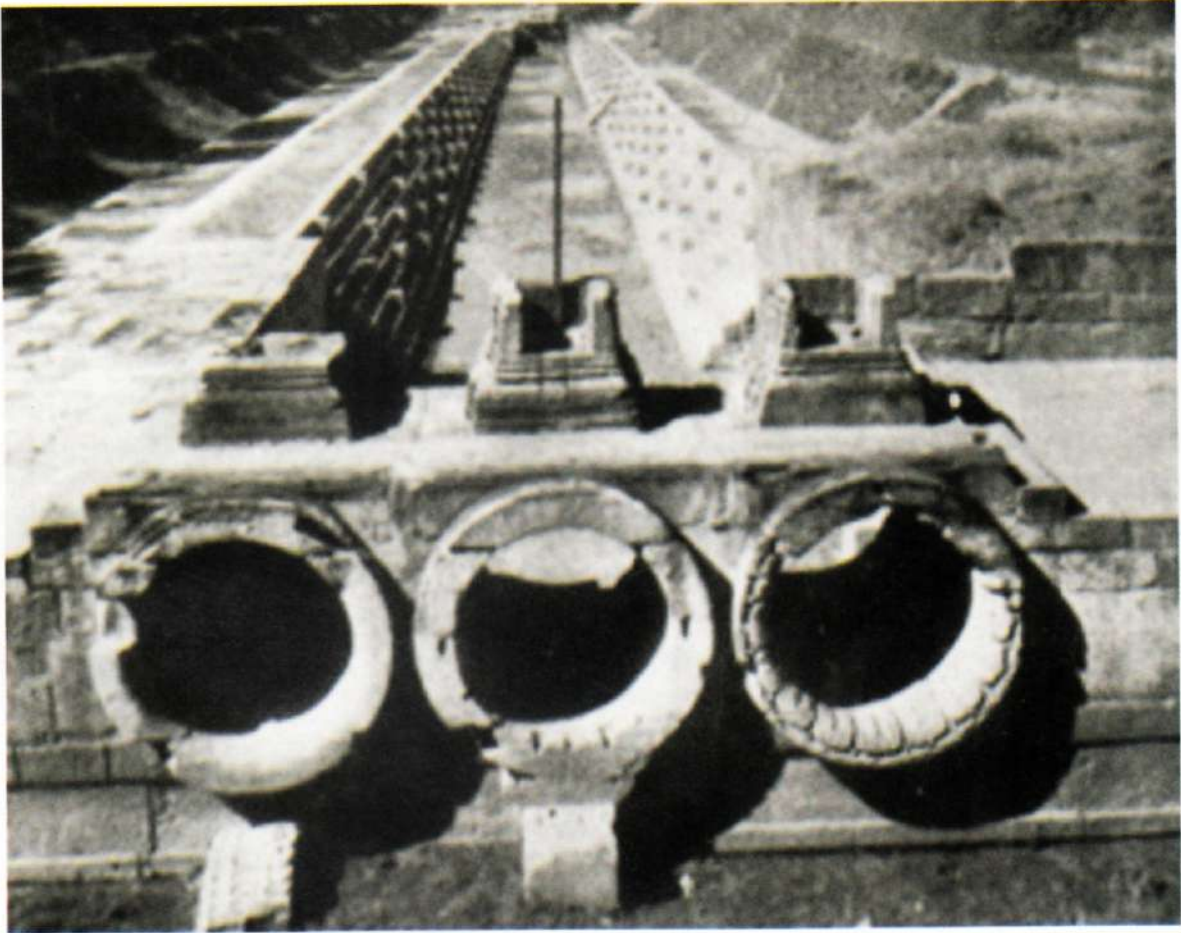
From the 4th cent. B.C.E. to the 19th century C.E. the reservoirs were an integral part of western Indian communities for drinking, washing and bathing as well as for festivals and sacred rituals. The excavation of a well, a lake, a canal, construction of a water hut, a stepwell, a shrine, a temple, a gate, an assembly hall or the consecration of an image and commissioning of a refectory were some of the noble and charitable deeds. (*iṣṭāpūrta*) which have been documented in ancient and medieval Sanskrit inscriptions. Thousands of water reservoirs like stepwells, lakes, stepped ponds known as *kuṇḍas* and wells built in western India particularly in Gujarat and Rajasthan are fascinating cultural and architectural monuments.

For twelve hundred years stepwells and stepped ponds, elaborate water buildings with stairs- have been integral to life in western India. These underground buildings usually from three to nine storeys deep became community centres, as passages into the subterranean, they were invested with religious meaning. Stepwells and stepped ponds are indigenous to the semi-arid region of Gujarat and Rajasthan. They have been the vessels for capturing and conserving the precious rains, and also tell much about the region's ecology and history.

Viṣṇu-dharmottara Purāṇa lays down that 'one who digs well for the public, has as a consequence half his sins absolved when the water begins to flow forth. One who dedicates a pond or a stepwell (*vāpī*) is forever happy and free from thirst. He attains the world of Varuṇa' (chaps. 91-92). Thus it was a current practice throughout Gujarat and Rajasthan to build stepwells, wells, lakes or *kuṇḍas* to perpetuate the memory of their beloved ones or their forefathers and for public welfare as well.

The Lake- Sanskrit *taḍāga* or *taṭāka* corresponding Gujarati word *talāva* is blocked with an artificially built dam. Structural flights or stairs enable easy access to the water level. The beginning of the staircase is marked by flanking entrance halls placed on a raised platform and embellished with sculptures. The construction of such artificial lakes is very ancient and its antiquity goes back to the time of the Mauryan rulers. As the Girnar rock inscription of Mahākṣatrapa Rudradāman¹ testifies that Chandragupta Maurya's *Rāṣṭriya* (governor) named Puṣyagupta Vaiśya had constructed dams across two rivers and made the lake called Sudarśana *taṭāka* near Girnar and it had been adorned with outlets by Tuṣāṣpha, the Yavan governor of Maurya king Aśoka. In the Śaka year 72, on the first day of the dark half of Mārgaśīrṣa (Oct-Nov. 150 C.E.) heavy storm attended by a copious rainfall happened quite out of season and so much increased the force of the current of the two rivers Suvarṇasikatā and Palāśinī which flowed through the lake ran off, and its loss no doubt caused great inconvenience to the inhabitants of Junagadh. A little later the dyke was repaired by the Pahlava Suviśākha who as Rudradāman's governor of Sorath and Ānarta resided at Junagadh. The Sudarśana lake was again burst in consequence of excessive rain in the (Gupta) year 136 (C.E. 455) at night on the sixth day of the month *Prausthapada* (i.e. *Bhādrapada*) (Aug.-Sept. C.E. 455) as recorded in the Girnar Rock inscription of Gupta emperor Skandagupta.² The restoration of the breach, by renewing the embankment was effected under the orders of Cakrapālita, after two month's work in the Gupta year 137 C.E. 456). In year 138 of the Gupta year C.E. 457) Cakrapālita caused to be built a temple of Lord Viṣṇu under the name of Cakrabhṛt 'the bearer of the discus'. He made an immeasurable expenditure of wealth and built an embankment] a hundred cubits in all in length and sixty eight in breadth and seven (?) men's height in elevation of two hundred cubits. Thus having done honour to the kings, he laboriously built up with a great masonry work, properly constructed the lake Sudarśana which is renowned as not being evil by nature. The *Praśasti* is called *Sudarśana taṭāka Saṁskāra Grantharacanā*- the composition of the description of the restoration of the lake Sudarśana.

