

VII.10

Existence And Location Of Dvaraka City of Mahābhārata Era And Its Subsequent Submergence—A Reality or A Myth?

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Historicity of Lord Krishna

According to tradition and ancient texts, Dvaraka or Dvaravati township was built by Lord Krishna whose supernatural personality — as an epic hero and divine lover has endeared him to everyone in India. It would be rather difficult to show Krishna as a human being, bereft of supernatural and traditionally believed attributions, which have grown over a period of time. The deification of Lord Krishna is a part of traditional religious lore. Three principal sources which contain accounts of Lord Krishna can be examined. They are the *Mahābhārata*, the *Harivamśa* and the *Purānas*. Amongst all these sources, the *Mahābhārata* is the earliest and contains a great deal of historical information. *Harivamśa* is an appendix to the *Mahābhārata* whereas, the *Purānas* tend to be the accounts of traditions, based on intuition, inspiration and divine revelations attained by wise men. The *Mahābhārata*, therefore, can be used as the main source of historical information about Lord Krishna, which depicts him more as a human than any other texts.

Krishna was born to Vasudeva and Devaki, who were kept as prisoners, in the jail at Mathura, by Kamsa. The child was carried away to Gokula for safety and was brought up by Yasoda as her own child. Lord Krishna of the *Mahābhārata* period was a warrior king, the leader of the contemporary kings, a personification of good qualities. Lord Krishna makes his first appearance in the *Mahābhārata* as a king of Dvaraka, attending the Draupadi Swayamvara. There he recognises the five Pandava brothers in the guise of Brahmins, and one of them, Arjuna performing the difficult archery feat and winning the hands of Draupadi. In his various roles, Krishna had been behaving like a king endowed with superb qualities. His attempt to avoid Kurukshetra war as described in the *Mahābhārata* is an exhibition of highest level of diplomacy of a king, who is interested in the welfare of the country.

Lord Krishna of the *Mahābhārata*, besides being a benevolent king of the highest calibre, was also the greatest philosopher. In his sermons to Arjuna — unwilling to fight the war under various pretexts, Krishna brings out the essence of the highest philosophy of life which is contained in the *Mahābhārata*, as a separate entity called *Śrimad Bhagavadgītā*. Time has immortalized Lord Krishna because of his good deeds and given him the place of a god. Krishna's end at the hands of a hunter called Jara shows that he was a human being.

Where was Krishna's Dvaraka or Dvaravati

Tired of the harassment caused due to frequent onslaughts of Jarasandha, who was infuriated by the death of his son-in-law, Kamsa, at the hands of Krishna, Yadavas, under the leadership of Krishna, migrated to Kusasthali from Mathura, because his ancestor's motherland was Saurashtra. Anarta, the ancient name of Saurashtra, was one of the provinces of the Yadava kingdom where, the Yadava ancestor Kakudmin Raivata had founded the capital, Kusasthali. Raivata had earlier taken refuge in Mathura when he lost his kingdom of Saurashtra in a war with Punyajanas, who were foreigners. As Saurashtra was not easily accessible to Jarasandha's army, Lord Krishna accepted the invitation of Raivata and migrated to Kusasthali for permanent settlement. Thus Krishna preferred a remote but already known ancestral home-town for resettling the Yadavas.

Krishna is said to have founded a city near Kusasthali which was in ruins and named it as Dvaravati or Dvaraka. The low-lying land was reclaimed by building bunds and seawalls to protect the city from the sea. The *Harivamśa* says that the sea yielded 12 yojanas of land for the construction of the city, obviously suggesting that some kind of reclamation work was undertaken and indicates that perhaps the sea-level was lower than the present level. There is plenty of reference in the *Mahābhārata*, *Harivamśa* and other texts describing the impregnable character of Dvaraka city (*Mahābhārata* 13-60). It was once very prosperous and beautiful so that the texts referred to it as the golden city of Dvaraka (*Suvarṇa Dvārakā*). But its prosperity did not last long. Immediately after Krishna left his mortal form, the city was destroyed by the sea. At Prabhasa, Vāsudeva (another name of Krishna) warned Arjuna that Dvaraka would be submerged and asked him to get it vacated. The *Mausala parva* of the *Mahābhārata* (XVII 8. 40-41) says that as the city was being vacated by the residents, the sea went on encroaching upon it and finally submerged it. It might have been the result of a natural calamity such as, earthquake, cyclone or a tidal wave and sudden increase in the sea-level.

