Investigating the Hindu Shahi Kingdom in North-western Pakistan Through Systematic Landscape Survey

Ijaz Khan / Muhammad Zahir
Fazal Muhammad / Irfan Ali

Abstract

This paper investigates the historic kingdom of Hindu Shahi dynasty (circa 822 to 1026 CE) and discusses the results of systematic landscape survey in districts Lower Dir, Swat, Buner and Malakand Agency of Khyber Pakhtunkhwa province, Pakistan. During the survey, a total of 2542 square kilometres area was surveyed and a total of 225 archaeological Hindu Shahi sites were recorded. These sites were strategically positioned in difficult terrains, occupying hilltops and slopes, overlooking the surrounding landscapes. The Hindu Shahi sites are located in close proximity to access routes and passes that link the study area with the neighbouring regions. Among the Hindu Shahi structures, a total of 217 watchtowers at 140 sites, are the most frequent and dominant in their respective landscapes. The geographical distribution, physical locations and the nature of structures are indicative of a highly defensive architecture and purpose. The results of the survey demonstrate that the study area is the most densely occupied known region of the Hindu Shahi period. Within the study area, the relatively small Mayar valley in Lower Dir holds a naturally secured location and include a high number of sites and watchtowers. The distinctive nature of the Mayar valley suggests that it might remain the locus of socio-political activities during the Hindu Shahi period.

Keywords: Hindu Shahi Dynasty, Hund, Landscape Systematic Survey, Watchtowers, Mayar valley, Ghaznavids

1. Introduction

The Hindu Shahi dynasty is generally known from the historic accounts and limited archaeological explorations and excavations. This dynasty is better known as the last Hindu dynasty in northern and north-western Pakistan that put a fight to the onslaught of the Ghaznavids Muslims from Afghanistan during the last quarter of the 10^{th} and early 11^{th} centuries CE. The Hindu Shahi dynasty ruled most of northern and north-western Pakistan and Afghanistan for more than two hundred years from 9^{th} to 11 centuries CE (circa 822 to 1026 CE). They ruled largely from the city of

Hund – located in modern Swabi district, Khyber Pakhtunkhwa – on the right bank of the Indus River. The prominent classical Muslim historians, such as Al-Bīrūnī (circa 970-1039 CE), Albahaqi (circa 996 to 1077 CE), and Utbi (circa 10^{th}-11^{th} century CE), have recorded some events related to the Hindu Shahi dynasty (Dani, 1968; Elliot & Dowson, 1966; Rahman, 1968, 1978, 1979a; Stein M. A., 1973). These historians primarily worked for the Ghaznavids, the strategic opponents of Hindu Shahi, and they describe the Hindu Shahi dynasty in relation to wars and peace treaties, mostly from Ghaznavid perspectives (Dani, 1968; Khan H., 1980; Mishra, 1972; Pāṇḍeya, 1973; Rahman, 1979a; Stein M. A., 1973). Kalhana, the illustrious historian from Kashmir, reported the Hindu Shahi in his book *Rajatarangini* (Stein A., 1900); however, he largely discussed them in relation to the Kashmiri kings and the history of Kashmir (Pāṇḍeya, 1973, pp. 2, 78).

These classical accounts, along with partial evidence of their inscriptions, forms the basis of the modern understandings of Hindu Shahi dynasty (for example Agrawal, 1985; Dani, 2001; Nasim Khan, Khan, & Azeem, 1999; Nasim Khan & Azeem, 1999; Mohammadzai, 2002; Mishra, 1972; Pāṇḍeya, 1973; Rahman, 1978, 1979a, 1979b, 1980, 1988, 2002). The Hindu Shahi coins in gold, copper, silver and billon bear royal titles or names of the kings (Ali, I., 1999, pp. 269, 280-282; 2003, pp. 135-170; Nasim Khan, Khan, & Azeem, 1999, p. 25; Rahman, 1979a, pp. 205-206, 1998, pp. 50-51). However, some of the names on coins do not correspond to the names mentioned by the classical historians (Dani, 1968; MacDowall, 1968). Thus, the current historic and archaeological knowledge of the Hindu Shahi dynasty have caused divergent opinions about the number or names of the kings and their political centres (for example Mishra, 1972; Pāṇḍeya, 1973 and Rahman, 1979a).

