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Art forms of Kirtimukhas at the Solanki period Sun Temple at Modhera, Gujarat

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Abstract: Kirtimukha is a sculptural motif which resembles a grotesque face or head and is widely used in Indian art and architecture, especially during Early medieval period (c. 600CE - 1200 CE). It is a stylized face with strange features of a fearsome facial expression, horns and protruding eyes; which are based on animal and human appearances. It is not only used as anornamental feature, but is understood to be a protective charm. It is the most versatilely used art form intemple decoration during the *Solanki* period (eighth century CE to thirteenth century CE) in Western India i.e., Gujarat, Rajasthan and Malwa. At the Sun Temple ofModherain Gujarat, built during the reign of Bhima-I of *Solanki* dynasty (1020 - 1062 CE) various styles of thisart motif are seenalong with other decorative carvings.

This paper aims to understand the different styles of *kirtimukhas* at the *Solanki* period Sun Temple of Modhera.

Keywords: Kirtimukha, Pattern, Solanki, Stylize, Sun Temple Modhera

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INTRODUCTION

The *Kirtimukha*art motif is also knownas 'the face of glory' and is a decorative element found in most of Indian temples. It is a face that resembles a lion or a human with protruding canines, bulging eyes, and a gaping mouth, and is sometimes surrounded by foliage (Vajracharya, 2014). The word 'glory' can be interpreted as victory and fame(Apte, 1890: 405). The expression ranges from grinning to fearsome; while the depiction can range from minimalistic to elaborate.

In a *Nagara* (North-Indian) style temple, the motif is found on the *pitha* (socle); *jangha* (externalwalls) of *mandapa* (hall) and *shikhara* (superstructure); *kakshasana* (balcony); *torana* (entrance gateway); pillars and pilasters of *mandapas*, *chandrashila* (semi-circular threshold to enter sanctum) and *prakoshtha* (doorframe and lintel) of *garbhagriha* (sanctum).

The earliest example of a *Kirtimukha* is found on a railing (*vedika*) medallion from Bodhgaya (187 - 78 BCE) (Nayancy and Tiwary, 2020), after which a constant development in the motif is seen (Vajracharya, 2014).

In Gujarat, the motif is called '*Grasapti*' and is considered auspicious(Burgess and Cousens, 1903: 25-6). Decorative bricks with grotesque faces were found from excavations at the Buddhist

site of Devnimori, presently in Bhiloda Taluka of Aravalli district of Gujarat. The site is dated to third to fourth century CE i.e.,Kshatrap period (Mehta and Chowdhary, 1966: 167-8).

The temples constructed under Maitrakas (475-775 CE) and Saindhavas (730-920 CE) are plain in design, except Son Kansari temple no.1 and no.4 at Mokhana (seventh to ninth century CE). Two types of *kirtimukhas* with human features are on the walls of temple no.1; while temple no.4 has two lion-faced *kirtimukas* on the sanctum (*garbhagriha*) threshold. The temples constructed during the eighth to ninth century CE are identified with Chavdas(c. 690- 940 CE) and Gurjara-Pratiharas (c. 730- 1008 CE) (Nanavati and Dhaky, 1969: 56-7). One example of this period having *kirtimukhas* on pillars; is the Shiva temple no.1 at Roda. The motif is also found in abundance from the Solanki period (940- 1240 CE) temples (Dhaky, 1961).

Modhera village is located 35km from the major city of Mehsana, in Mehsana District (North-Gujarat) of Gujarat state, on the left bank of the Pushmavati river. Anhilwad Patan, which was the old capital of the Solanki dynasty, is located 40km north of Modhera. The Modhera Sun Temple (23°35'1.7"N 72°7'57.67"E) (Plate I) is locally known as *Sita-ni-Chauri* and *Ramakund* because of *Ramayana* narratives depicted on the temple. The temple is dated to the early eleventh century CE, to the reign of Bhima-I (1020- 1062 CE) of the Solankis (Sompura, 1968:120-23).

This paper aims to understand the different styles of *kirtimukhas* at the Solanki period Sun Temple of Modhera.