The great lake excavated by king Durlabharāja (C.E. 1010-1022) was named Durlabhasara after him. It was renovated by king Siddharāja Jayasimha (C.E. 1094-1143) and known as Siddhasara or more popularly as Sahaṣraliṅga *talāva* with its 1008 Śiva shrines and 108 goddess shrines and numerous other fanes with its *kīrtistambha* shining like a silvery column must have made the surroundings of Aṇahillapura Pattana magnificent (Pl. 16.1). A Sanskrit *praśasti* composed by Śripāla, the poet laureate of Jayasimha's court was inscribed on the *Kīrtistambha*, a slab of which has been discovered on the wall of a small Śiva temple in Vijala Kuā Mohallā.³ The fragmentary inscription contains only 5



Pl. 16.1: Sahaśraliṅga Lake, Patan (1094-1142 CE)

verses numbered 76,77,79,87 and 90. It refers to the name of King Sidharāja Jayasimha and mentions his epithet *Parameśvara*. Examples of some other lakes are Karnasāgara lake near Chanasma (Dist. Mehsana), Munasara lake in Viramagāma, Malāva lake at Dholka, Sharmiṣṭhā lake at Vadnagar etc.

Bhuvāṭimbi Sanskrit inscription⁴ near Sutrāpādā (Dist. Junagadh) of the Sultanate period is engraved on a stone slab on the bank of Bhuvaḍa tank, dated V.S. 1457, *Vaiśākha, badī. 5, Soma, Uttarāśādhā nakṣatra, Bava Karaṇa, Uttarāyaṇa, Grīṣma* ṛtu (2 May C.E. 1401). It records that Nāgubāi, daughter of Bharama and Megatī of the Bāraḍa community caused a tank to be dug up in the village Palāśalā in Saurashtra in the victorious reign of King Śavagaṇa and during the regime of Pañcakula.

Candrasara inscription dated V.S. 1534, *Phālguna, sudī. 7, Soma*⁵ (9 Feb., 1478 C.E.)* is found on a stone fixed in the southern dam of the big lake to the south of the village Candrasara (Dhrangadhara State). It records that a *kṣatriya* named Dīpacandra of Darbha *gotra* caused to be dug a beautiful tank for the comfort of the beings. Another record fixed in the northern dam of this lake dates V.S. 1911, Śaka 1777, *Vaiśākha, sudī.3, Guru, Uttarāyaṇa*⁶ (19 April, C.E. 1855) is written in Gujarati mixed Sanskrit language. It records that Mahārāṇā Raṇamalajī ordered his *vazīra* Jāḍejā Saṅgajī to repair the dam as strongly as before. Accordingly, he repaired the tank for the happiness of the beings.

Ahmed-sara (Lake) situated in the village Sarkhej near Ahmedabad is 430 feet in length and 700 feet in width. An inscription dated V.S. 1571, *Mahā, sudī 5* (C.E. 1514, 31 Jan.) is inscribed on the small stone fixed on the back wall of the mosque and the Roza of Saint Ahmed Khattu. The script is Devanāgarī and the language is old Gujarati. The inscription records that the lake was 422 *gaja* (844 feet) from the north-south side and 381 *gaja* (762 feet) from east-west side. It was built during the time of Muzaffar Shah I with the expense of nine lac *taṅkas*.

A Sanskrit inscription containing 36 lines fixed in the eastern dam wall of a big tank in Una (Dist. Junagadh) is dated V.S. 1582, *Śrāvaṇa, sudī 8, Budha*⁷ C.E. (18 July, 1526 C.E.). In the beginning, the inscription begins with the invocation of the deities Brahmā, Viṣṇu, Śiva, Gaṇapati, Indra and other Dikpālas, Sūrya and other *grahas* and Pārvatī. It then mentions that in the *kāyastha* family minister Narasimha, his son minister Sevā, his son Maṭā and Maṭā's son Patā were very famous for their statesmanship, charity, learning and penmanship. Patā caused a big tank to be made in Unnatadurga (modern Una) in V.S. 1582, *Śrāvaṇa, sudī 8, Budha* (18 July, C.E. 1526). The inscription mentions the names of three wives of Patā : Lalī, Madāi and Haribāi. Patā was given the title Māfar Malik and

* According to *Caitrādī Pūrṇimānta* system (*IE*, Vol. IV, p. 362).

a Palki by the Sultan. Somnātha, an *ābhyañkara nāgara*, and son Kṛṣṇadāsa composed the *praśasti* and the engraver was Ratnā, son of Mahādeva. The easy flow of the language full of alliteration and use of various metres like Śārdūlavikṛīdita (vs. 1,4 & 8), Upajāti (vs. 2,10,12 & 13), Indravajrā (v. 14), Upendravajrā (vs. 9 and 15), Vamśastha (v. 3), Vasantatilakā (vs. 5 and 7) show the author as a gifted and learned poet.

The Sanskrit Inscriptions of the Stepped Ponds (*kuṇḍas*) of Gujarat

A *kuṇḍa* as a reservoir is an unique construction of a pond with flight of steps on all the four directions. Such stepped construction of the pond is known as the *kuṇḍa* in Gujarat. It is usually square. Its four walls are made of short flights of stairs that meet at small landings. It has no columns or covered spaces. Every stone is placed flat, light fills the whole and no sight line is interrupted. The zigzag of the stairs of a stepped pond allow for a steeper slope to the pool. Each flight of stairs is half of a matched pair of steps placed back-to-back to form a triangle. In Gujarat, shrines built into the triangles face the pool's centre.

In the Caulukya period of Gujarat chronicles and inscriptions mention the construction of several types of artificial reservoirs by the royal personages as well as the citizens. This tradition seems to have been maintained during the Muslim rule (C.E. 1304-1757) too.

A Sanskrit inscription engraved on a stone slab lying underneath the *pīpala* tree near famous Viṣṇugayā *kuṇḍa* in the west of Dhamlej village (Dist. Junagadh) is dated V.S. 1437, *Āṣāḍha, badī 6, Śani*⁸ (26 May, C.E. 1380). It records that Karmasimha, son of Rāṇa, who was the son of Jeja of Prāgvāṭa caste and the minister of the Vājā King Bharama, renovated the temple and the *kuṇḍa* of Mūlagayā near Dhamlej. He used to worship Lord Somanātha and because of the request of minister Karmasimha, the king gave the grant of the village Megharaja to the *brāhmaṇas* and made them the inhabitants of Megharaja to do the *Svādhyāya* of the Vedas. The *praśasti* was composed by Vāsudeva, son of Dvija Bhānu of Ānandapura (Modern Vadnagar). It was inscribed by Sūtradhāra Madhusūdana and written by Paṇḍit Sarvāditya.

The *kuṇḍas* like the Sūrya *kuṇḍa* at Moḍherā (Pl. 16.2) (Dist. Mehsana), Loṭeśvara *kuṇḍa* at Munjpur (Dist. Mehsana), Brahma *kuṇḍa* at Shihor (Bhavnagar), Śakti *kuṇḍa* at Ākhaj (Dist. Mehsana), Gaurī *kuṇḍa* at Vadnagar, Śiva *kuṇḍa* at Kapadvanja, Gangvo *kuṇḍa* at Dedadara (Dist. Surendranagar) and Damodar *kuṇḍa* at Junagadh are some of the beautiful Solanki and Sultanate period *kuṇḍas* of Gujarat. Even though they do not contain any inscription, they are noteworthy due to either their architectural form or sculptural decor.

The Sanskrit Inscriptions of the Stepwells of Gujarat

Stepwells are an important part of the main current of the architectural activities in



Pl. 16.2: Sūrya Kuṇḍa, Moḍherā (1027 CE)



Pl. 16.3: Rānī Step-well, Patan (11th century CE)

Western India. The antiquity of this unique form of underground well-architecture goes back to the 7th century C.E. in the existing monuments of Gujarat. The terms *vāvaḍī* or *vāī* (*vāy*) for stepwells are in common use in Gujarat. In some travellers' accounts they are transcribed as *baurī* or *bowarī*. The Sanskrit term appearing in the classical *Śilpa*-texts and inscriptions is *vāpī* or *vāpikā*.

