Deterioration of Śarda Temple, Neelum Valley, Pakistan: General Perceptions vs New Findings

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Abstract

Stone temples of Kashmir are rare architectural marvels. Most of them are deteriorated to a great extent. Generally scholars attribute their destruction to Sultan Sikander, known as iconoclast, the desecrator of Hindu Temples in Kashmir, on the basis of historical chronicles. There are many geologist, on the contrary, who attribute most of these destructions to the Himalayan Earthquakes. Śarda temple, being one of the same group is taken as a case in this study to find out the reality. It tries to establish that it is never been a single or intentional activity but a long list of deteriorating agents that reduced the Śarda temple into ruins.

Keywords: *Śarda Temple, Neelum Valley, Kishan Ganga, Stone Temples of Kashmir*

Introduction

Kashmir has relatively isolated history and art for being geographically surrounded valley in lower Himalayan offshoots. In fact, it is geology of Himalaya that caused such an abode. In 3rd to 10th century CE, many Shavite Temples were built in the valley. Their style developed from prototype to a well-developed repertory of architectural art. Most important element of this style is the building material, i.e. stone. Examples are there for extremely huge boulders cut with great care and used in these temples. Currently, they are ruined into heaps of stones. Recently, geologists use their destruction to trace the frequency of earthquakes in times. Earlier studies considered vandalism as only reason for their destruction.

Śarda Temple is in the Neelum Valley in northern ring of mountains surrounding Kashmir Valley. It is also of the same repertory with huge blocks of stones. Like all others, it has lost its roof too. Half of its southern wall is fallen along with portal from southern corner of western side. Succeeding stairs are also disturbed a little bit.

Causes of Decay

It can be assumed from the current structure that it was not the same as it looks today. Study of its architecture is related to the causes of its deterioration into current position.

Vandalism

The site is currently a deserted, partially destroyed building. Local people regard it as an ancient learning centre and feel boast for it and use to present it to the visitors (personal observation).

Muslim sultans, commanders and chiefs are blamed for the destruction of a huge number of the temples in all around the India. According to a current study, about 80 major temples are desecrated in this account (Eaton 2006: 1-8).

The main cause of the decay for whole of Kashmir temples, is itself a huge realm with its roots deep into the history of the valley. According to the Rajatarirgini of Kalhaṇa, King Harsha of Kashmir plundered Hindu and Buddhist temples in his lust for the gold and silver which went into the making of idols (Shourie et al. 2008: 29). However most of the scholars as well as traditions blame Sultan Sikander (d. 1416) for their destruction (Cunningham 1848: 241-45). He is historically known as bigoted who procured him the title of '*Butshikan* (the iconoclast بُت شکن)' for such activities. Cunningham (1848) further links the phenomenon to the Timurlane's invasion of India and the exchange of friendly gifts with Sikander. He possibly provided Sikander with gunpowder.

This temple, which exists in the remote area beyond the geographical boundaries of the main valley of Kashmir, would have possibly escaped from the hands of this man. But yet there is the possibility of such actions from other chieftains.

It is said that a Buṃba Raja used this structure as gunpowder storage which resulted in a blast taking its roof (Stein 1900: 284). He further comments that on believing so we can assume that there was no roof. Because if so, then what would have saved its side walls. Another case came from Bates (1873) that a Bumba Raja Mansur excavated the temple in hunt for treasure. He blasted a huge stone slab lying in the temple.

It is however, easily can be rejected that if there was a roof, then it might have been fallen already. Secondly, no evidence of single crack can be seen inside the remaining structure of the main shrine.

Apart from early references, currently there is a say among the locals that on the time of independence, officials came from Sirinagar on the orders of the Dogra Maharaja to move the cult (a *Sivlinga*) into the valley but locals gathered and said we revere this stone. Please do not take it from us *(personal comm.)*.

Natural Agents

It is more likely that the site got ill-fated against the ravages of nature. One side is badly damaged by the stream and the other portions are encrusted with ivy and mosses growing on stone surface.

Floods

Flood can be considered the most obvious reason for its destruction. *Madhumati* or *Śarda Nar* is hilly torrent rushing in its peak season. This is the monsoon season starting in mid-June and ending with August. During this season, hill streams rush with rains in small packets. Torrents rush and cause havoc to the land. Debris came along and strengthen the thrust of water washing everything in its way. These flood waters can engulf stone walls and even meshed embankments.