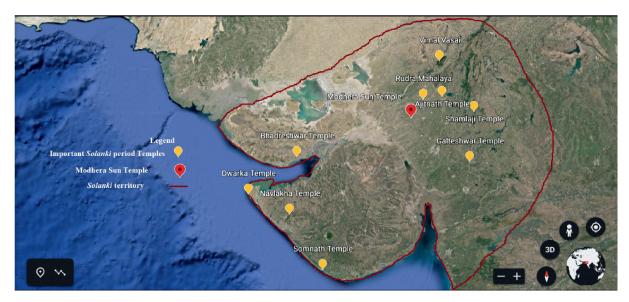


Plate I: Modhera Sun Temple on the map of Gujarat

(Image Courtesy: Google Earth)

HISTORICAL BACKGROUND

Gujarat has a long cultural habitation sequence spanning from Prehistoric (c. 200,000 BP) (Zeuner, 1950:24-5) and Protohistoric (3000 to 2000 BCE)(Kumaran, 2014) periods. Early Historic Gujarat was under the rule of Mauryas which is proved by the Junagadh rock inscription of Rudradaman I which also contains Ashoka's thirteenthMajor Rock Edict. This covered the time period of 320-185 BCE. The Western Kshatrapas which ruled during the time period of first century CE to third century CE, were the next rulers. Gupta rule was extended over Gujarat through their feudatory Maitrakas which established their own kingdom after the Gupta decline in475 CE and ruled till 775 CE. Some

minor dynasties included Saindhavas (730-920 CE) and Chavdas (c. 690-940 CE). During late eighth century CE, North-Gujarat was ruled by Gurjara-Pratiharas (c. 730- 1008 CE) and Southern part was under Rashtrakutas (750- 980 CE) (Sankalia, 1941:7-32).

Mularaja (940- 966 CE) was the first Solanki ruler who established his kingdom by defeating the Chavdas. Anhilwad Patan was his capital (Majumdar, 1956: 23-33). The next major ruler was Bhima I (1020- 1062 CE) who faced political disturbances in early part of his rule. Templeconstruction activity reached its peak during his reign. This is understood from construction activities such as: Sun temple at Modhera (1026- 1027 CE); Vimal Vasahi (1032 CE) of Dilwara temples which was built under feudatories Vaghelas; Rani-ki-vav (1032 CE)which was built by his queen consort Udayamati (Majumdar, 1956: 43-55). Other prominent rulers of the dynasty were Jayasimha Siddharaja (1090-1140 CE) and Kumarapala (1140- 1170 CE). The last known rulers of the Solankis were Bhima II (1176- 1240 CE) and Tribhuvanpala (c. 1240- 1244 CE); their power declined and the kingdom was overtaken by Vaghelas(Majumdar, 1956: 153-69).

THE ARCHITECTURE OF THE TEMPLE

The Modhera Sun Temple is constructed in *Maru-Gurjara* style which developed in Gujarat, Rajasthan and Malwa region during the tenth to thirteenth century CE. This style is characterized by multiple porches and extensivelycarved exteriors and interiors (Dhaky 1975). The temple in this study consists mainly of three parts: holy tank (*kunda*); open hypostyle hall (*sabha mandapa/ natya mandapa/ ranga mandapa*); and main temple (*mulaprasada*) which contains sanctum (*garbhagriha*), circumambulatory path (*pradakshina*), and close hall (*gudha mandapa*). The placement is on the east-west axis with an entrance on the east. The tank is known as *RamaKunda* or *Surya Kunda* and has terraces with steps leading down towards the base. The corners have small shrines dedicated to deities such as *Shitala*, *Vishnu*, etc. (Sompura, 1968: 123). The main temple (*mulaprasada*) and open hypostyle hall (*natya mandapa*) are on a slightly raised platform; with the former having a single porched entrance and the latter having four porched entrances. Both these structures are exquisitely carved with naturalistic and geometric designs including human and animal sculptures; and *kirtimukhas* (Lobo, 1982: 5-45) (Fig. 1).

The construction material is buff sandstone used in dry masonry (Lobo, 1982: 5-7; Sompura, 1968: 121-3). The temple originally had three freestanding pillared gateways (*torana*), oneof them stands between the tank (*kunda*) and the open hypostyle hall (*natya mandapa*)(Lobo, 1982: 47).