The classical and modern historians' discussions of the Hindu Shahi kingdom in modern north-western Pakistan revolves around the historic cities of Hund and Nandana which are believed to have been their capital centres. However, there is no historic mention of the extension of the Hindu Shahi kingdom or their political activities in the Swat, Buner, Lower Dir and Malakand Agency (Rahman, 1988, p. 472). The present paper attempts to investigate the extent of the Hindu Shahi kingdom in north-western Pakistan – primarily in districts Lower Dir, Swat, Buner and Malakand agency of Khyber Pakhtunkhwa province – through the

contextualization of the results of the systematic landscape archaeological survey.

2. The Geographical Setting of the Study Area

The study area, comprising the districts of Lower Dir, Swat, Buner and Malakand agency, is located in the northwest of Pakistan in Khyber Pakhtunkhwa province (Fig. 1). The study area holds a strategic location on the major access routes, linking China, Tibet and Kashmir in the north and northeast, Afghanistan in the west, Chitral and Central Asia in the north and northwest, and the Vale of Peshawar in the south (Ali & Khan, 1998, pp. 184-185; Rahman, 1968, p. 105; Swati, 1998, p. 88; Fig. 1).

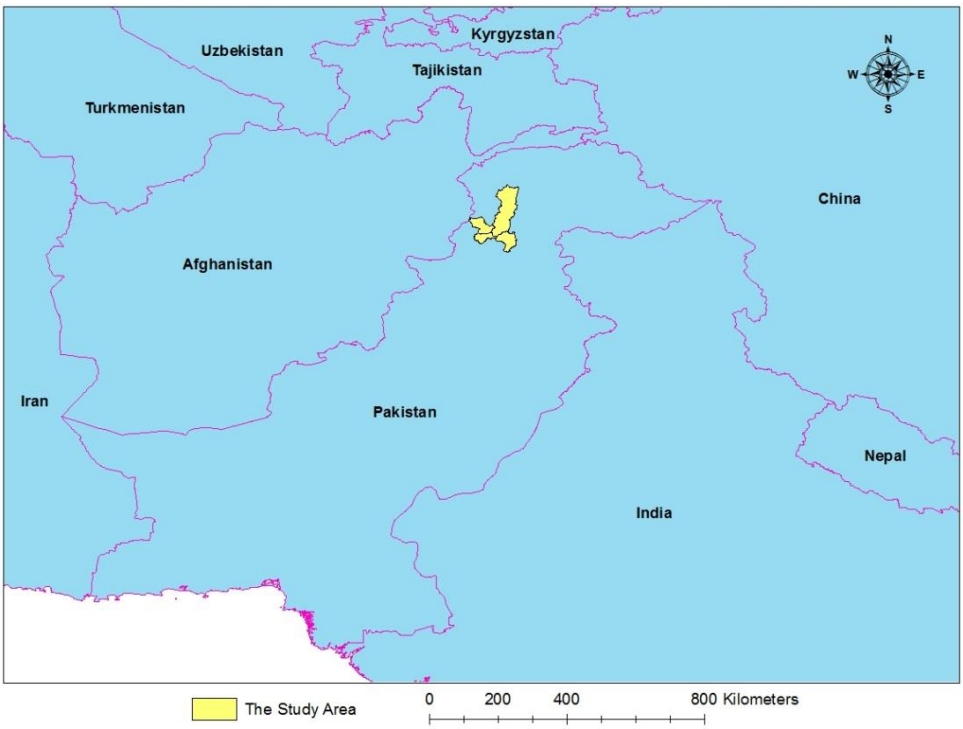

Fig. 1 - Location of the study area in Pakistan in relation to the neighbouring countries.

The study area is surrounded by the Hindu Raj mountains – a branch of the Hindu Kush mountain series – in the north, with a highest peak reaching to 5486 meters in height around the study area (Swati, 1998, p.