Stepwells are the monuments of which the major parts are underground. In most cases they are richly carved and ornamented, with decorative relief work and sculptures. A stepwell consists of three major constituent architectural parts; such as the vertical well (*kūpa*) with an arrangement for hauling up water by buckets (*ghaṭa-yantra*); the stepped corridor leading down several storeys into the earth starting from the entrance pavilion and ending at the water level of the well; and numerous intermediate tower like pavilions (*kūṭas*) built as open halls (*maṇḍapa*) in the stepped corridor.

The first pavilion at the entrance (*mukha-maṇḍapa*) in front of the stepped corridor is normally a simple, open, pillared hall, either square or oblong in ground plan or crossed shaped. Most often the entrance pavilion is on a raised platform to be approached on three sides by the steps, the fourth side leading down the corridor.

A flight of steps leads to the lower-lying storey being the first pavilion (*kūṭa*). The stepped corridor descends further in a flight of steps to the second *kūṭa* with two storeys underground and one above ground level being in one horizontal line with the entrance pavilion (*mukha-maṇḍapa*). Thus, the flights of steps proceed downwards into the earth interrupted at regular distances by the tower-like *kūṭa*, from storey to another, till the water level is reached. In some of the larger stepwell monuments, the last pavilion is sometimes six or seven storeys underground.

According to the classification of Sanskrit *Śilpa*-texts the stepwells can be divided into four main types :

Nandā Bhadrā Jayā caiva caturthī Vijayā tathā /
Ekavaktrā Trikūṭā ca Nandā nāma varapradā // 9 //
Dvivaktrā ca Ṣaṭkūṭā Bhadrā nāma suśobhitā /
Trivaktrā navakūṭā ca Jayā vai Devadurlabhā // 10 //
Caturvaktrā sūryakūṭā Vijayā Sarvatomukhī /
(Aparājitapṛcchā, sūtra 78, vs 9-11)

1. **Nandā vāpī** : with straight stepped corridor, one entrance and three pavilion towers (*trikūṭa*)- Nandā vāpī specifies those stepwells having a plain basic structure. Here the stepped corridor is descending in a straight line and has only one entrance. Depending

on the size of the monuments, the stepped corridor ends at the level of the third or sixth storey underground. The most plain and unostentatious monuments of this type do not have elaborate pavilions; often they are only small empty spaces marked by four pilasters without having pillars in between to break up the interior and to support the upper floor. Among the existing monuments Rānī stepwell at Patan^{8A} (Pls. 16.3, 16.4, 16.5), Limboi stepwell near Idar (N.Gujarat) and Vikia stepwell at Ghumli are Nandā type *vāpīs*.

2. **Bhadrā vāpī** : with two entrances and six pavilion towers (*ṣaṭ-kūṭā*). Weṭ adorned is the one called *Bhadrā* with two entrances and six pavilion towers; for example Bāi Harīra stepwell (Pl. 16.6) at Asarava, a suburb of Ahmedabad.
3. **Jayā vāpī** : with straight stepped corridor and three entrances and nine pavilion towers (*navakūṭa*).

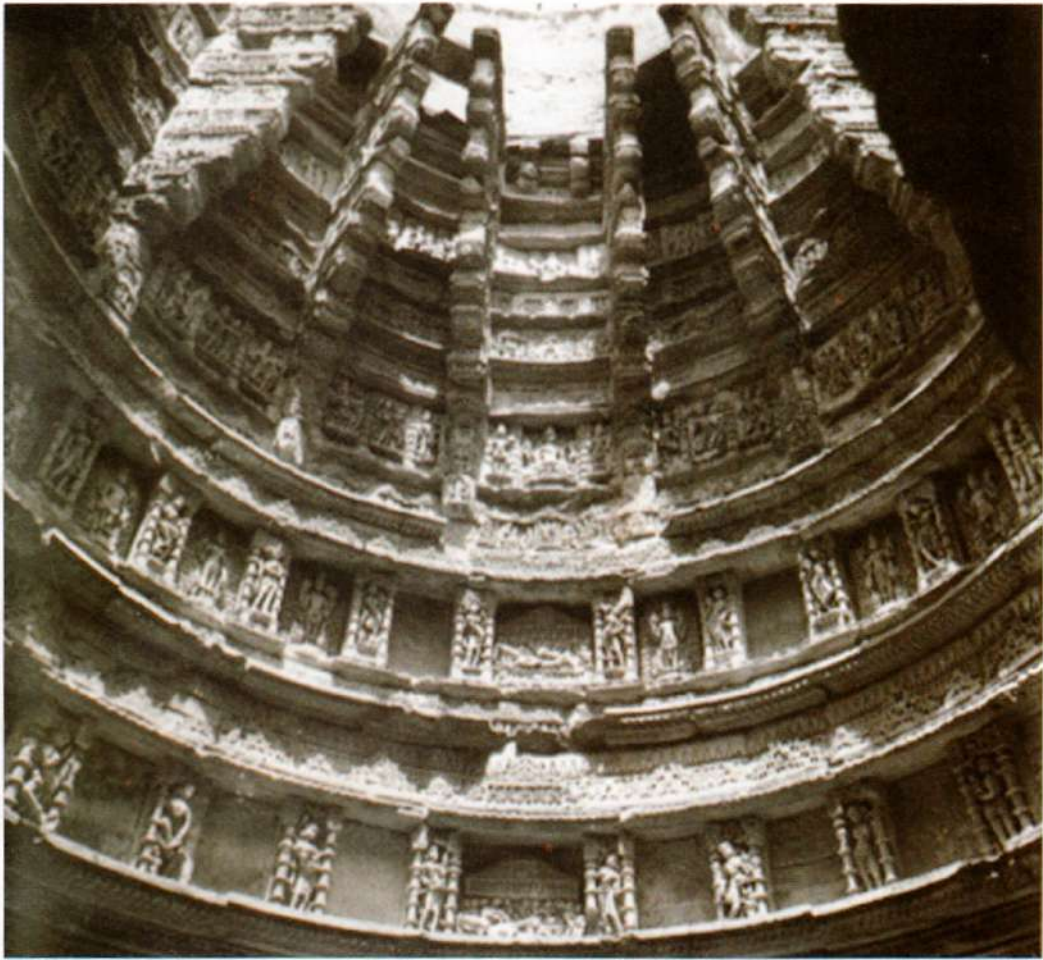
This type has a threefold entrance, i.e. 3 flights of steps arranged crosswise and attached to the stepped corridor; the Rūḍābāi stepwell at Adalaj (Pl. 16.7) near Ahmedabad representing this type is the magnificent and extremely well proportioned stepwell.

4. **Vijayā vāpī** : Facing all directions is *Vijayā vāpī* (*sarvatomukha*) with four entrances and twelve pavilion towers (*sūryakūṭa*). The one major examples of this type found in Gujarat and Saurashtra is the *caumukhī* stepwell in the village of Chobari near Surendranagar. The descent to the water-level is by four attached lateral staircases, one each on each arm. The water level in this case is quite high, hardly one storey underground.