Figure 1: Modhera Sun Temple showing the major parts: *kunda, natyamandapa* and Main Temple (Photo Courtesy: Author)

DIFFERENT STYLIZATIONS OF THE KIRTIMUKHAS

The temple complex is carved with sculptures of gods and goddesses; decorative motifs such as geometric designs, floral scrolls, animal themes and *kirtimukhas*. Most of the *kirtimukhas* from the temple are from *natya mandapa* rather than the *mahamandapa*; mostly on the pillars and dwarf pillars as bands and medallions. Based on the facial features, the motif can be classified into three broad groups: a)stylized as an animal face; b)stylized as a grotesque face; c) stylized as a human face.All these categories have sub-varieties. Eleven of the variations resemble an animal face while the other two categories have one example each.

These are discussed as follows:

(A) Kirtimukhas stylized as an animal face

The common features of this category include frontal face; eyebrows extending into horns which usually point in opposite directions; forehead decoration emerging between the socketed bulging eyes; tiny pointed ears; and leonine features on the muzzle. The rounded bead string decoration dropping from the mouth can be interpreted as a stylized tongue; similarly, the ones coming out of the sides can be understood as stylized canines. In some examples the finer details of elongated tongue stylized as bead strings; eyebrows; nose and etc. seem to be eroded.

1. This style of *kirtimukha* has strings of rounded beads coming out of the sides of its slightly protruded muzzle, which could be stylized canines. The expression appears to be grinning and it has a stylized forehead decoration in the shape of an extended arrow. This pattern is carved in bands (two) on the base (*kumbhika*) of *torana*in low relief. Both these bands follow the recessed carvings of the pillar. The same pattern is also on the *pitha* of external walls of the *mulaprasada* including *gudha mandapa* and *natya mandapa*. Some of the *kritimukhas* are eroded (Fig. 2, Fig. 3).

A similar band is also on the upper portion of octagonal dwarf pillars of the wall projections (*bhadra*) windows of *gudha mandapa*. The details of nose and eye-sockets are sharp in renovated parts (Fig. 4, Fig.5).

An alike patterned band in high relief with highly eroded details is over the *mandovara* of the *mulaprasada*, above the frieze with deities (Fig. 6, Fig. 7). A similar patterned bandin low relief is in the ceiling of the *natya mandapa*, it is a design which fills the background in a band of *yogini* niches (Fig. 8).



Figure 2: *Kirtimukha* on *torana* pillar and exterior temple walls



Figure 3: Eroded *kirtimukhas* on exterior temple wall (Photo Courtesy: Author)

(Photo Courtesy: Author)



Figure 4: *Kirtimukha* on dwarf pillar of *gudha mandapa* (renovated)

(Photo Courtesy: Author)



Figure 5: *Kirtimukha* on dwarf pillar of *gudha mandapa* (Photo Courtesy: Author)



Figure 6: *Kirtimukhas* over *mandovara* of main temple

(Photo Courtesy: Author)



Figure 7: Detail of *kirtimukhas* over *mandovara* of main temple

(Photo Courtesy: Author)



Figure 8: *Kirtimukhas* inbetween *yogini* niches (Photo Courtesy: Author)

2. This design of *kirtimukha* has a dangling extended tongue which drops out of the highly protruding muzzle and a forehead decoration in the shape of a rhomboid flower. The finer details seem to be eroded. Based on the shape and size, it can be assumed that this was a part of a pillar or a dwarf pillar and is currently displayed at the site museum (Fig. 9, Fig. 10).

A similar style is also in ahigh relief band that adorns the upper portion of the pillars in the *natya mandapa*.In this the details of nose, eye-sockets, thin whiskers and lipsare sharp; and it appears to be grinning. The cheeks are bulging and the dangling tongue is stylized as five strings of rounded beads. Besides this, two strings of rounded beads are at sidesof the face and have a pointed floral pendant, these could be stylized canines. On some pillars the finer details of whiskers seem to be eroded (Fig. 11).

An alike pattern has identical features but is in a low relief. Its dropping tongue is styled as three strings of rounded beads. It is on *gudha mandapa*pillars in a band (Fig.12). A similar form of *kirtimukha* is on the cusps of the *torana* of *natya mandapa* and *gudha mandapa*. It has details of whiskers and tongue fashioned as five strings of rounded beads falling out of its mouth. The design has dancing human figures in the background. It is eroded and broken in some parts (Fig. 13, Fig. 14).