Seeing the site, existing by the sides of a streams can give us a clue that it would have been the victim of such flood that washed the bases of the structure to some extent. Even if it could not have reached it directly, the vibration caused by the flow of huge debris can also work destructively. There are signs of such passing of flood water near to the site. This possibly triggered the southern wall to lapse down (Figure 1).

To the southern side it can be assumed that there was extra piece of land which is now washed by the floods of the stream. However, with the existence of massive ramp formed by stair case, we can exclude the possibility of same destruction to the west.

Earthquakes

Kashmir lie on the verge of a tectonic plate. Bilham & Bali (2013) have made a case that the account of Suyya, the Minister of Avantivarman, cleared the debris limiting the drain of the *Vitasta* (Jehlum River). It is posed in this study that it was the earthquake which caused these debris. The case is taken for all the valley of Kashmir (Figure 1).

It is obvious from the pattern of jostling caused by earthquake can take place here in this site being near to the fault line. A case is presented by Bilham & Bali (2013: Fig 3 & 4) (Figure 2, 34).

Table .1 Ancient Earthquakes in Kashmir summarised different scholars (After Bilham et al 2013: Tab. 2)

Year	Comments
1250 BC date uncertain	A devastating earthquake struck at night. The entire town was reduced to shambles. Cracks appeared on the surface at earth, and from there water gushed out and the entire town was deluged. Thus in the aforesaid manner there appeared Wular Lake (1, 4)
883	Uncertain date, no damage described, as discussed in the present article (1, 4)
1123	Kalhana 1123 AD: Book VIII, Verse 1167 (1, 2, 4)
	Stein 1898 "earthquakes occurred repeatedly" page 418
24 Sept 1501	3 months of aftershocks (1, 2)
1552	Not an earthquake (3)
Sept. 1555	Earthquakes continued for several days. Landslides and liquefaction. Several accounts, some assign date as 1554 (1–5)
c.1560/61	No details (2)
1569–1577	No details (2)
23 June 1669	The buildings rocked like cradles. No loss of life. (2)
c.1678/79	Persistent shaking. Reconstruction needed (2)
1683	No details (2)
24 March 1736	Earthquakes for 3 months. Buildings of the city and hamlets razed to the ground (2. list as 1735)
1779	Srinagar and hamlets flattened and aftershocks for 14 days. People took shelter in the open. Bashir et al. (2009) list event as 1778; Oldham (1883) as 1780
c.1784/85	People thrown. Shocks persisted 6 months
1803	Earth ripped apart, houses collapsed, people buried under walls (2)
26 June 1828	Vigne (1844) 1,200 houses collapsed, 15 days of aftershocks
1863	(2) Lawrence (1895) indicates 1864
30 May 1885	Jones (1885) $6.2 < Mw < 6.3$ (Ambraseys and Douglas 2004)
8 Oct 2005	$Mw = 7.6$ Instrumental period. One week of strong aftershocks

With the exception of the 1885 and 2005 earthquakes, no magnitudes can be assigned to these earthquakes

The table presents a huge range of opportunity to look for the temple destructions, caused by the earthquakes. The temple in *Śarda* is not that far from the area of destructions for these earthquakes.

This jostling in the *Śarda* Site (Figure 4-a) is obvious that it is a flood generated thrust that tended the site to very slightly tilt toward the south. On the contrary, the northern side

(Figure 4-b), resting relatively on a solid ground, seems to have struck by the earthquake. Earthquake jostling can also be observed even in the foundation of the northern side wall. The map of the observable forces on the structure (Figure 5) is also consistent with the same.

It is clear that except the eastern side, the whole structure, along with its podium is set on artificial mound. This scenario makes the structure ultimately prone to tilt in a single direction, which here is to the south. Therefore, earthquake became the main trigger that started the jostling. Later on floods lessened the bearing capacity of the ground on southern side.

Biological Decay

The site is surrounded with a commanding naturally active environment. Humidity, temperature, rains, freezing, etc. as a whole are other agents of decay. Mosses are grown on the site and destroyed the site in a very drastic manner (Figure 6).

To the southern side of the temple main shrine, a crusty layer of plastering material (possibly stucco) is apparent which demonstrates the rate of biological decay.