Search for the Legendary City of Dvaraka

Four locations were considered as probable sites at which, Dvaraka city was founded by Krishna. The claimants are: 1. present Dwarka town; 2. a site near Visavada, 40 km south of the present Dwarka; 3. a site near Madhavpur-Ghed, 50 km south-west of Porbandar and 4. Mul-Dwarka, near Kodinar (Una Taluka in Junagadh district). The first attempt to search for the ancient Dvaraka town was made by Hirananda Sastry, who excavated at Mul-Dwarka in the 30s of this century, but he could not find any relics of a settlement earlier than 1st cent. AD. So also the case with Madhavpur and Visavada. The date of the Mahābhārata Battle has been discussed by S.B. Roy, in his book *Date of the Mahābhārata Battle*. He takes into account the archaeological, astronomical and literary evidences and comes to the conclusion that it should be in the latter half of the 15th cent. AD. This is also A.D. Pusalkar's deduction, supported by astronomi-

cal evidence, adduced by Mahadevan (1981). The generally accepted date of the *Mahābhārata* is 1424 BC.

Most ancient texts refer to Dvaraka of Krishna as situated in or close to the sea, thereby referring to it as *Vāridurga*, a “fort in water”, as in the *Harivamśa* (Vishṇu Parva 57.5). The *Skanda Purāna*, another text, describes the location of Dvaraka as that hugging to the west coast, where the river Gomati joins the sea. The present Dwarka in Okhamandal, Jamnagar district, has been regarded as Krishna’s Dvaraka by great saints like, Adi Sankara, Ramanuja, Madhava, Mira and Ramdas. Millions of devotees pay homage to Lord Krishna, in the magnificent temple of Dwarkadhish, overlooking the Arabian Sea. The earliest epigraphical record, referring to Dvaraka is a copper plate grant of AD 574, by the Garulaka king Simhaditya who refers to his father as the “Dvarakadhipati”, cast in the mould of ‘Sri Krishna’ (*Epigraphia Indica*, vol. XI, 11–12, 18). The confirmation of the present Dwarka as Krishna’s Dvaraka by the 6th cent. AD is borne out by this record.

In the case of Mul-Dwarka, Madhavpur, or Visavada, there is no inscriptional reference to them as Dvaraka, nor are any archaeological remains of the 15th cent. BC available (Rao, 1990).

Onshore Excavation at Dwarka

Sankalia, under whose direction, the Deccan College team excavated a trench, not far away from Dwarkadhish temple, came to the conclusion that “the foundation of the first Dwarka might be placed at a period just before or around the beginning of the Christian era but not much earlier” (Ansari and Mate, 1966). The historical evidence however, indicates otherwise.

It is inconceivable that the Dvaraka township with its great tradition could have been uninhabited in the 15th cent. BC or even earlier (Rao, 1990). This prompted Rao to excavate in front of the Dwarkadhish temple. In 1979, as a part of the implementation of the conservation plan of the Archaeological Survey of India, S.R. Rao demolished a two-storeyed modern building which was obstructing the view of the 15th century Dwarkadhish temple. The clearance operation revealed remnants of a Vishnu temple assignable to the 9th cent. AD, lying buried in the sandy deposit over which the modern building stood. Further excavation revealed the existence of the remnants of two more temples, the earlier one being assignable to the 1st cent. BC/AD. Deeper excavation yielded evidence of destroyed protohistoric settlement of 15th cent. BC. A distinct pottery, known as the Lustrous Red Ware of 15th cent. BC was obtained in the 10 m deep trench, dug in front of Dwarkadhish temple. This pottery occurring in Prabhasa (Somnath), another *Mahābhārata* site, on the southern coast of Saurashtra has been assigned to the 15th–12th cent. BC. The wave-rolled pottery of Dwarka suggested that the ancient city was destroyed by the sea.

The shore-based archaeological evidence became a strong cause for taking up seaward

explorations, in order to find the remains of submerged Dvaraka of Mahābhārata period. It is of great scientific interest to find out how and when the ancient city of Dvaraka was destroyed and submerged by the sea. It was, therefore, necessary to undertake marine archaeological explorations at Dwarka and the nearby island of Bet Dwarka, as the latter is also associated with the Krishna legend.

Offshore Explorations and Findings

Systematic underwater studies were undertaken at Bet Dwarka and Dwarka (fig. 1) by the Marine Archaeology Unit of the National Institute of Oceanography, under the leadership of the veteran archaeologist S.R. Rao, beginning from 1982. Prior to this, available information on oceanographic and geo-morphological characteristics of Dwarka and Bet Dwarka were collected.