87). The districts of Upper Dir and Chitral are located to the north of the study area and the Vale of Peshawar – comprising of the districts of Peshawar, Charsadda, Mardan, Nowshera and Swabi – to the south and southwest (Fig. 2). The districts of Bajaur and Mohmand Agencies and Afghanistan are situated to the west, and district Shangla to the east (Ali et al., 2009, p. 30, 2010; Fig. 2). The strategic location afforded the study area to have close political, religious and cultural relationships with its bordering regions and beyond, and this correlation is supported by the archaeology and history of the study area (Tucci, 1958, pp. 280, 282).

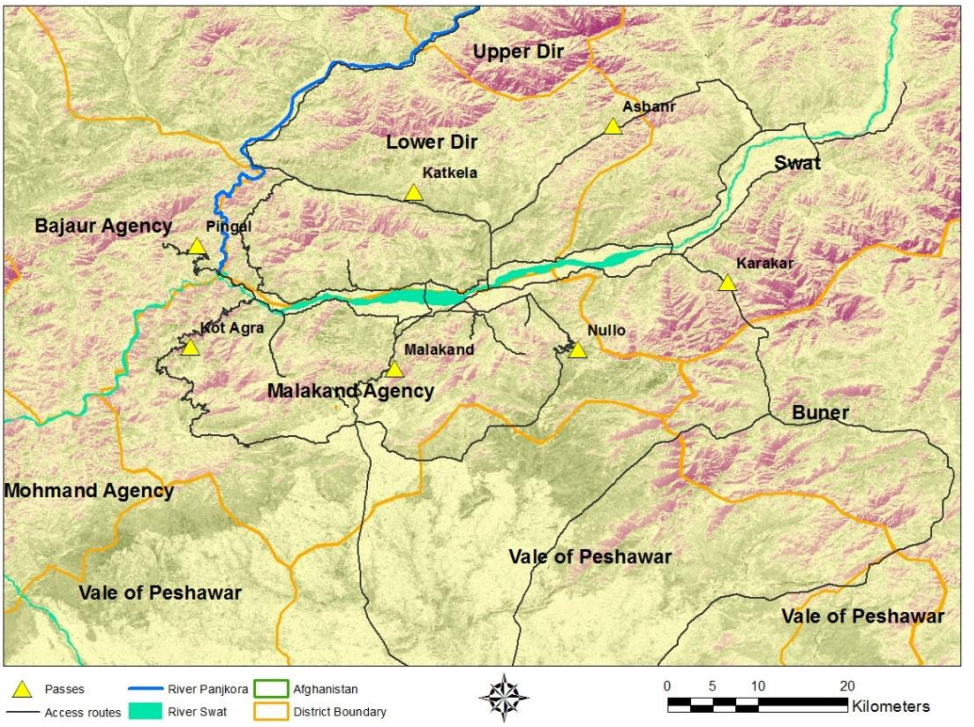

Fig. 2 - Map of the study area showing its neighbouring regions, rivers, access routes and passes.

The study area is a hilly region with many perennial and semi-perennial rivers, seasonal streams and springs; however, the it is primarily drained by the Panjkora and Swat Rivers (Barger & Wright, 1941, p. 14; Dani, 1968, p. 4; Swati, 2008, p. 89; Fig. 2). The abundant water resources were possibly one of the main attractions for the settlement of ancient people in

the study area from Neolithic to the British periods (Ali et al., 2009, pp. 30-37, 2010; Ali & Khan, 1998, p. 185; Dani, 1968, p. 3; Khan R. , 2004, p. 1; Stacul, p. 82, 1987, 1994; Swati, 1998, p. 90). The study area is enclosed by the Malakand Range, Adinzai-Talash Range and the Pingal Range, dividing it from the Vale of Peshawar, district Upper Dir and district Bajaur Agency respectively.

The major passes of Malakand, Karakar, Kot Agra and Nullo connect the study area with the Vale of Peshawar in the south (Fig. 2). Additionally, the historic Shahkot pass also connects the Vale of Peshawar over the Malakand Range (Deane, 1896, pp. 660, 663; Faccenna & Tusa, 1986, p. 478; Olivieri, et al., 2006, p. 119). The Katkela and Pingal passes link the study area with Upper Dir in the north and the tribal district of Bajaur in the west respectively (Fig. 2). Presently, the study area is inhabited by the Yousafzai, a sub-tribe of Pathans. The Yousafzai, migrated to this region from Afghanistan around 1515 CE and pushed the earlier settled Pathan tribe, known as the Swati tribe, across the Indus River to Hazara Division in Khyber Pakhtunkhwa. The Swati tribe is believed to have settled in the Swat valley and adjoining regions around 1000 CE from Afghanistan as part of the Sultan Mahmud Ghaznavid forces (Ali & Khan, 1998, p. 188; Khattak, 1997, pp. 31, 44-45).