Damage to the roof

The roof of the most of the temples in Kashmir is found missing. Same might be the fate of the *Śarda* Archaeological Complex (Figure 7). The general idea is that the temples of Kashmir were mounted with a set of huge blocks of stones. It is confirmed from smaller examples like Pandrethan's Meruvardhanasawamin Temple which has its roof intact. So the earthquake particular and other reasons in general trigged the heavy stone's shift to a side. The weight of the huge slabs casted the fatal breakdown taking the roof away.

Śarda Complex is not an exceptional case. The general perception by Stein (1900: 185) and succeeding scholars, that it was a roofless temple, cannot be necessarily true. Bates (1873: 319) wrote that there was a stone slab which was disturbed by the Raja of Karnah.

Conclusion

In the light of the deteriorations caused by the floods and devastating Himalayan earthquake (Bilham & Bali 2013: 10). Bilham (2010: 107-117) confirmed a set of devastating historical earthquakes casting decisive blow to the temples of Kashmir. The

earthquake before or in the time of Avantivarman (Bilham et al 2013: 13) are most direct reason for the destruction of the Kashmirian Temples.

The *Śarda* Temple is also a candidate for destruction caused by the earthquakes mentioned in Table 2. It is however evident that the earthquake of 2005 (Mag 7.6) did not disturbed the site. Therefore, it may be assumed that earthquake which torn the temple was more strong. Or it can also be the floods to tear apart the portion coming in its way. Currently, the direction of tilt is to the southern side, where gape is formed by the fallen wall. Categorically, it can be inferred that the pedimental roof is destroyed by the earthquake jostling, whereas southern wall is washed by the flood and rest is the work of weathering. On the other hand we cannot blame biological growth on the site for fatal destruction. It might only be the product of the period of neglect, from its owning society, and then complete abandonment after the independence.

It is yet to confirm the exact date of the site that it is either before CE 883, the year an earthquake hit the valley or earlier in the period of Lalitaditya Muktapida or even earlier. Also the building material is yet to be studied in comparison with other example of the style and the monuments around the site. It will be very helpful to study the stucco traces on the surfaces of the main shrine. Other site in the region, Kishan Ghati in particular, are the potential sites to take in consideration.

It can be recommended that the site should be developed with extension of supporting buttresses in the south. To keep these buttresses from flooding of the Sharda Nar further embankments will be needed also. Similarly, to minimise the weathering effects, the site needs shed and wall capping. Separate study on the conservation is inevitable before any intervention. Huge blocks of stones need specific equipment to carry out conservation.

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Figures

Figure 1. Southern side of the temple lapsed due to the weakening of foundations by floods