Bet Dwarka

Eroded coastline of Bet Dwarka revealed remnants of a massive rubble wall at the southern portion of the eastern shore of Bet Dwarka (figs. 2 and 3). The pottery collected from the section was dated to 3520 years before present, by Thermoluminescence (TL) dating method. Traces of early settlement were also noticeable in the central region (BDK VIII), on the eastern shore as inferred from the remnants of a massive rubble wall, exposed during the low tide. It is roughly hexagonal in plan and about 558 m in perimeter, 2 m thick and 1 to 1.5 m wide. Nine courses of masonry are found almost intact. To the south of this enclosure two rock-cut slipway-like features were probably used for launching of boats. A wall-like structure submerged in the area, far north of BDK VIII, in Balapur Bay is visible about 1 km seaward of the iron pillar, situated on the shore. The structural remains from BDK I to BDK VI suggest the existence of a protohistoric port town of about 4 km length and 0.5 to 1 km width, with three distinct sectors on the eastern coast of Bet Dwarka (fig. 4). It was probably destroyed and submerged by the action of the sea at the same time when Dvaraka township got destroyed and submerged in 1500 BC.

Dwarka

Based on the inspection of various shore features it was decided to start offshore explorations for the remnants of the submerged city, seaward of the Samudranarayana temple, because the river Gomati presently joins the sea in this region. Optical and visual underwater target search techniques were adopted by divers during the first seven expeditions in 1983–88. Marker buoys and sextants were used for position fixing. In 1989, geophysical survey of an area 6 km × 5 km was carried out using echo-sounder, side-scan sonar, sub-bottom profiler and electronic position fixing system with the help of mini ranger. As a result of intensive underwater exploration work, it has been possible to roughly ascertain the plan-view of the submerged port city