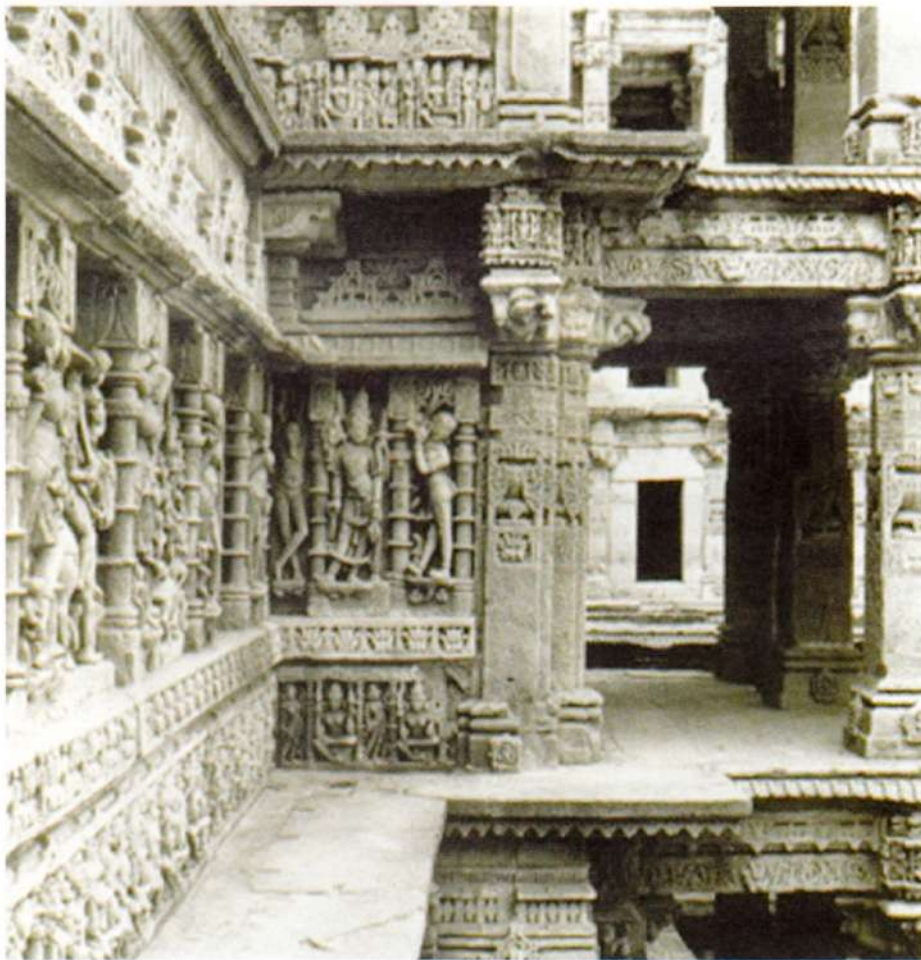
The References of the Vāpī or Vāpikā in the Ancient Sanskrit Inscriptions of Gujarat

One of the earliest references to the antiquity of the *vāpī* is found in the Gunda (Dist. Jamnagar, Saurashtra) stone inscription of Kṣatrapa Rudrasimha, dated Śaka 103, *Vaiśākha*, sudī 5 and *Rohiṇī nakṣatra*⁹ (6 April, C.E. 181). It records that during the reign of King Rudrasimha the army leader Rudrabhūti, son of *Senāpati* Bāpaka Ābhira had dug and constructed a *vāpī* in the village Rasopadra for the benefit and comfort of all living beings.

The copper-plate grants of the Maitraka Kings Dhruvasena I and Dharasena II of Valabhī are the additional evidences mentioning a *vāpī*. The Ganeshgadh (Dist. Vadodara) plates of Dhruvasena I dated Valabhī *saṃ.* 207, *Vaiśākha*, *badī* 15¹⁰ (27 April, C.E. 526) record that the king granted an area of land along with Yamala *vāpī* measuring 40 *pādāvartas*



Pl. 16.4: Rānī Vāva – well brackets



Pl. 16.5: Side wall – Rānī Vāva, Patan



Pl. 16.6: Bāi Harīra Step-well, Asarva-suburb of Ahmedabad (1499 CE)



Pl. 16.7: Three Storeys of the Adalaj Step-well

and another *vāpī* of 20 *Pādāvartas* to *brāhmaṇā* Dhammila in Hariyānaka village of Hastavapra-āharaṇī (modern Hathab in Bhavnagar Dist.) Palitana plates of Dhruvasena I, dated Valabhī *saṃ*. 210, *Śrāvāṇa* *sudī*.15¹¹ (7 July, C.E. 529), Valabhī *saṃ*. 210 *Bhādrapada*, *badī* 9¹² (C.E. 529) and Valabhī *saṃ*. 210. *Āśvina*, *badī* 5¹³ (8 Oct. C.E. 529) refer to the *Āmrīkā vāpī* of 12 *pādāvarta* = 1 square foot) situated in the south Bhaṭara *grāma* in Hastavapra *ābharaṇī*, donated to *Vājasaneyā brāhmaṇa* Viṣṇuśarmā of *Jyabāla gotra* and an inhabitant of Simhapur (modern Sihor), a *vāpī* named Bhoṭara of 12 *pādāvartas* to *brāhmaṇa* Śāntīśarman of *Vājasaneyā Śākhā* and *Ātreya gotra* and an inhabitant of Nagaraka (modern Nagara near Cambay) and a *vāpī* of 12 *pādāvartas* on the boundary of Akrolaka village, donated to *brāhmaṇa* Skanda of *Aupasvati gotra* and *Vjasaneyā Śākhā*.

Maliya (Dist. Junagadh) plates of Dharasena II, dated Valabhī *saṃ*. 252, *Vaiśākha*, *badī* 15¹⁴ (10 April, C.E. 571) refer to a *vāpī* of 28 *pādāvartas* in the west of Vajra *grāma* and another *vāpī* in the outskirts of Bhumbhusapadraka *grāma* donated to *brāhmaṇa* Rudrabhūti of *Vatsa gotra* and *Vājasaneyā Śākhā* and an inhabitant of Unnata (modern Una - Dist. Junagadh).

Kukad (Tal. Ghogha, Dist. Bhavanagar, Saurashtra) copper plates of Maitraka king Dhruvasena I, dated Valabhī *saṃ*. 206. *Āśvina*, *sudī* 5¹⁵ (8 sept. C.E. 525) refer to the grant of land along with two wells of 40 *pādāvaratas* in circumference and a stepwell of 16 *pādāvartas* in Kukkūṭa (modern Kukad) *grāma*.

Inscriptions found in South Gujarat bear evidences of the existence of stepwells in this area too. The Cambay copper-plate inscription of the *Rāṣṭrakūṭa* King Govind IV, dated Śaka 582, *Khara saṃvatsara*, *Jyeṣṭha*, *sudī* 10, *Soma*¹⁶ (10 May C.E. 930) gives a reference to the use of a stepwell in earlier times. As indicated in the plates, the grant of villages and a large number of gold coins is made to the *brāhmaṇas* not only for meeting the expenses of their ritual duties, but also for repairing temples and for building institutions like alm-houses (*sattra*), places for the supply of water (*prapā*), rest houses for travellers (*sraṭīśarya*) and stepwells (*vāpī*), wells (*kūpa*), ponds (*taḍāga*) etc.

The Stepwell Inscriptions of Gujarat

The middle of the 12th century, being the period of the reign of Solanki Kumārapāla, who succeeded Siddharāja Jayasimha in 1142 C.E. and reigned till 1172 C.E., is distinguished by the building of numerous Jaina temples due to the ruler's inclination towards this religion. The city of Vāyaḍ, ancient Vāyuvaṭa or Vāyuputra, has a stepwell which is supposed to belong to Kumārapāla's time. It is situated near the temple of Vāyudevātā. The stepwell is dated 13th century of the Vikrama era on the basis of a much abraded inscription on one of the pillars, deciphered by Cousens.¹⁷ The Gaṅga stepwell at Vadhvan is attributed to

Kumārapāla's period. There was once an inscription dated V.S. 1225 (C.E. 1169), of which only a few words are readable : 'the brave warrior Śrī Vijaya'. Cousens did not find the inscription any more during his survey of monuments, which probably was submerged in water.¹⁸

The two stepwells named Vikia and Jethā of the Solanki period near Ghumli in Barda Hills reflecting the magnificent temple of Navalakhā are exquisite examples of style and art-traditions of the 13th century in south-western corner of the peninsula of Saurashtra.