3. A Concise Review of Previous Research

Previously, Hindu Shahi sites and their artefacts have been reported from Lower Dir, Malakand Agency, Swat and Buner districts (Ali et al., 2009, 2010; Dani, 1968; Deane, 1896; Godfrey, 1912; Khan et al., 1999; Khattak, 1997; Moritani & Zahir, 2019; Olivieri, 1996, 2003; Olivieri, et al., 2006; Scerrato, 1985, 1986; Stein A., 1921, 1929; Stein M. A., 1898, 1927). However, the Malakand Agency and the Lower Dir districts received relatively little attention and were investigated primarily for other archaeological phenomena and chronological periods (Ali, et al., 2009, 2010; Dani, 1968; Deane, 1896; Khan et al., 1999; Stein A. , 1921).

H. A. Deane (1896: 655), a British political officer for the Swat and Dir regions, surveyed the Lower Dir and Malakand Agency to locate the Buddhist period sites following the Chinese pilgrim Xuanzang's travel account. Similarly, in 1906, Sir Marc Aurel Stein (1921, 1927) and Professor Ahmad Hasan Dani (1968) studied the Talash and Ouch valleys in the Lower Dir, and Thana and Batkhela in the Malakand Agency for

tracing the route of Alexander's invasion of the region in the 4th century BCE as described by Greek historians. In 1999, Muhammad Bahadar Khan and his team (1999, pp. 1-28) surveyed the area between Batkhela to Landakai in Malakand Agency. In 2005, a survey was conducted in Adinzai Tehsil of Lower Dir district (Ali et al., 2009, 2010). The survey resulted in the discoveries of multi-period and Gandhara Grave Culture sites (Ali et al., 2009, p. 30). However, the most intensive archaeological explorations, aided by the excavations of the Bir-Kot Ghwandai settlement and temple, and Raja Gira – Udegram, of the Hindu Shahi dynasty were carried out by Italian Archaeological Mission to Pakistan, primarily in the Swat valley Bagnera, 2015; Callieri, 2005; Faccenna & Gullini, 1958; Filigenzi, 2005, 2010a,b, 2011; Olivieri, 2003, 2010, 2020). Needless to mention here that most of previous archaeological surveys (with the exception of archaeological excavations by the Italian Archaeological Mission in Swat) in the study area were carried out unsystematically and focussed on certain geographical localities, leaving larger regions of the study area unexplored.

4. The Survey Methodologies

Within the context of this research, site means a permanent place of human activity or residence in the past, such as a settlement or workshop (Haggis, 2005, p. 28; Wilkinson, 2003, p. 38). Off-site refers to an area of temporary activity such as ancient hunting or agricultural lands (Bintliff & Snodgrass, 1988, pp. 507-508; Rhoades, 1992, p. 198). During the present survey, a structure, lithic or ceramic scatter of five potsherds or more per square meter was considered as a site (Coningham et al., 2004, p. 3). Before the commencement of the survey, the choice of sampling strategies is considered key to its success, as it reflects a broad picture of archaeological material (Burger et al., 2004, p. 411) within a short time and with limited resources. There are several sampling techniques (see Sinopoli (1991) and Terrenato (2004)); however, during the present survey probabilistic and non-probabilistic strategies were utilized for documentation of the archaeological sites. The non-probabilistic strategy was applied within the earlier surveyed regions of the study area (Ali et al., 2009; 2010; Dani, 1968; Deane, 1896; Rahman, 1968, 1979a; Khan et al., 1999; Stein A., 1921; Fig. 3). This strategy was applied to understand the relationships of sites with each other and with the surrounding

landscapes. The probabilistic strategy was applied in new and unexplored to find out the extent of Hindu Shahi material and to understand their settlement patterns on a regional scale (Fig. 3).