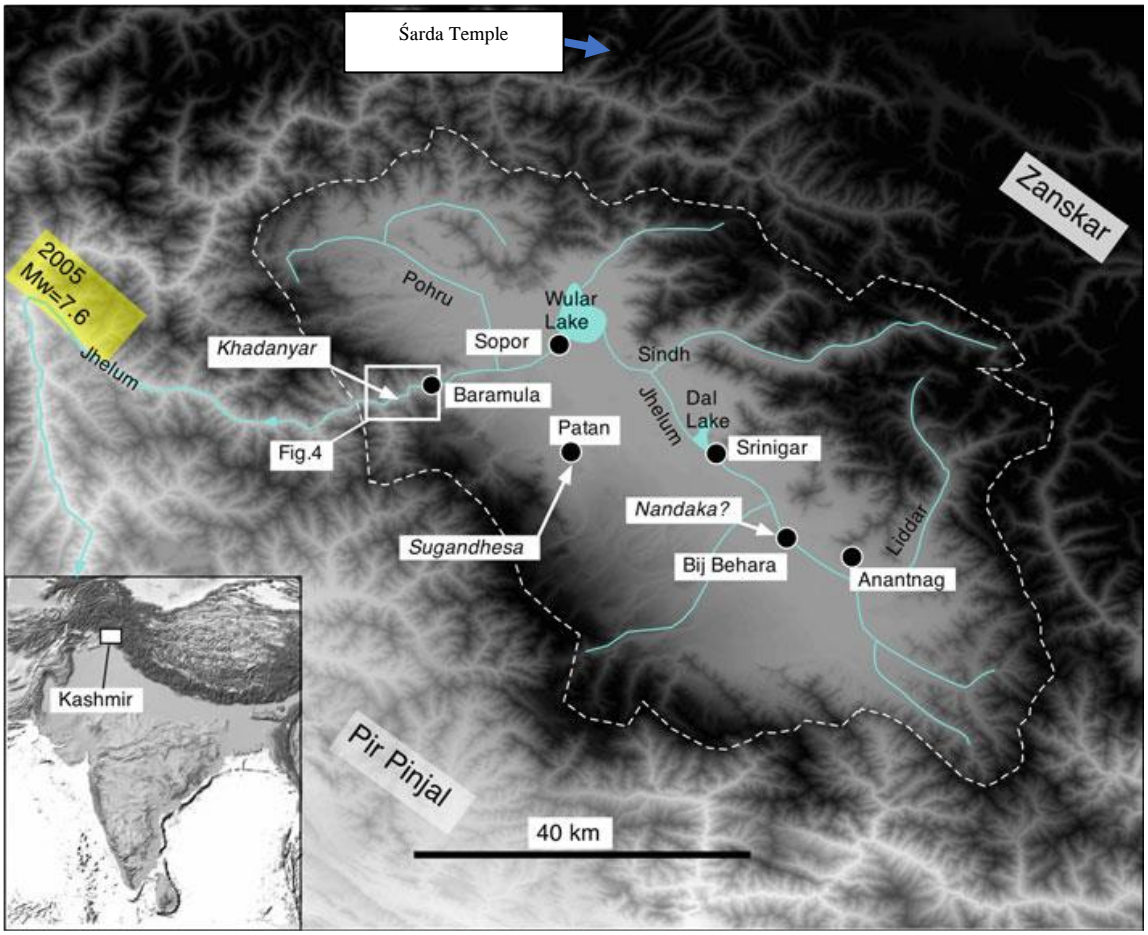

Figure 1. Jhelum catchment and major locations of Hindu Temple Sites (After Bilham et al 2013: Fig 1). *Śarda* Archaeological Complex is on the top

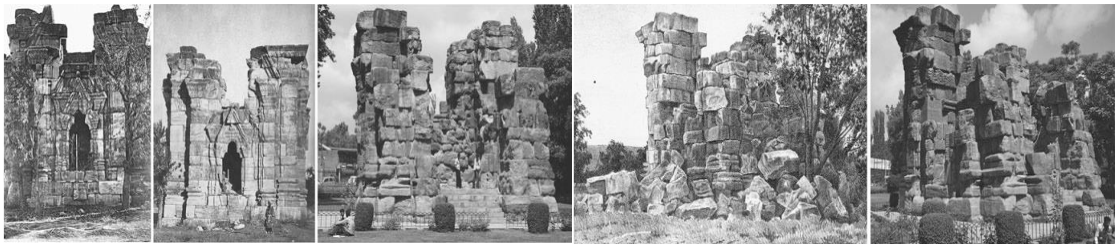

Figure 2. Views of *Sankaragauriśvara* taken in 1686. The second view shows a lateral shift in the centre trefoil keystone caused by an earthquake prior to 1868, before its complete loss in the 1885 earthquake. Note the lateral drift of blocks in the left hand corner. The third Lithograph reproduced from Jones (1885) showing the immediate aftermath of the 1885 earthquake compared to a last 2005 photograph from the same angle (After Bilaham et al 2013: Fig 10,11)

Figure 3. Views of *Sugandheśa*: top pair from the south in 1868 (Cole 1869, left) and 2011 (right), and lower pair from the east, showing damage sustained in the 1885 earthquake, and evidence of toppled blocks that we interpret to have fallen in previous earthquakes. Arrows highlight lateral block motions typical of earthquake jostling. The gradation of the poles visible in the left hand figures are in feet (After Bilaham et al 2013: Fig 13).

Figure 4. Earthquake jostling in *Śarda* Complex a. joint of stair case with the main court b. outside view of the base of the northern wall