In northern Gujarat, during the Vāghelā period, the minister-brothers Vastupāla and Tejapāla were the source of tremendous and prolific architectural activity. It is said that numerous monuments, like temples, rest houses, tanks, wells etc. were erected by them. The Ra Khengar stepwell near Vanthali was built during this period as it stated in the *Vastupālacaritra* (cha. VI) by Jinaharṣa Gaṇi (dated V.S. 1497=C.E. 1441) that Tejapāla had built a stepwell between Tejalapura or Jirṇadurga and Vāmanasthalī (modern Junagadh and Vanthali).¹⁹

The Mādhāvāva in Vadhavan (Surendranagar) was built during the end of the Vāghelā period by a Nāgar *brāhmaṇa*. The building of the stepwell is attributed to Mādhā, the minister in the two niches in the stepwell. The first inscription, gives the date V.S. 1350, Kārttika sudī 8, *Guru*²⁰ (8 Oct; C.E. 1293) and records the name of Sīdhū, son of Ṭhākura. Soma of the Nāgara community and the other inscription gives only the name of Taṣamādevī, daughter of Soḍhala of the Nāgara community. Sīdhū and Taṣamā seem to be the parents of minister Mādhā.

The Petlad stepwell inscription dated V.S. 1380, *Pauṣa badī 7, Bhauma*²¹ (20 Dec. C.E. 1323) is found near the Dargāha of Arjuna *Bābā*. It is a bilingual inscription in Persian and Sanskrit. The inscription records that during the reign of Gyāsuddīn Tughluk, the inhabitant of Khambhar, Ismail Usman Shiraj donated 20 *Kubhā* land for the restoration of the stepwell.

Hātasni (Tal. Palitana, Dist. Bhavnagar) Sanskrit inscription preserved in Barton Museum, Bhavnagar records that Thepaka of the Mehar *vaṁśa* wished to dig a stepwell named Thepāvāpī after him, just as his uncle in Junagadh had dug a stepwell named Saṅgavāpī after him. Thepaka instructed Kuntrāja born in the family of Vallāditya and descended from Sūryavikala, to act accordingly. As instructed by the Mehar chief he caused a stepwell to be dug in V.S. 1386, *Aṣāḍha, sudī 7, Soma*²² (3 July, C.E. 1329).

Sūdā *vāpī* (Mahuva, Dist. Bhavnagar) Sanskrit inscription, dated V.S. 1437²³ (C.E. 1380-81) records that Sahajaladevī, the wife of Sūdā, who was the son of Nandana, the

minister of King Satyarāja, a Cūḍāsamā king of Junagadh, caused a stepwell to be built for the use of the public. Pandit Viśveśvara composed the *praśasti*.

The 14th century is marked with the building of numerous stepwells. The inscription in the Soḍhaḷī stepwell in Mangrol carved on a cross-beam in the stepped corridor, informs us that Vālī Soḍhala of the Moḍha caste had built this stepwell in V.S. 1375, *Pausa, sudī 15, Ravi*²⁴ (7 Jan. C.E. 1319).

Baḍūlā (Sutrapada, Dist. Junagadh) stepwell inscription, dated V.S. 1440, *Māgha sudī 14*²⁵ (6 Feb. C.E. 1384) now preserved in Watson Museum, Rajkot records that the two daughters named Hāṅsū and Jāṅsū of Dhandham and Kilhaṇadevī belonging to the *Nāgara* minister Mādhava caused to be built a stepwell in the village Burgalā at the cost of 500 *tāṅkās*. These two daughters were experts in *gīta, vādyā* and *nṛtya*.

An inscription neatly engraved and set up in the eastern Trivenī gate of Somanath Patan²⁶ informs that Yamunā, daughter of *Yādava* King Bhīma and Queen Māṅikyadevī caused to have built, *Vāpikā, Sarovara* and *tridevatāyatana, prapā* etc. at Prabhas Patan in V.S. 1442. *Āṣadha, badī 9. Śani* (1 July, C.E. 1385). The *praśasti* is of a high poetic value and is of much historical importance.

Hānī *vāva* inscription at Dhandhusar (Tal. Vanthali, Dist. Junagadh), dated V.S. 1445, *Phālguna, sudī Soma*²⁷ (1 Feb. C.E. 1389) mentions that the stepwell was built by a Vanthali princess called Hānī, the wife of minister Vaidanātha of Rājā Mokalasiṃha of the Cūḍāsamā dynasty during the time when Gujarat was ruled by Ghiyasuddin under Tughluk authority. *Praśasti* is composed by Travāḍi Śrīrāma.

Siddhanātha Mahādeva stepwell in Dholka was built, as the inscription says, in the year V.S. 1466, *Śaka 1332, Jyeṣṭha, sudī 10. Budha*²⁸ (10 May. C.E. 1410) by Sahadeva who belonged to the Tāṅka *vaṃśa* of Āśāpāla of Malhāṇa *gotra*, for the merit of his son Āśācandra. After the death of Sahadeva, his two wives became *sañi*.

Tarapura (Tal. Cambay) stepwell inscription dated V.S. 1518. *Aśvina, sudī 6*²⁹ (29 Sept., C.E. 1462) records that during the reign of Mahmud Begḍā Badrāja Doshi of *śrimālī* caste and an inhabitant of Gandhāra who resided at Tarapura, caused to have built this stepwell. Another stepwell at Sampa (near Dehgam, Dist. Ahmedabad) was built during the reign of Mahmud Begḍā in V.S. 1518, *Vaisākha, sudī 11, Śukra* (9 April, C.E. 1462) by *śreṣṭhī* Kālū and his nephew Satya for the well-being of fourfold animals³⁰. The inscription therein is a beautiful *praśasti* which contains a graphic description of the village Sampatpura-Sāmpāpura (modern Sampa) and also of *Mantrī* Satya and *Mantri* Kālū, the builders of the stepwell.

Modaj (Taj. Mahendavad, Dist. Kheda) stepwell inscription is a *praśasti* composed in Sanskrit verses and high poetic style. It records that Devarāja and his son Yogirāja repaired the stepwell in V.S. 1520, *Māgha, badī 13, Ravi*³¹ (5 Feb. C.E. 1464).

Four Sanskrit inscriptions have been found from Viṇā *vāpī* between Rāmpura and Rātbā villages of Vadhavan state.³² The date of the inscriptions is V.S. 1538. Śaka 1403, *Māgha, sudī 13, Śukra* (1 Feb., C.E. 1482). One of the inscriptions gives details about the ruling authorities of the area, namely Sultan Mahmud Begdā of Ahmedabad and the ruling Paramāras Lakhadhīraji and Hādā being *sūbās* of the area. *Śreṣṭhī* Viṇā of *śrīmāla* caste and inhabitant of Zanzangar (modern Zinzuvada) and his two wives Rānībāi and Valhāde caused to be built the stepwell for the welfare of the people.

Two beautiful Sanskrit *praśastis* dated V.S. 1539, *Bhādrapada, sudī 8, Guru* (22 Aug., C.E. 1482) and V.S. 1539, *Bhādrapada, sudī 5, Soma*³³ (19 Aug., C.E. 1482) have been found in the Vadava (near Cambay, Central Gju.) stepwell. These *praśastis* record that Dhanada of Tambiḷī caste and Mehara Kula caused to have built the *vāpī* and gave donations to *brāhmaṇas* and poor people. Vaḍuvaka, the ancient name of Vadva is mentioned in the inscriptions. Nāgara *brāhmaṇa* poet Hala composed the *praśasti*. The *sūtradhāra* for the construction work were Vanā and Khetā. The reference to a member of the Tambiḷī caste who was the builder of a stepwell is extremely interesting, as Tambiḷī is the caste of *Pānavālā*, i.e. the seller of *pāna*, the common betal leaf and spice preparation.