The archaeological surveys, based on systematic transect methodology, are relatively rare in Pakistan (Zahir and Khan, 2018, 2020). These methods have been applied in Lower Dir, Chitral and Upper Kohistan districts of Khyber Pakhtunkhwa province and district Loralai in Balochistan province (Ali et al., 2009, 2010; Ali et al., 2016; Samad, et al., 2012; Zahir & Khan, 2018, 2020). The systematic transect survey affords archaeologists a tool to sample information from a large region through walking in regularized transects, using handheld Global Positioning System or GPS and recording features of the sites (Ali et al., 2010, p. 138; Burke & Smith, 2004, p. 65; Yatoo, 2012, p. 110; Zahir & Khan, 2018, p. 6, 2020, p. 347).

The adaptable nature of the transect surveys allows archaeologists to decide the number of team members and the space between the transects in consideration to the research aims and ground surface (Mattingly, 2000, p. 8; Orton, 2000, p. 19; Tartaron, 2003, p. 29; Ur & Hammer, 2009, p. 38). A total of 8 transects were walked in Malakand Agency and Lower Dir with 5 and 10 meters spaces (Fig. 3). The vegetation cover, accessibility, nature of the terrain, visibility, difficulty and time required were some of deciding factors for the spaces of the transects. The members of the local communities in the study area were also involved in the present survey. Their involvement was instrumental in the discovery of new sites and gathering of information about passes and routes. As part of the present survey, a pilot survey was also carried out in districts Buner and Swat for the detailed documentation of the earlier recorded sites and its findings were used in the planning and choice of the survey strategies and geographical entities.

Two fieldworks were conducted in 2012 and 2013, and approximately 2542 square kilometres was investigated (Fig. 3). Compared to Swat and Buner, the districts Malakand Agency and Lower Dir have received little attention. As a result, a total of 918 square kilometres area was investigated more intensively within these districts (Fig. 3). With the help of these different survey techniques and strategies, nearly 240 square kilometres area (9% of the total 2542 square kilometres) was studied within the study area. The survey datasets were primarily recorded in Microsoft Excel, while the analysis of the sites was conducted

through the use of Google Earth and Geographical Information System (GIS) software packages. In the study area, the earlier researchers have identified and characterised different periods on the basis of structures, pottery typologies, coins, inscriptions and other artefacts (Ali et al., 2009, 2010; Dani, 1968; Godfrey, 1912; Khan et al., 1999; Khattak, 1997; Olivieri, et al., 2006; Scerrato, 1985, 1986; Stein A., 1921, 1929; Stein M. A., 1898, 1927). These characterizations provided clear and workable ideas for identification of Hindu Shahi sites. These sites were identified and recorded due to their unique structures, masonry, pottery assemblages, locations and landscape choices.