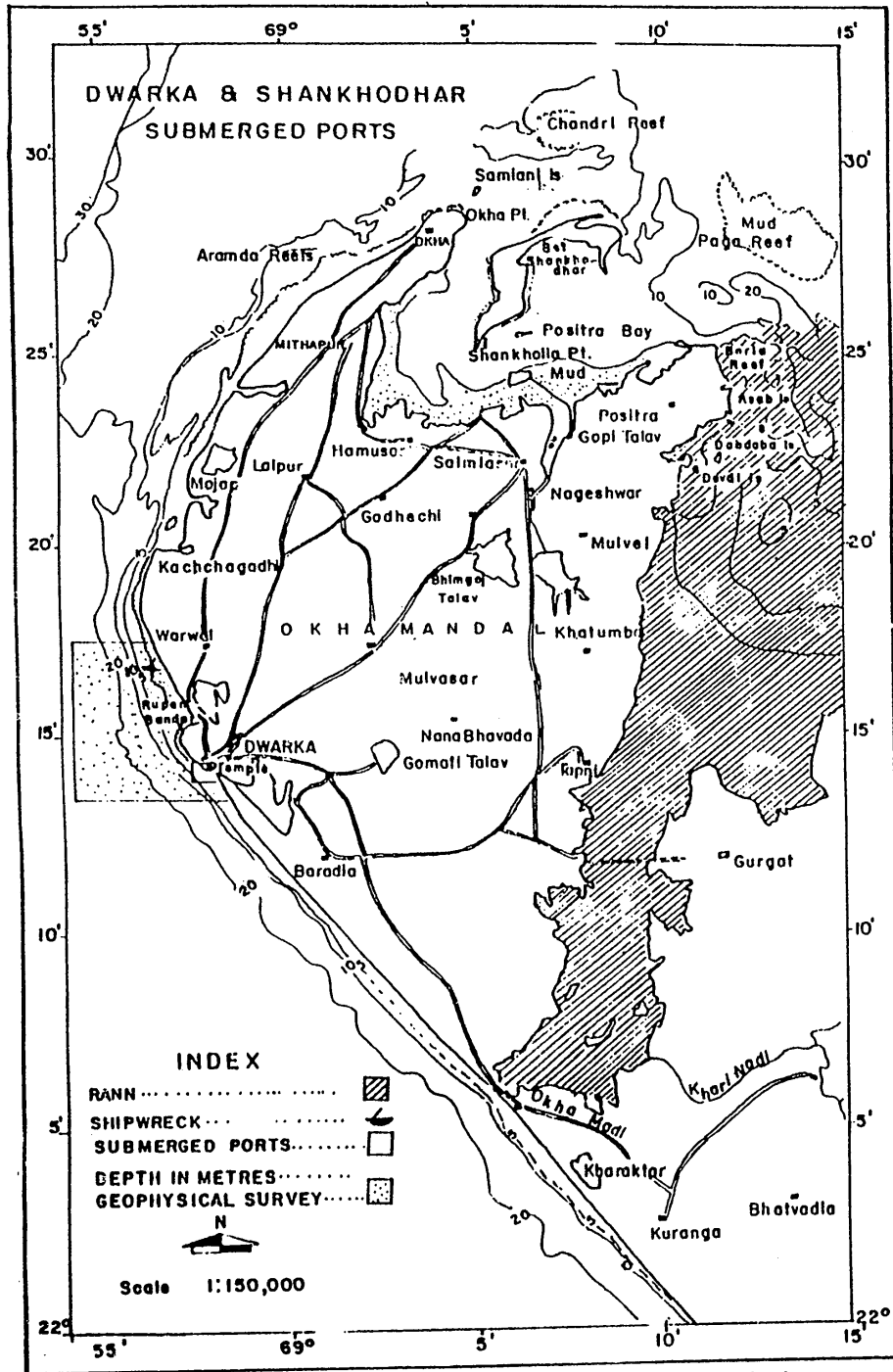


Fig. 1 Dwarka and Shankhodhar in Okhamandal, Jamnagar District.

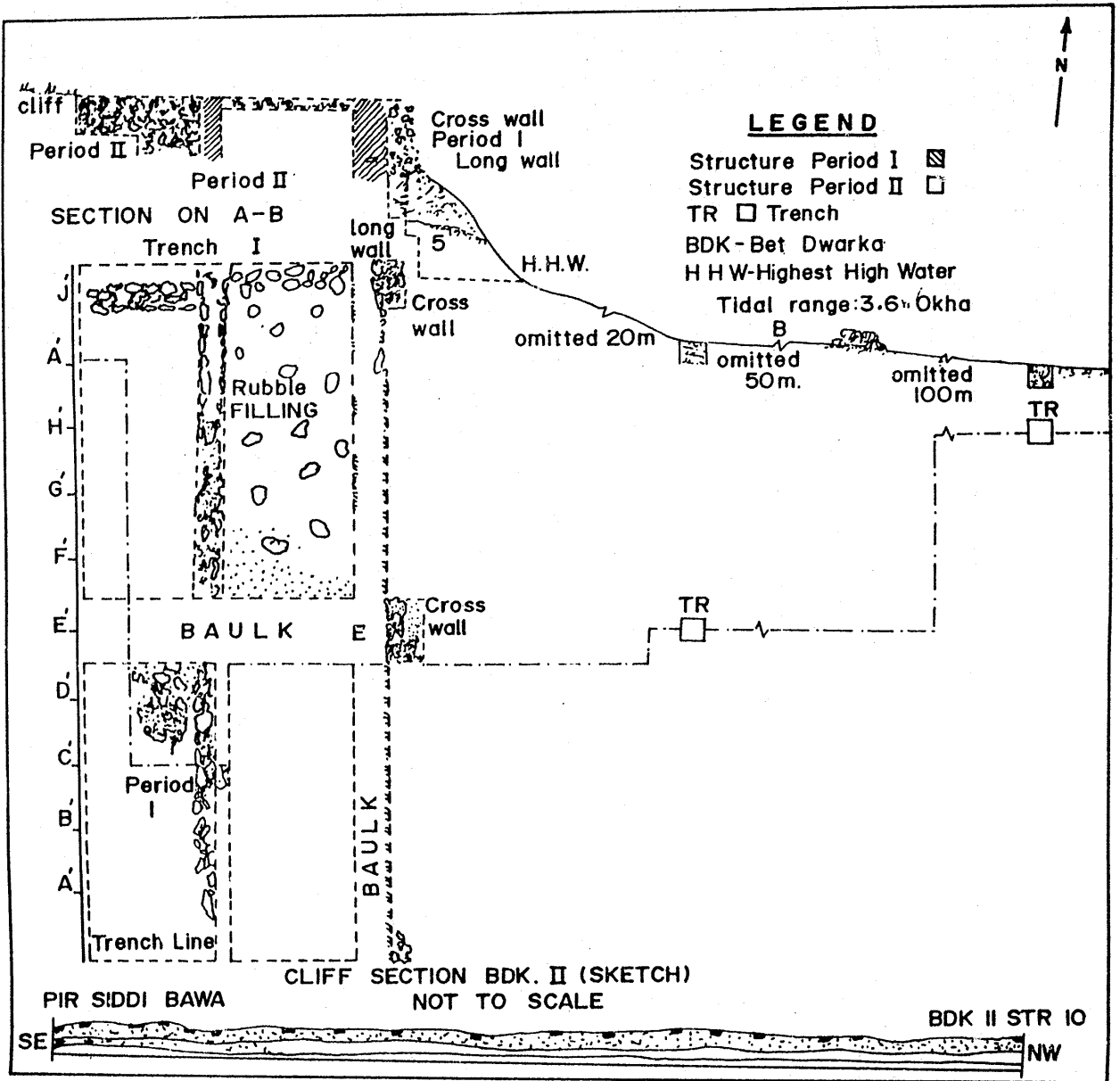


Fig. 2 Schematic showing the structures in BDK I-II.