Mandvi (Tal. Halol, Dist. Panchmahal) stepwell inscription dated V.S. 1554, Śaka 1419, *Pauṣa, sudī 5, Guru*³⁴ (28 Dec., C.E. 1497) records that during the reign of Mahmud Begdā, Maliksandal Sulatānī gave two *hala* (=10 acres) farm land of Mosque and Hajīrā Vakafa as a donation for the expenses of the stepwell. There is a reference to Pāvakadurga (modern Pavagadh) and Champaner- Mahamudābāda (i.e. modern Champaner).

Bhoja (Tal. Padra, Dist. Vadodara-central Gujarat) stepwell inscription, dated V.S. 1554, Śaka 1420, *Āśvina, sudī 13, Bhṛgu*³⁵ (29 Sept., C.E. 1498) records the *praśasti* of *śreṣṭhī* Kājarāja of *Lāṭa* caste, an inhabitant of Vṛddhabhoyaja (modern Bhoj) who caused to be built the stepwell as Bhoj. The reference to the *pūrtanirmāṇa* activities of the *Diśāvāla śreṣṭhins* is very interesting.

The famous stepwell in a small village of Adalaj about 18 k.m. to the north of Ahmedabad was built by Rūḍādevī, Queen of King Vīrasimha in the lineage of Vāghelā Mokalasimha in V.S. 1555 at the cost of 5 lakhs *ṭānkās*. (Pl. 16.8). The inscription in the stepwell is dated V.S. 1555, Śaka 1420, *Māgha, sudī 5, Budha*³⁶ (16 Jan. C.E. 1499).

Bāi Harīra stepwell is situated in a suburb of Ahmedabad, Asarva, to the north east



Pl. 16.8: Sanskrit Inscription in the Step-well, Adalaj (V.S. 1555, 1499 CE)



Pl. 16.10: Gangad Step-well Sanskrit Inscription (V.S. 1763, 1706 CE)



Pl. 16.9: Sanskrit Inscription – Bāi Harīra Step-well (V.S. 1556, 1499 CE)

of the old city (Pl. 16.6). The Sanskrit Devanāgarī, inscription therein is dated V.S. 1556, Śaka 1421, *Paṣa, sudī 13, Soma*³⁷ (16 Dec., C.E. 1499) and the Persian inscription is dated *Hijri sana 906, jumad, 2nd roja* (25 Nov. C.E. 1500). The inscription records that the stepwell was built by powerful, religious, chief councillor of King Mahmud and the general superintendent at the door of king's *harem*, Bāi Harīra by name at the cost of 3,29,000 Lakh *ṭānkās* in all (Pl. 16.9). The stepwell was built in order to please God, for the use of eighty four lakhs of various living beings, men, beasts, birds, etc. who may have come from the four quarters and are tormented with thirst.

Amadāvādi Bhāgola stepwell at Nadiad has an inscription fixed on the left side in the wall, dated V.S. 1572, Śaka 143(8), *Vaiśākha, sudī 13, Soma*³⁸ (14 April, C.E. 1516). The inscription mentions that Gūjara Vaṇika Veṇidāsa donated thousands of cows and wealth and built this stepwell. The inscription also gives the genealogy of Veṇidāsa of Vṛddhaśakhā and Gurjara *varṇśa*.

Mansa (Tal. Vijapur, Dist. Mehsana- north Gujarat) stepwell inscription dated V.S. 1582, Śaka 1448, *Mārgaśīrsa, sudī 2, Budha*³⁹ (15 Nov. C.E. 1525) records that Dhārājī of Ugāñija (modern Oganaj near Ahmedabad) and belonging to Vāghelā Rājakula of Manasa caused to be built the stepwell with the expense of plenty of wealth.

An inscription is found in a stepwell near the Sāraṇeśvara Mahādeva temple adjoining the tank in Halvad in Dhṛangadhra Talukā. The inscription is important for the genealogy of the family of the Zālā rulers of the Dharangadhra state. The queen Kalyānade mother of Mahārāṇa Mānasimha caused the stepwell to be dug up during the time of her son Mānasimha in V.S. 1583, Śaka 1448, *Phālguṇa, badī 13, guru*⁴⁰ (28 Feb. C.E. 1527).

The 17th and the 18th centuries still witnessed the construction of numerous well-known stepwell monuments. Five inscribed copies of the Mehsana stepwell inscription are said to be found at various places in the stepwell, three of which are said to be under the water, one is fixed on the right wall and the second one is fixed in the niche on the right side in the 1st pavilion. The one on the top is bilingual, i.e. in Persian and in Sanskrit, and is dated V.S. 1731, Śaka 1596, *Mārgaśīrṣa, sudī 10 (15), Guru*⁴¹ (3 Dec. C.E. 1674). During the reign of Mughal Emperor Aurangjeb, Shah Gokaladāsa of Śrīmāli caste and Laghu Śākhā and his mother Mānabāi caused to be built this stepwell for the welfare of the people. The construction work was finished under the supervision of Nāgara Dave Viṭhalaḷājī and Travādī Gaṇeshajī. Somapurā Kṛṣṇadāsa Śaṅkara, a Visalanagarā Vāchā Lādaṇā was the *sūtradhāra*.

Śikotarī *mātā* stepwell inscription near Paramāñīā pond in Petlad (Dist. Kheda), is dated Kaliyuga ear 4799, Vikrama era 1755, *Āśvina, badī 13, Śukra*⁴² (21 Oct. C.E. 1698).

The inscription mentions that Nāgara Rāmaji caused to be built his *vāpī* for the use of the people of the town Peṭapadraka (modern Petlad). The construction work was done under the supervision of *Udīcyā* Toḷakīyā Pandyā Nāraṇajī and Nānā Nāthā of Stambhatīrtha. The author of the text is Pāṭhaka Deveśvara, son of Surajī Gopāla of Śrigōḍa *brāhmaṇa* caste. The scribe is salāṭa Rāyachandra Rahiyā of Ahmedabad. The expenses of the building of the stepwell were debited in the accounts of the shop of Modi Viṭṭhaladāsa Kṛṣṇadāsa Dīsāvāla.

The two inscriptions fixed in a niche on the right side of the entrance door in the stepwell at Gaṅgad (Tal. Dholaka) are dated V.S. 1763, Śaka 1628, *sudī* (*Āṣāḍha*), *sudī* 1, *Ravi*⁴³ (31 June C.E. 1706). (Pl. 16.10). The inscription refers to the Queen mother Gorānjī during the reign of Vāghelā Rāṇā Sesamallajī caused to be built the stepwell at Gaṅgapura (modern Gangad).

The stepwell at Roho⁴⁴ (N. Gujarat) is wellknown to epigraphists because of four inscriptions found in it, of which, however, only one refers to the stepwell itself. The inscription mentions that Cāmpā, the wife of Rājā Śrī Nānājī and her daughter had built two temples and a stepwell in V.S. 16[72] (C.E. 1615).

The Amṛtavarṣiṇī stepwell in Ahmedabad, an interesting monument with an L shaped descending corridor has a Sanskrit inscription on marble tablet in the first pavilion, dated V.S. 1779, Śaka 1644, *Māgha*, *badī* 5, *Guru*⁴⁵ (14 Feb. C.E. 1723) which records that Raghunāthadāsa, son of Bhagavāna and grandson of Kṣātra Gokula caused to be built Piyūṣavarṣiṇī *vāpī* in Gurjaranagara for the welfare of the people. The text was composed by *audīcyā brāhmaṇa* Mukundajī, son o Mahāśiva Dave. The construction work was supervised by *śilpī* Kāśīdāsa and built by *śilpī* Rāmadāsa. The Persian inscription dated Hijrī *san* 1135 (C.E. 1722) is fixed on the right side wall in the first pavilion.