Figure 9: *Kirtimukha* on broken part of pillar (Photo Courtesy: Author)



Figure 10: *Kirtimukha* on *natya mandapa* pillars (Photo Courtesy: Author)



Figure 11: *Kirtimukha* on *natya mandapa* pillars (Photo Courtesy: Author)



Figure 12: *Kirtimukha* on *gudha mandapa* pillar (Photo Courtesy: Author)



Figure 13: Eroded kirtimukha on torana gateway

(Photo Courtesy: Author)



Figure 14: *Kirtimukha* on broken part of *torana* (Photo Courtesy: Author)

3. This form of *kirtimukha* is in high relief and has a decorative tongue stylized as three strings of rounded beads with a floral pendant hanging down of its protruded mouth. The canines are designed as bead strings which also forms the tail of a hybrid creature which alters the *kirtimukha* at both sides. The eyebrows which extend into horns are detailed with rounded petal designs and small projections form the forehead decorations between the eyebrows which extend into horns. The protruded muzzle has thin yet bold whiskers and a sharp nose. This pattern is on the shaft of the pillars of the *torana*. Parts of similar pillars are also displayed at he site museum (Fig. 15, Fig. 16).

A similar form of *kirtimukha* is in half-medallions on some of the dwarf-pillars of the *natya mandapa*. It is a bit different due to its low relief and non-inclusion of floral pendant in the stylized tongue (Fig. 17).



Figure 15: *Kirtimukha* on *torana* pillar (Photo Courtesy: Author)



Figure 16: *Kirtimukha* on broken *torana* part (Photo Courtesy: Author)



Figure 17: *Kirtimukha* on dwarf pillars of *natya mandapa* (Photo Courtesy: Author)

4. This design f *kirtimukha* has aflaring nose and seems to bite colied festoons. It has a forehead decoration in the shape of a diamond and is surrounded by foliage. It is on the arch of figural friezes of *torana* and pillars of *natya mandapa*. It is damaged in some of the parts (Fig. 18).



Figure 18: *Kirtimukha* on pillar of *natya mandapa* (Photo Courtesy: Author)

5. This style of *kirtimukha* has tiny eyes but does not have the lower jaw. The eyebrows which extend into horns are ribbed like that of a gazzle; and are three in number. The one in middle projects straight upwards while the other two curl out in opposite directions. Two pairs of thick stylized whiskers cover its surroundings. It is carved in a half-medallion onlower portion of some of the projections over the exterior temple wall of the *natya mandapa* and *mulaprasada* including *gudha mandapa*. Most of the projections are restored and renovated (Fig. 19).

A similar pattern of *kirtimukha* in similar position i.e. on *mandovara* is in a rectangular niche. The only difference is the stylized whiskers, which are in three pairs and designed as foliage. The whiskers and horns cover more area in the niche then the face itself. Most of the projections are restored and renovated (Fig. 20).

Another variety of *kirtimukha* without the lower jaw is in some of the half-medallions on the lower part of dwarf pillars in the*natya mandapa*. It has a prominent nose and aforehead decoration in the shape of a flower bud, between the eyebrows which extend into horns. The face is surrounded by foliage (Fig. 21).



Figure 19: *Kirtimukha* in half-medallion on exterior wall projectionson exterior walls

(Photo Courtesy: Author)



Figure 20: *Kirtimukha* in rectangle niche on exterior wall projectionson exterior wall (Photo Courtesy: Author)



Figure 21: *Kirtimukha* in half-medallion on dwarf pillar base in *natya mandapa* (Photo Courtesy: Author)

6. This pattern of *kirtimukha*has a protruded gaping mouth with a thin extended dog toungue and a sharp nose. This is the only example of *kirtimukha* in the temple which does not have a stylized tongue. Canines designed as thin foliage curls emerge out of its gaping mouth at the sides. Ridged bell-like motifs are at the sides of the face. It is carved on a band on the external side of *kakshasanas*(balconies) in *natya mandapa* but is presently displayed at the site museum. Similar design is seen insitu at Galteshwar Temple of Sarnal, Kheda. At this temple it forms a band in the *mandovara* of the *natya mandapa* (Fig.22).



Figure 22: *Kirtimukha* on *mandovara* band (Photo Courtesy: Author)

This style of *kirtimukha* has a forehead decoration in the shape of an elongated arrow and fine whiskers. The details of muzzle seem to be eroded. It is in low relief in a medallion over the *mandovara* of the *natya mandapa*. Only one example of this is presently seen insitu, but based on decorations of other Solanki temples there might have been other such medallions on the *mandovara* (Fig. 23).