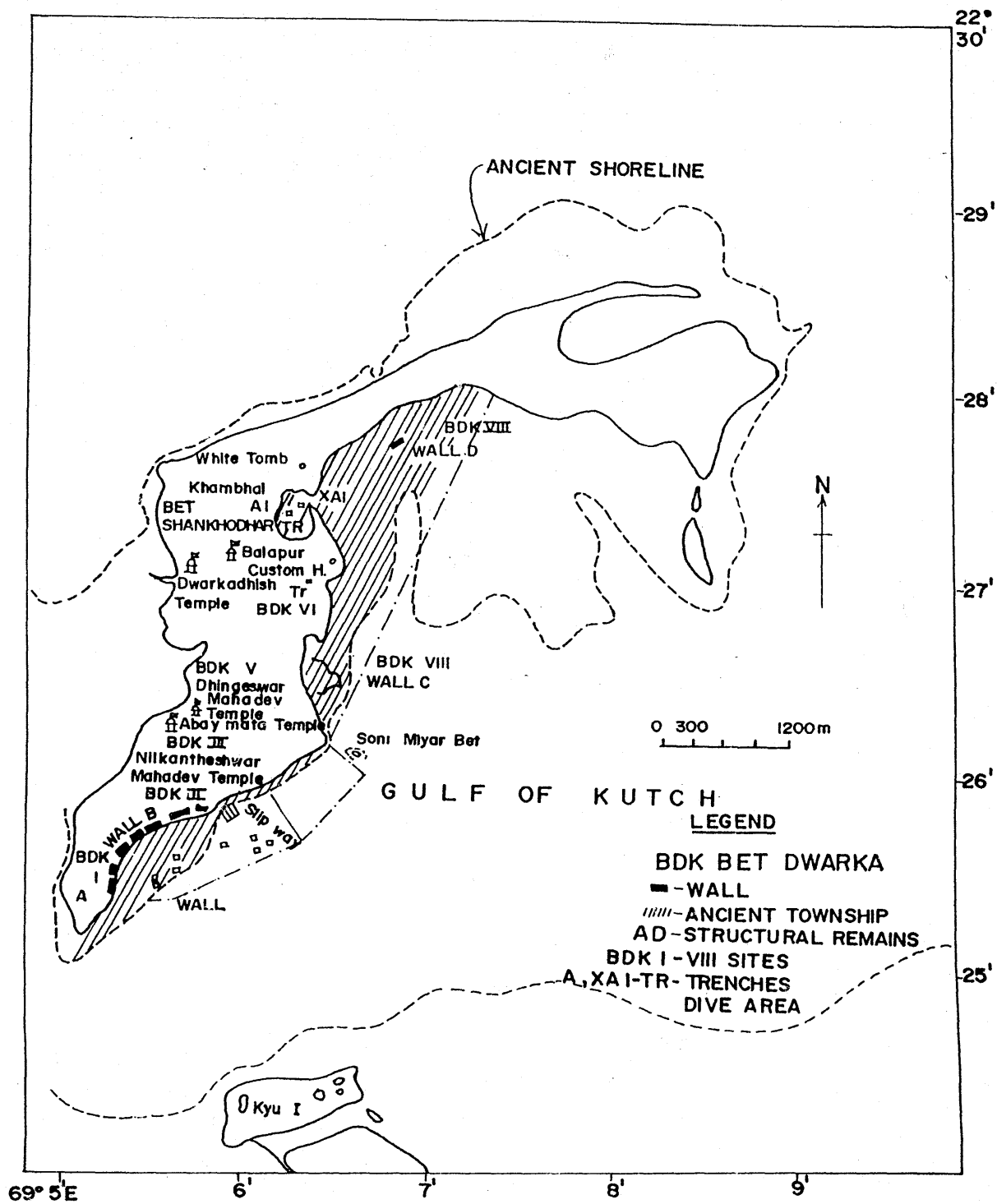


Fig. 3 Bet Dwarka Underwater Explorations.