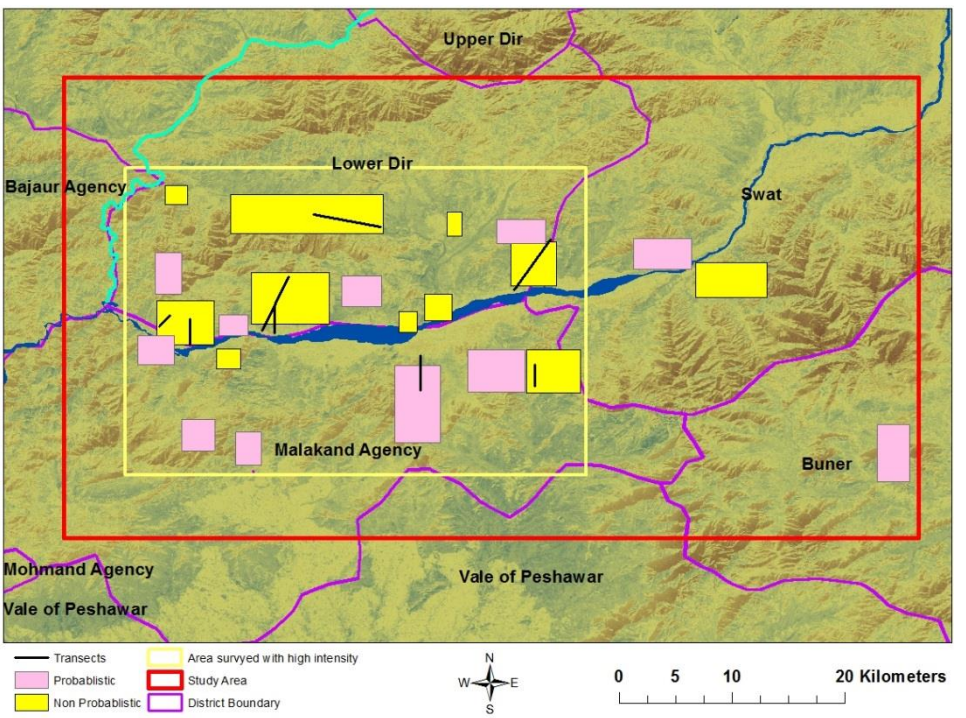

Fig. 3 - Map showing the study area, sampling and the transects methodologies and the intensively surveyed area in districts Malakand Agency and Lower Dir.

5. Results and Analyses of the Survey

During the survey, a total of 225 Hindu Shahi period sites were recorded. These sites are widely spread in the study area, holding strategic locations in close proximity to the access routes and passes with the exception of

Mayar valley (Fig. 4). These passes and routes are the entry and exit points, allowing access to and from the study area to the neighbouring regions (Fig. 4). The uniform occupation of sites at key strategic locations suggests their close association with the passes and routes, and the observation and control of movement of people and goods . Compared to other areas within the study area, most of the sites are concentrated along the Vale of Peshawar, primarily around the Kot Agra, Malakand, Nullo and Karakar passes (Fig. 4). In district Buner, they are located in Tor Warsak locality, overseeing the routes and valley openings from Buner to Swat via the Karakar Pass and the Ilam mountain top respectively (Fig. 4). To the north, towards the Upper Dir district, the Hindu Shahi sites are primarily concentrated along the Katkela Pass and are not found beyond Udegram village in district Swat and Talash valley in district Lower Dir (Deane, 1896; Olivieri, 1996; Rahman, 1968; Fig. 4). Towards the west side of the district of Bajaur Agency, the sites are located in Guru and Tauda Cheena in district Lower Dir. In Guru, it is the last known site of the Hindu Shahi period in north-west end of the study area and it is located in front of a valley passage leading from River Panjkora (Fig. 4).

In Tauda Cheena, the sites are located to the north side of Swat River almost opposite the another cluster of Hindu Shahi sites in Qulangai, Malakand Agency where the Kot Agra and Pingal pass open, leading from Vale of Peshawar and the tribal district of Bajaur Agency respectively (Fig. 4). Throughout the study area, the Hindu Shahi sites are spatially organized in a manner to maintain a visual interaction with each other in their respective localities and with the neighbouring sites. This is particularly evident from the sites located along the Swat River between the Mayar valley and Qulangai and between the Nagwa and Parrai localities (Fig. 4). A series of Hindu Shahi sites are located at several intervals along the different routes leading from district Swat, district Bajaur Agency and the Vale of Peshawar towards the Lower Dir district (Fig. 4).

In the study area, the Mayar valley is an exception to all other localities as it is located far from all known routes and passes that link it with the neighbouring regions (Fig. 4). It is located about 18 kilometres to the west of the Chakdara Bridge, district Lower Dir, to the north side of River Swat, measuring roughly 3 x 3 kilometres in area. The Mayar valleys is surrounded by the Talash range, and its offshoots, on three sides and the Swat River on the fourth, making it the most naturally protected

locality within the study area (Fig. 4). In other localities, the sites are instantly faced at entry points from the neighbouring regions. To the Mayar valley, the approaches from outside the study area are lengthy, difficult and marred by natural barriers, such as mountains and rivers from all directions (Fig. 4). However, within the study area, Mayar valley holds a pivotal location with easy accessibility from most of the other outlying localities with abundant, and rather vulnerable, Hindu Shahi sites (Fig. 4).