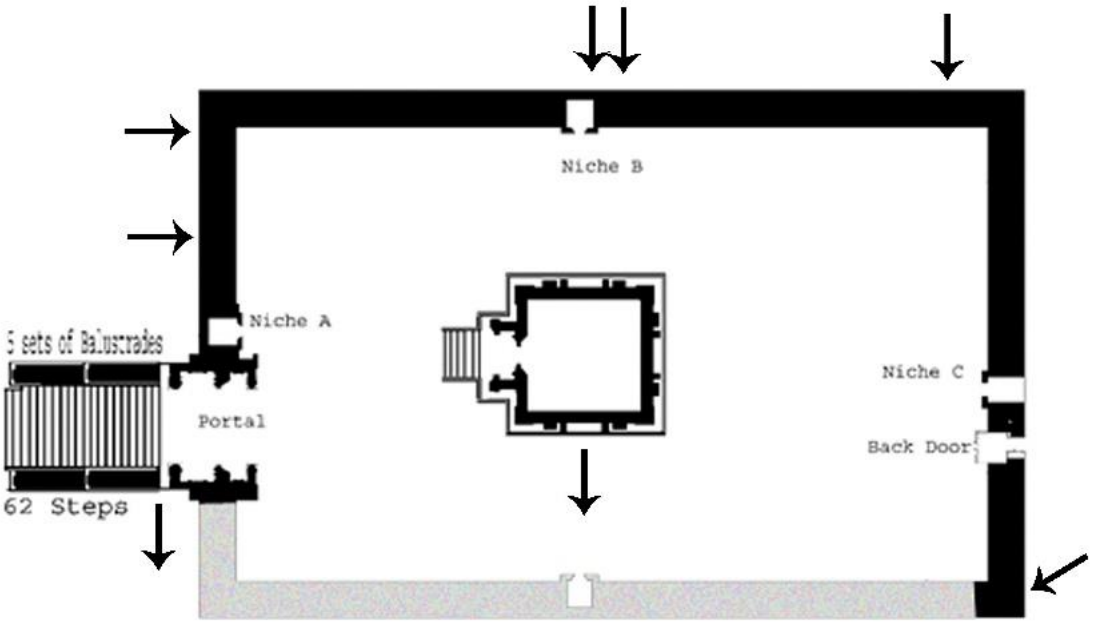

Figure 5. An arbitrary position and direction of the observable forces tilting the building southward

Figure 6. Deteriorations caused by biological growth on the surface

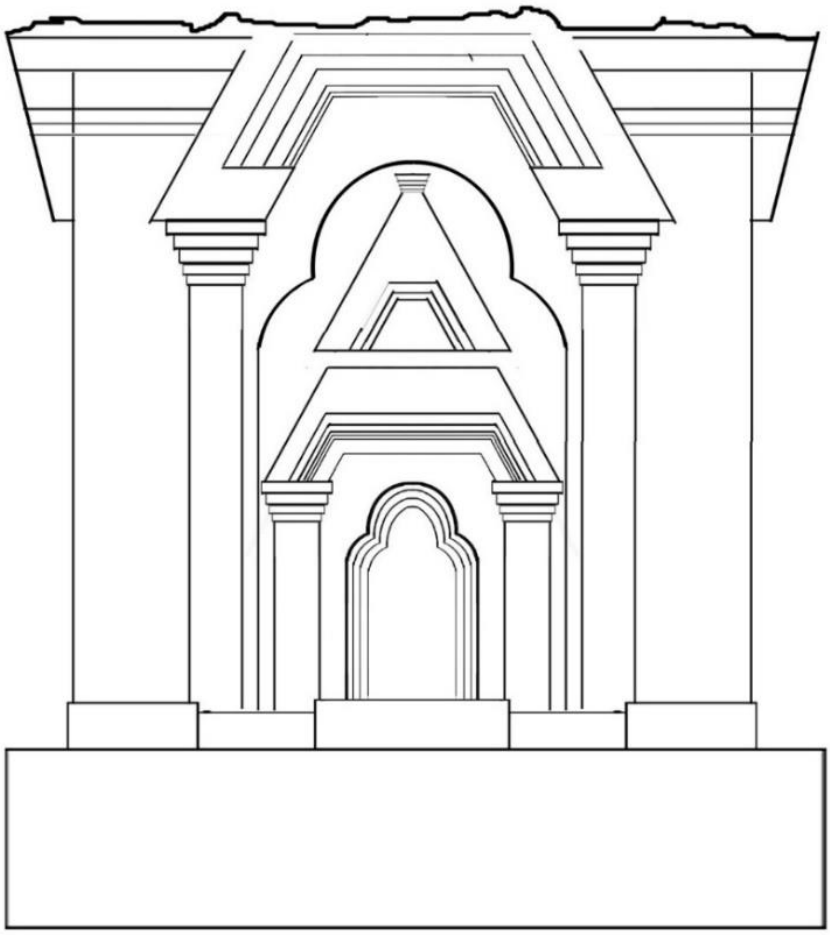

Figure 7. Elevation of the sides of the main shrine