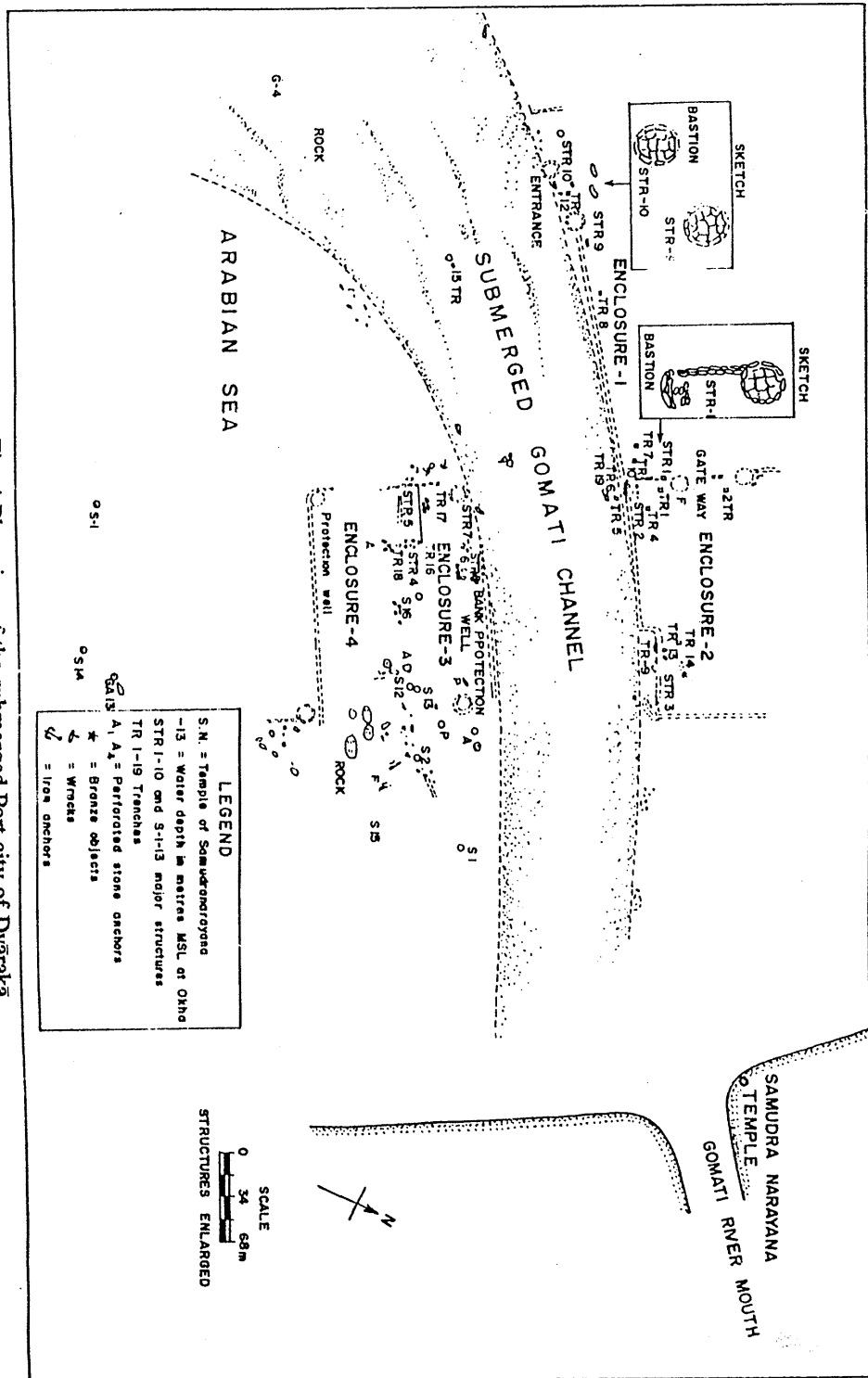


Fig. 4 Plan-view of the submerged Port-city of Dvārakā.

of Dvaraka which was built on the banks of the river Gomati which, in ancient times should have been joining the sea farther seaward as compared to the present position (fig. 5). The submerged channel of the ancient Gomati river could be traced to a distance 1.5 km seaward of the Samudranarayana (SN) temple. While the depth of the channel generally decreases from nearshore to offshorewards, the width varied from about 200 m towards SN to about 700 m at about 1.5 km seaward of this location, the average being about 500 m (Vora *et al.*, 1991). The depth below M.S.L. along the channel, varied from 4.87 m at marker buoy 35, installed near the remnants of the inner protection wall to 7.44 m at buoy 50 and to 11 m at the seaward end of the channel. The channel is likely to be extended further seaward, which needs to be surveyed.

Submerged Structures

The major discoveries 1.5 km seaward, of the present Dwarka are the inner and outer fortification walls of the ancient city, with a gateway complex. The outer gateway leads to the open sea and the inner one to the river Gomati. Four enclosures could be delineated — two on each bank of the river. Remnants of a stone jetty was located. The protective outer walls constructed by massive dressed stone blocks are *in situ* up to 1 to 2 m height whereas, the smaller size stones used for buildings within are spread out due to the action of waves and current.