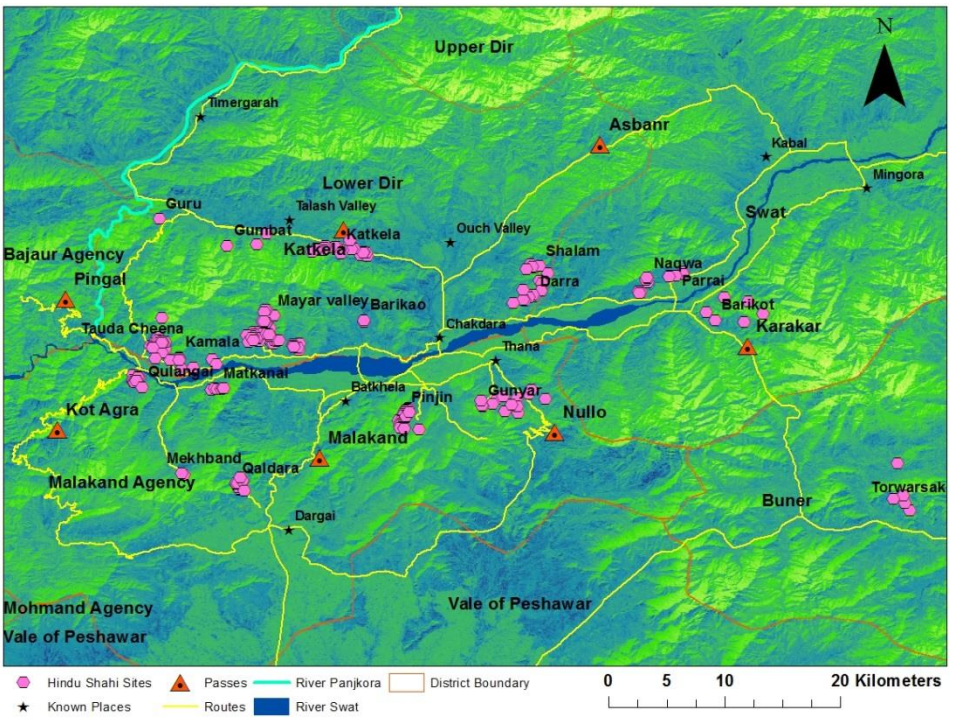

Fig. 4 - Map showing the geographical distribution of Hindu Shahi sites across the study area.

The geographical extent of Hindu Shahi sites gives an idea of a small and well-defined entity and shows a firm control of the study area from the neighbouring regions. Almost all openings that could allow entry the study area from the neighbouring regions have been covered and protected with militarized Hindu Shahi sites. The Mayar valley is located away from all neighbouring regions and the entry points, enjoying a more central and naturally protected location. The Hindu Shahi sites are largely located in

similar landscape settings and show close association with routes, mountain passes and their supervision.

The large number of 225 sites attests a considerable Hindu Shahi presence in the study area; however, the concentration and distribution of sites varies from locality to locality. The areas along the Swat River are more densely occupied, such as the Mayar valley, which houses the largest number or 54 (or 24% of 225) sites (Fig. 4). The area around the passes, near the Kot Agra and Pingal passes appear to have been the second most densely settled region and first among the passes, with 23 sites in Tauda Cheena and 14 in Qulangai (Fig. 4). These localities are situated on the opposite banks of Swat River facing each other and overseeing their respective passes (Fig. 4). A total of 130 (or 58% of total 225) sites are located at different intervals between the Mayar valley and, the Tauda Cheena and Qulangai localities and these regions bear substantial evidence of Hindu Shahi architectural activities (Fig. 4). Nearby the Nullo and Charat Passes, the Hindu Shahi sites are variously spread in the length and breadth of Pinjin, Nullo, and Gunyar localities, representing the third most densely settled region in the study area and second highest among localities around the mountain passes (Fig. 4). All the above-mentioned passes, with the exception of the Pingal pass, connect the study area with the Vale of Peshawar.

In the north of the study area, 25 Hindu Shahi sites cover nearly 10 kilometres area close to the Katkela pass and these sites face the Ouch valley, where Asbanr pass descends from Swat region (Fig. 4). A further cluster of 14 sites is located in the Darra locality on a hill that separates the Lower Dir from Swat region and they overlook the Ouch valley in north and the route coming from Shamozai along the Swat River in the south (Fig. 4). In Qaldara, 14 sites are located between the Malakand and Kot Agra passes (Fig. 4).