Cultural Study of the Sanskrit Inscriptions of the Reservoirs

The reservoirs were not only domestic and functional architectural specimens, they also had a religious significance too. In the case of stepwells, many a time they are closely connected with a temple, situated in the temple compound or having a small shrine inside. In some inscriptions, this religious aspect of a stepwell is alluded to, when it is said that a stepwell was built and consecrated along with two temples as stated in the stepwell inscription at Roho (N. Gujarat) dated V.S. 16[74], *Pauṣa badī* 5, *Guru*.*

A clear indication of the Association of stepwells with mother goddess worship can be discerned in the fact that many stepwells are shrines sacred to one or other aspect of the *Devī* or *Mātā*. This is revealed in the names of the stepwells such as Mātā Bhavāni stepwell

and the Āśāpurī stepwell in Ahmedabad, the Sindhavāi Mātā stepwell in Patan, the Ankol Mātā stepwell in Davad, Mātṛ stepwell in Kaṅkāvāṭī and Śīkotarī Mātā stepwell in Petlad etc.

In *Agnipurāṇa* (64.42-44) the consecration of a water reservoir or pool brings more religious merit for a person than performing the *Aśvamedha*, the royal horse sacrifice.

Many inscriptional and literary evidences show that the charitable and social welfare works (*Iṣṭāpūrta*) like the construction of the reservoirs for the use of public came to be regarded as more meritorious than the sacrifices and offerings to the gods and gifts to the *brāhmaṇas*. The stepwells combine a utilitarian and social function with satisfying the spiritual needs of the people.

It is interesting to note that a site near the water either a river, a pond, a well or a stepwell was the suitable place for the self-immolation of a woman after her husband's death as related in the folk songs and legends, travellers' accounts and inscriptions. A stone inscription, found in an ancient well (now preserved in the Sanskār Kendra Museum) is situated in a field adjoining the Municipal Water Works on the Sabarmati river. The inscription, dated V.S. 1672, *Vaiśākha, sudī 3* (9 April, C.E. 1616), mentions the self immolation of three wives named Rūpaśrī, Kama and Kesara of Sha. Rūpacandra, son of Sha. Sonapāla of Osvāla caste.

Many inscriptions record that the royal women or women of high class families were the patrons for building the stepwells; as for examples Rāṇī Ruḍādevī, wife of the Vāghelā chief Vīrasimha or Daṇḍāhi-pathaka during the reign of Sultan Mahmud Begada (C.E. 1458-1511) who built the stepwell in Adalaj in V.S. 1555 (C.E. 1499). Bāi Harīra, the general superintendent at the door of the *harem* of the king, who caused to have built a stepwell in order to please god and for the benefit and use of the 84 lakhs of various living beings in V.S. 1556 (C.E. 1499) in Ahmedabad. Hānī stepwell at Dhandhusar, dated V.S. 1445 (C.E. 1389) was built by a Vanthalī princess called Hānī, the wife of minister Vaidyanātha of Rājā Mokalasiṃha of Cūḍāsamā dynasty.

The stepwell inscriptions refer to some of the ancient place names; such as Petilapadra (modern Petlad), Aṇahillapattana (modern Patan), Skambhatīrtha (Khambhata), Sūryapura (Surata), Pāvakadurga (Pavagadh), Bhūbhṛtpalli (Ghumli), Maṅgalapura (Mangrol), Devapattan (Somanath Patan), Vṛddhabhoyaja (Bhoj near Vadodara), Unnatadurga (Una,

* The *tithi* and the week-day mentioned in the inscription do not tally with each other if last two digits of the Vikrama year 1674 is read as [1674]. If the year is read as V.S. 1672, the weekday tallies with the *tithi* according to the *Amānta* system of months. The equivalent English date would be 30 Nov., C.E. 1615.

Junagadh Dist.) in Gujarat. These place names with their modern identification are important for the historical study of the place names.

The Language and the Script of the Reservoir Inscriptions

The language of the reservoir inscriptions under reference is Sanskrit. Very few inscriptions of the Mughal period are written in old Gujarati language, for example Khārī vāva inscription at Ghogha, dated V.S. 1634 (C.E. 1577), Kharva (near Dhrol, Dist. Jamnagar) stepwell inscription of V.S. 1715 (C.E. 1659), Gopanath stepwell inscription of V.S. 1750 (C.E. 1694) and Gangad stepwell inscription, dated 1763 (C.E. 1706). Occasionally we find Persian inscriptions in the stepwells; for example Bāī Harīra stepwell inscription at Ahmedabad, dated A.H. 906 (C.E. 1500), Amṛtavarsīnī stepwell of A.H. 1135 at Ahmedabad. Some inscriptions are bilingual; for example Petlad stepwell inscription of V.S. 1380 (in Sanskrit and Persian), Mandvi Stepwell inscription of V.S. 1554 (C.E. 1497) written in Sanskrit and Medieval Gujarati languages. In Mehsana stepwell inscription, first six lines are in Persian and then Sanskrit inscription starts. Śīkotarī Mātā stepwell inscription at Petlad is a trilingual inscription written in Persian, Sanskrit and Gujarati.

Some of the stepwell inscriptions are beautiful *praśastis* which contain lucid descriptions of the town and *nagaras*; for example in the Śīkotarī Mātā vāva at Petlad the description of Petlad Nagara :

*Śrīmadgurjaramaṇḍale kṣītalālaṅkārabhūtaṁ puram
Pūrṇam sarvaguṇairdvijendrabhavanaiḥ śrīpeṭapatrābhidham /
Yatratyairdvijanāgarairapi kṛtairdānaiḥ suvismāyito
Deveśo dhanadohamityatimadam muktvaiva saṁvartate //4//*

"There is a town named Peṭapadra in Gurjara Maṇḍala, like an ornament to the earth, full of royal places of the virtuous Dvijendras, where Kuber, God of wealth is astonished by the donations given by Nāgara *Brāhmaṇas* and lives after quitting the arrogance of being *dhanada* (One who gives wealth). In Badula inscription, the poet describes two sisters Hānsū and Jānsū by using beautiful *Utprekṣā alaṅkāra*.

*Gītavādyaratinarattanadakṣe dve sute janayati sma surūpe //3//
Hānsū-Jānsūsamjñite dve bhaginyau vāpīmetām kārayāmāsatuste /
Jāne Raṁbhā Menakā nākalokāt śrī Someśam sevituṁ bhūmimāste //4//*

'From Kilhaṇadevī Dhāndhama had two daughters named Hānsū and Jānsū both well versed in singing, dancing and playing the musical instruments and who seemed as if they were Raṁbhā and Menakā descended from heaven to the earth to worship Lord Somanātha.'

While describing the *vāpī* of Adalaj the poet creates beautiful imagination :

*Mānasākhyam saro divyam kim vā svargāpaga kimu/
Kailāšo veti sarveṣāṃ vibhramam vidadhāti yā //11//*

Is this divine lake Mānasa sara or heavenly river Gaṅgā or is it Kailāśa? The *vāpī* thus creates illusion to all.

The Script

The script of the ancient Sanskrit inscriptions upto the 9th cent. C.E. was Brāhmī and from the 10th century onwards they were inscribed in the early stage of the Devanāgarī script.

The script of the Sanskrit-Gujarati reservoir inscriptions is Devanāgarī of the medieval period and the script of the Persian inscriptions is Persian. Devanāgarī characters sometimes are given the forms of Gujarati *Boḍiā* characters, though all along we find a decided preference for the Devanāgarī script, even in the modern inscriptions composed in Gujarati language. In the *Nāgarī* script *Paḍī mātrā* or *Prṣṭha mātrā*, i.e. instead of oblique verticle stroke, on the left side of the letter is used.