Figure 23: *Kirtimukha* in medallion over *mandovara* (Photo Courtesy: Author)

8. This form of *kirtimukha* is carved in high relief; it has a protruding muzzle with sharp nose, lips and whiskers. It has a forehead decoration in the shape of a flower. This is the only example with eyebrows which extend into hornswhich pointing towards each other. It is surrounded by intricate swirls of foliage which come out of its mouth and cover the entire architrave. It is on the architraves which support the ceiling and the porch of the *natya mandapa* and *gudha mandapa* (Fig.24).



Figure 24: *Kirtimukha* on architraveof *natya mandapa* (Photo Courtesy: Author)

9. This style of *kirtimukha*has a sharpflaring nose with whiskers on the slightly protruding muzzle. It has a fearsome expression and scrolls of foliagedropping out of its gaping mouth cover the surroundings. It has a forehead decoration in the shape of a floral design between its eyebrows which extend into horns. It is in a triangularoutline in the ceilingsover the *pradakshinapathsurrounding* the *garbhagriha*and also in arcs of the *natya mandapaceiling* (Fig.26). Broken examples are displayed at the site museum (Fig. 25).



Figure 25: *Kirtimukha* surrounded by foliage in part of ceiling of *pradakshina path* (museum) (Photo Courtesy: Author)

Figure 26: *Kirtimukha* surrounded by foliage in ceiling of *pradakshina path* (Photo Courtesy: Author)

10. This pattern of *kirtimukha* resembles a seated roaring lion in high relief with thin paws at sides. It is open mouthed with canins and a row of minute teeth, and a rolled tongue. The muzzle is protruded with sharp features of nose and whiskers. The design also has thick bushy eyebrows . It forms some of the pillar capitals in the *natya mandapa* (Fig. 27).



Figure 27: *Kirtimukha* pillar capital in *natya mandapa* (Photo Courtesy: Author)

11. This form of *kirtimukha* has a protruding muzzle. It has a forehead decoration in the shape of a floral design between its eyebrows which extend into horns. The ears are prominent and pointed while the nose is eroded. Canines styled as elaborate scrolls of foliage come out of its gaping mouth at sides. Besides the *kirtimukha* is a human figure holding a lotus bud facing the motif. It is carved in high relief. Based on the size and the design this could have been a part of the *gudha mandapa* threshold and is currently displayed at the site museum (Fig. 28).



Figure 28: *Kirtimukha* on probable *garbhagriha* threshold (Photo Courtesy: Author)

(B) Kirtimukhas stylized as a grotesque face

This design of *kirtimukha*has a trident-likeprotrution from the centre of its foreheadbetween the eyebrows which extend into hornswhich point in opposite directions. It features a round button-like nose with thin moushtache, parted lips with curled beard and tiny pointed ears. It appears to be scrowling with puffed cheeks and is in low relief within a half medallion located on the base of the octagonal dwarf pillars of the wall projections (*bhadra*) windows of the *gudha mandapa*. Parts of the wall are renovated (Fig. 29).

The unrenovated parts reveal the actual features of this style of *kirtimukha*. It has a forehead decoration in the shape of a bud with leaves, emerging from the centre of its foreheadbetween the eyebrows which extend into horns pointing in opposite directions. The eyebrows which extend into horns are rounded at the ends. The details of eye-sockets, row of teeth and pointed ears is sharp. The lips are parted while the motif appers to be scrowling with a fearsome expression. Swirled foliage comes out of its parted lips and surrounds the rounded cheeks (Fig. 30).





Figure 29: *Kirtimukha* on dwarf pillar base on exterior walls of *gudha mandapa* (renovated) (Photo Courtesy: Author)

Figure 30: *Kirtimukha* on dwarf pillar base on exterior walls of *gudha mandapa* (Photo Courtesy: Author)

(C) Kirtimukhas stylized as a human face

The third variety resembles a human faceand is in low relief. The facial features of nose, lips and tiny pointed ears are barely visible; the motif is badly eroded. It does not have eyebrows which extendinto horns, but the feature of eye-sockets outlines the bulging eyes. The lips are not parted and the expression appers to be delighted. It is in half-medallions on the lower part of some of the dwarf pillars in the *natya mandapa* (Fig. 31).