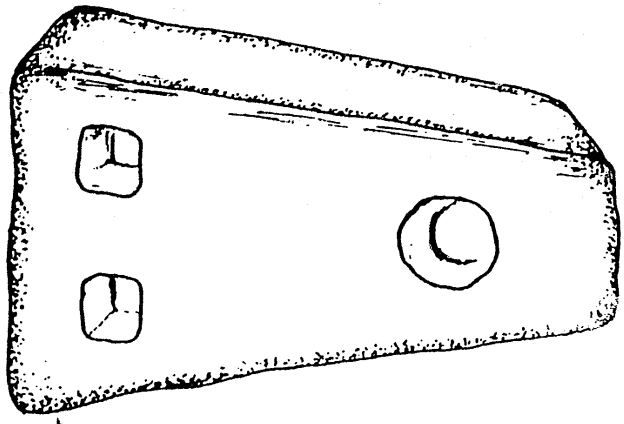
Rectangular enclosures are built of large dressed sandstone blocks measuring 2 m × 0.75 m × 0.3 m to 1.5 m × 0.8 m × 0.2 m. These enclosures could have been part of port structures. Circular bastions were built around corners, to improve the protective characteristics against the forces of the sea. A large number of three-holed triangular and prismatic stone anchors (Pl. I) lying on the seabed along these walls confirm that the sheltered harbour area created by the jetty-like structures should have been used for anchoring boats.

It is interesting to observe that the protective walls and bastions were built on a dry boulder foundation (Pl. II), especially at depressions (Rao, 1990). This feature is indicative of reclamation of low-lying land as referred to in the *Harivamśa*. The three-holed triangular anchors ranging in weight, from 50 to 150 kg are identical to those used in the Late Bronze Age sites of Kition and Syria in the 14th–12th cent. BC (Frost, 1985, 281–321). The trenches dug near the submerged structures would give the stratigraphic position of buildings/structures. The pottery is very meagre in quantity as the lighter material should have been carried away by the strong flow in the river and deposited in the offshore area, where it could have been buried under 3 to 4 m thick sediments. However, some rolled sherds of black and red ware and Lustrous Red Ware are identifiable in the otherwise coarse grey and red ware collection.

The Lustrous Red Ware of Dwarka and Bet Dwarka analogous to that of Prabhas III (Dhavalikar, 1973, 12) and Rangpur III (Rao, 1973: 45–46, 100) is datable to 15th cent. BC if not earlier. The structures of Period I (1500–1400 BC) are *in situ* at 6.14 m and 10 m below

STONE - ANCHORS

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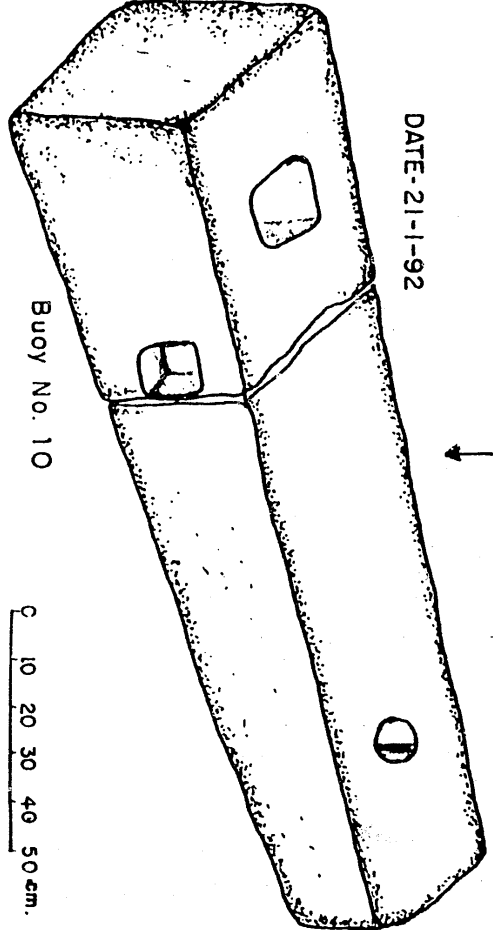


Buoy No. A-1

← SITE - DWARKA →

SITE - SOMNATH

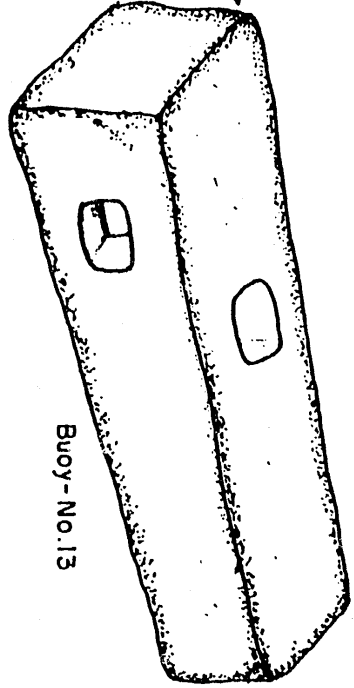
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Buoy No. 10

0 10 20 30 40 50 cm.