The Chronological Systems

The dates of the reservoir inscriptions are expressed in the Vikrama era. In some inscriptions the Vikrama era is accompanied by the corresponding Śaka era. In one date Kaliyuga era is expressed along with the Vikrama era. The dates usually contain the year, the month, the fortnight, the *tithi* and the week-day. Sometimes we get references to seasons like *Vasanta* (Kherali, Nadiad inscriptions), *Hemanta* (Mandvi *vāpī*), *Śīśira* (Adalaj, Halvad, Amṛtavarṣiṇī *Vāpīs*), *Ayanas* like *Uttarāyana* (Kherali, Champaner, Mandvi, Halvad *vāpīs*), *Nakṣatras* like *Mṛgaśīrṣa* (Kherali *vāpī*), *Śatabhiṣak* (Mandvi *vāpī*), *Uttarāṣaḍhā* (*Bhuvad vāpī*), *Uttarā Bhādrapadā* (Adalaj *vāpī*), *Mūla* (Manasa *vāpī*), *Dhaniṣṭhā* (Halvad *vāpī*), *Svāti* (Ahmedabad *vāpī*), *Hasta* and *Abhijit* (Petlad *vāpī*), *Yogas* like *Āyusmān* (Kherali), *Sānhya* (Mandvi *vāpī*), *Siddhi* (Adalaj *vāpī*), *Harsaṇa* (Nadiyad), *Sūla* (Manasa) and *Dhruva* (*Amṛtavarṣiṇī vāpī*), *Grīṣma* (Bhavad tank); *Karaṇas* like *Bava* (Kherali, Halvad *vāpīs*), *Bālava* (Maṇḍvī, Nadiad, Manasa *vāpīs*), *Taitila* (*Amṛtavarṣiṇī vāpī*); *Sanvatsaras* like *Bhāva* (Hatasni *vāpī*), *Vikṛta* (Kherali *vāpī*), *Sādhāraṇa* (Vadva *vāpī*), *Pramāthin* (Halvad *vāpī*) etc.

The years of the Vikrama and the Śaka eras are expressed by numbers as well as by words denoting figures; for example V.S.: 1763 is expressed in words like *vahnayanāgātribhū* - *vahni=3, aṅga=6, nāga=7, atriḥū=1*. According to *aṅkānām vāmato gatiḥ* the year is read as V.S. 1763.

The ancient Vedic names of the months are mentioned in some inscriptions, such as *Śuci=Āṣāḍha* (Gangad *vāpī*) *Nabhasya=Bhādrapada* (Vadava *vāpī*).

For the verification of dates expressed in the reservoir inscriptions, 36 dates have been referred to the tables given in 'Indian Ephemeris' by Dr. Swamikannu Pillai. Out of 36 dates, only 22 dates are the key-dates for deciding the system of years and months.

As for the system of years, out of 18 dates, majority of dates (11-61%) tallies with the *Kārttikādi* system of years, 6 dates (33.3%) tally with the *Caitrādi* and 1 date (5.5%) tallies according to the *Āṣāḍhādi* system of years.

As for the system of months, only 6 dates are useful, all of which tally according to the *Amānta* system of months.

From the examination of the key dates, it follows that there is a preponderance of *Kārttikādi* system of years and *Amānta* system of months in Gujarat and Saurashtra regions. In Kutch and Halar (Jamnagar) regions *Āṣāḍhādi* system of years was prevalent. The following tables represent key-dates with their system of years and months :

Table 1 : The dates showing the system of years

No. of Dates	<i>Caitrādi</i>	<i>Kārttikādi</i>	<i>Āṣāḍhādi</i>	Total
18	6	11	1	11
Percentages	33.3%	61%	5.5%	100%

Table 2 : The dates showing the system of months

No. of Dates	<i>Amānta</i>	<i>Pūrṇimānta</i>	Total
6	6	-	6
Percentages	100%	-	100%

Table 1 : The dates showing the system of years

No. of Dates	<i>Caitrādi Amānta</i>	<i>Caitrādi Pūrṇimānta</i>	<i>Kārttikādi Amānta</i>	<i>Kar. pūrṇimānta</i>	<i>Āṣāḍhādi</i>	<i>Caitrādi</i>	<i>Kārttikādi</i>	<i>Amānta</i>	<i>Pūrṇimānta</i>	Total
22	1	1	2	-	1	4	9	4	-	22
Percentages	4.5%	4.5%	9.1%	-	4.5%	18.2%	41%	18.2%	-	100%

Thus the reservoirs and their inscriptions are important vernacular markers and highlight their significance in cultural perspective terms. They are the most valuable source for writing the cultural history of the region. They provide ample information about religious activities, society, customs, script, language and prevailing chronological systems during various periods of the history of Gujarat.

Footnotes

1. *Epigraphia Indica (EI)*, Vol. VIII, pp. 42 ff.; G.V. Acharya, *Historical Inscriptions of Gujarat (HIG.)* Vol. I, no. 6
2. J.F. Fleet, *Corpus Inscriptionum Indicarum (CH)*, Vol. III, pp. 58 ff.; *HIG.*, no. 15
3. Ramlal Chunilal Modi, 'Siddharājanā Kīrtisambhanā Lekhano Ek Amśa', *Prasthāna*, Vol. XII, no. 5 (*Bhādrapada*, V.S. 1947), pp. 293 ff.
4. D.B. Diskelkar, *Inscriptions of Kāithawad (IK)*, no. 60
5. *IK.*, no. 84
6. *Ibid.*, no. 190
7. *Ibid.*, no. 91
8. *Ibid.*, no. 39
- 8a. Morna Livingston, *Steps to Water : The Ancient stepwells of India*, Princeton, Architectural press, New York, pp. 63 ff; Kirit Mankodi, *The Queen's stepwell at Patan*, Bombay, 1991; J. Sadani, *Underground Shrine : Queen's stepwell at Patan*, B.J. Institute publication, 1998.
9. *Epigraphia Indica (EI)*, Vol. XVI, pp. 233 ff.; G.V. Acharya, *Historical Inscriptions of Gujarat (HIG., Bombay, 1933)*, Vol. I, no. 7
10. *EI.*, Vol. III, p. 318., *HIG.*, Vol. I, no. 21
11. *EI.*, Vol. XI, no. 9, pp. 109 ff.; *HIG.*, Vol. I, no. 23
12. *EI.*, Vol. XVI, p. 108; *HIG.*, Vol. I, no. 24
13. *EI.*, Vol. XI, p. 112., *HIG.*, Vol. I, no. 26
14. *EI.*, Vol. VII, p. 68, *HIG.*, Vol. I, no. 43
15. *Sāmīpya*, Vol. V, nos. 1-2 (April, Sept. '88, Ahmedabad), pp. 43 ff.
16. *EI.*, Vol. VII, p. 26; *HIG.*, Vol. II, Bombay, 1935, no. 135
17. Burgess and Cousens, *Architectural Antiquities of Northern Gujarat*, London, 1903, p. 112
18. Jutta Jain-Neubauer, *The Stepwells of Gujarat (SWG.)*, New Delhi, 1981, p. 21
19. *Ibid.*, p. 22
20. D.B. Diskelkar, *Inscriptions of Kathiawad, (IK. New Indian Antiquary, Vols. I-III, Poona, 1938-41)*, no. 16
21. *Epigraphia Indo-Moslemica (EIM.)*, 1915-16, p. 18; *HIG.*, Vol. IV, no. 2
22. *IK.* no. 27; *HIG.*, Vol. IV, no. 55

23. *IK.* no. 40; *HIG.*, Vol. IV, no. 59
24. *IK.* no. 25; *HIG.*, Vol. IV, no. 54
25. *IK.* no. 42
26. *IK.* no. 44; *HIG.*, Vol. IV, no. 44
27. *IK.* no. 48; *HIG.*, Vol. IV, no. 61
28. *HIG.*, Vol. IV, no. 7
29. *Ibid.*, no. 10, *Vallabh Vidyanagar Research Bulletin (VVRB.)* Vol. I, issue. 2, no. 20
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