Figure 31: *Kirtimukha* in half-medallion on dwarf pillar basein *natya mandapa* (Photo Courtesy: Author)

DISCUSSION

The motif of *kirtimukha* is accepted as 'the face of glory', which is understood to represent splendor. *Kirtimukha* stylized in different variety adds a charismatic feature in the temple architecture of this period.

The architectural style uses repetition of exquisitely carved mouldingsover the *pitha* and *mandovara* which increases the elevation of the temple.Similarly, the enlarged plan repeats projections on the external-walls.Presence of k*irtimukhas*in bands, medallions and small niches is the most common.

Most of the *kirtimukha* decorations have been stylized with animal features specifically that of a lion. While grotesque faces which have a combination of human and animal features; and faces resembling a human face are in use too. It suggests the contemporary usage of all the varieties.

The artistic expression changes the features of the motif according to the availability of space. In half-medallions and rectangular niches on the *mandovara*, the motif excludes the lower jaw and covers the surroundings of the face with whiskers stylized as foliage, in contrast the motif is surrounded by intricate foliage swirls when used in ceilings and architraves; and *chandrashila*. This suggests that the motif functioned like a carving which was added in parts of the temple structure to decorate it and to fill in empty spaces, like a design which intensifies the beauty in personal ornaments. It also shows flexibility in usage of artistic expression.

The Sun Temple of Modhera is the only Solanki construction which has incorporated these many varieties of *kirtimukhas* in its architecture.

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REFERENCES

Apte, V. (1890). The partial Sanskrit-English dictionary, Poona: Shiralkar and Co.

- Burgess, J. and H. Cousens (1903). *The architectural antiquities of Northern Gujarat, Vol. IX,* Archaeological Survey of Western India. Bombay: Thacker and Co., Limited.
- Dhaky, M. A. (ed.) Krishna Deva (1961). The chronology of the Solanki temples of Gujarat, *Journal of the Madhya Pradesh Itihasa Parishad*, 3: 1-103.
- Dhaky, M. A. (ed.) Pramod Chandra (1975). The genesis and the development of Maru Gurjara temple architecture, *Studies in Indian temple architecture paper presented at a seminar held in Varanasi 1967*, New Delhi: American Institute of Indian Studies 1975, 111-165.
- Kumaran, R.N. (2014). Second Urbanization in Gujarat, Current Science, 107 (4): 580-588.
- Lobo, Wibke (1982). *The Sun Temple at Modhera: A Monograph on Architecture and Iconography*, München: Verlag C.H. Beck.
- Majumdar, A. K. (1956). *Chalukyas of Gujarat: A survey of the history and culture of Gujarat from the middle of the tenth to the end of the thirteenth century*, Bombay: Bharatiya Vidhya Bhavan.
- Mehta, R. N. and S.N. Chowdhary (1966). Excavation at Devnimori (A report of theexcavation conducted from 1960 to 1963), Baroda: Department of Archaeology and Ancient History, Faculty of Arts, The Maharaja Sayajirao University of Baroda(2010, Baroda: Department of Archaeology and Ancient History, Faculty of Arts, The Maharaja Sayajirao University of Baroda).
- Nanavati, J. M. and M. A. Dhaky (1969). *The Maitraka and the Saindhava Temples of Gujarat*, ArtibusAsiaeSupplementum 26, Ascona, Switzerland: ArtibusAsiae Publishers.
- Nayancy, Priya and Sachin Kr. Tiwary (2020). Tracing the Origin and Antiquity of Kirtimukha Motif: Finding Iconic Parallels, *Heritage: Journal of Multidisciplinary Studies in Archaeology*, Thiruvanantapuram: Department of Archaeology, University of Kerala, 8.2: 1030-1040.
- Sankalia, H. D. (1941). *The Archaeology of Gujarat (Including Kathiawar)*, Bombay: Natwarlal and Co. Publishers.
- Sompura, Kantilal F. (1968). *The Structural Temples of Gujarat (Upto 1600 A.D.)*, Thesis (Ph.D.). Ahemdabad: Gujarat University, Thesis Publication series-4.
- Vajracharya, Gautama V. (2014). Kirtimukha, The Serpentine motif, and Garuda: The story of a lion that turned into a big bird, *ArtibusAsiae*, 74 (2): 311-336.
- Zeuner, F. E. (1950). *Stone Age and Pleistocene Chronology in Gujarat*, Pune: Deccan College, Postgraduate and Research Institute Volume 6 of Deccan College monograph series.