BASED ON UNDERWATER DRAWINGS



Buoy - No. 13

0 10 20 30 40 50 cm.

Fig. 5 Three holed triangular and prismatic stone anchors.

M.S.L., while those of Period II (100 BC/AD – AD 500) assignable to the beginning of the Christian era on the basis of Red Polished and associated wares are *in situ* at 2.82 m below M.S.L. Most of the buildings of Period II, built of smaller size stone blocks are levelled up due to the action of waves and currents. In the case of structures of Period I, the walls and bastions built of large blocks are *in situ* upto 4 or 5 courses above the foundation. They were mostly buried in sediment and when exposed above the seabed, they were covered by thick seaweeds. The stone bases with holes for inserting flag posts at the outer protective wall and farther seaward suggest that a warning system might have existed. Alternatively, it would suggest that the port had its own flag. Some stone pillars and beams lying within the enclosures seem to belong to larger buildings, such as warehouses and public buildings.

Antiquities

One of the most important finds of the underwater excavation, off Bet Dwarka region is, the small seal of conch shell engraved with a three-headed animal motif representing the bull, unicorn and a goat (Rao, 1990). The art style of this seal is more akin to that of protohistoric Bahrain, with which, Dvaraka had trade and cultural contacts in the 15th cent. BC. The *Harivamśa* refers to the use of seal (*mudra*) for identifying the Dvaraka citizens when the city was attacked by the Salva king of Soubha. To ensure that only genuine residents entered the city, they had to carry a seal.

The votive jar found in the intertidal zone of Bet Dwarka is another antiquity of great significance. The inscription on it reads *Mahākaccha Shah-pā* (meaning “sea lord protect”) and the characters used are similar to semitic alphabets of the 15th–14th cent. BC. The inscription suggests that an offering was made to the sea god by one who sought protection from the sea.

Antiquities of Period II consist of iron anchors and brass arches or parts of a chariot and a stone statue. The copper bell found, may belong to Period I. Some of the earthenwares, such as the perforated jar and beaker indicate the existence of a township prior to the building of Dvaraka city. The *Mahābhārata* makes a reference to the existence of Kusasthali township and its subsequent destruction by the sea before Dvaraka township was established by Krishna. A coppersmith's stone mould which can be used for casting spearheads was found in Bet Dwarka. The technique of forging of iron nails and stakes also points to the fact that iron technology was at its initial stages. While fixing the date of *Mahābhārata* war it would be essential to remember that iron weapons were used for the first time in that war, and the earliest date of iron technology so far known at Gufkrol in Kashmir, is 1500 BC.

Conclusions

The findings of the recent underwater explorations can be considered to have yielded valuable and conclusive evidence on the existence of port city of Dvaraka, submerged in the

Arabian Sea due to the combined action of a natural calamity such as earthquake, cyclone or tidal waves and sudden rise in the sea-level. The description of Dvaraka township as *Vāridurga*, "a fortress in water" in *Harivamśa* (Vishnu Parva 57.5) is corroborated by the discovery of remnants of fortification walls.

Dvaraka of Mahābhārata fame was a city with its fortified administrative capital and port facilities situated in the mainland of Dwarka and a number of satellite towns and minor ports, at Arambhadvara (Aramda), Shankhodhara (Bet Dwarka), Darukavana (Nageswar) and Pinda Taraka Kshetra (Pindarka).

The present marine archaeological explorations confirm that Dvaraka of 1500 BC was built at the confluence of Gomati river with the western sea, which exactly conforms with the location of Krishna's Dvaraka, as given in ancient texts. The submerged city of Dvaraka uncovered in the seabed, off the present Dwarka has four sectors, enclosed by massive protective walls and gateways flanked by bastions, which might have also served as watch-towers. Dvaraka must have had eight gateways, of which only four could be traced on the seabed.

The reclamation of 12 yojanas of land from the sea alluded to in the *Mahābhārata* is not a figment of poetic imagination but a fact. The boulder foundation used for constructing protective walls and bastions in waterlogged areas supports the statement that land reclamation was indeed carried out.

From the foregoing discussion, it would be reasonable to conclude that on the basis of archaeological evidence so far adduced, as a result of underwater explorations and excavations, the existence and the subsequent submergence of Dvaraka of *Mahābhārata* era is a reality and not a myth.

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