Thus, it appears that during the Hindu Shahi period, the Mayar valley, and its adjacent localities of Tauda Cheena and Qulangai to the west, were densely populated. The concentration of Hindu Shahi sites is much higher in the Mayar valley and it is followed by the Nullo and Charat passes that connected to the Vale of Peshawar. In other directions, the number of sites are relatively less and also spread over a large area. The secured location and high concentration of Hindu Shahi sites make Mayar valley as the most guarded locality in the study area.

Furthermore, the analysis reveals that all Hindu Shahi sites are constructed either on hilltops or slopes at high altitudes between 511-1272 meters above sea level (MASL). Due to the availability of limited flat surfaces for construction, the structures follow the natural contours of hills (Fig. 5). The Hindu Shahi structures are constructed on the available surfaces without digging of foundations and the existing topography and mountains contours are skilfully utilised. The stone blocks are directly placed on the bedrocks without the application of mortars (Fig. 5). Functionally, digging foundations into the rocky hard surfaces would have been a difficult job and it was much easier and quicker to erect walls between the variedly elevated surfaces.

Fig. 5 - The utilization of the irregular contours, site 1, Qulangai, Malakand Agency.

The Hindu Shahi structures are constructed with stone blocks of various sizes and shapes. Consequently, the masonry of Hindu Shahi structures is

generally rough in the whole study area (Fig. 5). Throughout the study area, the masonry technique is identical, though, clear differences can be seen in the finishing, dressing and placement of blocks within different localities. These variations affect the final display of sites with structures ranging from rough and irregular to sophisticated and refined in different regions of the study area. The widths of the walls of the structures range from 70 centimetres to 1 meter. During the survey, various structures, primarily rooms, were recorded between 2 to 8 meters in height. The watchtowers, however, ranged between 3 to 11 meters in height. No structure was discovered in its original condition, suggesting that their original heights could have been different. The arrow-slit are more common within the Hindu Shahi sites and their numbers vary from site to site and they are constructed at around the average human height (Fig. 6).

Fig. 6 - Multiple arrow slits and an extended platform for human support/ standing against them, site 153, Tauda Cheena, district Lower Dir.

The location of sites on high mountaintops and slopes make them considerably distant and hard to access from the surrounding deep valleys. Such settings allow them situational awareness in maintaining a visual interaction within their respective valleys and with the neighbouring sites

and dominate the surrounding landscapes. Additionally, their locations at considerable heights in rugged terrain serve as natural fortifications to the sites and provide these sites with enhanced natural safety and restricted access (Fig. 5). The development of sites on prime and strategic locations appear to be pre-decided and throw light on the intelligent utilization and maximization of the natural conditions for strategic and defensive benefits. Furthermore, the construction of Hindu Shahi sites on mountains increase their political and administrative control in ensuring maximum safety, communication and surveillance of the study during the turmoil of the Ghaznavid onslaughts.

The analysis of 225 Hindu Shahi sites led to the identification and categorization of four different types of sites in the study area (Table 1).

Type of site	Occurrence
Watchtower	140
Non-watchtower	82
Wells	2
Temple	1
Total	**225**

Tab. 1 - Typology of Hindu Shahi sites in the study area.

6. Hindu Shahi sites with watchtowers

A total of 140 (or 62% of 225) sites include single or multiple watchtowers, ranging from 1 to 8 per site, for total of 217 such structures. The upper structures of most watchtowers have fallen down while their platforms or bases have survived. Some of the watchtowers are still partially intact, giving glimpses about their original plans, sizes and possible functions. The relatively intact watchtower, recorded in the study area, still rises to about 11 meters height and consists of a platform and 3 storeys or floors (Fig. 7). The platforms are solid structures, constructed of locally available rocks (such as schist) and mud and the multiple storeys are erected on top of them (Fig. 8). The first floors are accessible through narrow doorways at the top of platforms; usually set at a much higher elevation than the average human height. The 2nd and 3rd floors were accessed from the first floor through a slit or open space in one corner of the watchtowers, possibly using a wooden ladder. No permanent stairs or

other means for accessibility to the first floor were recorded at any of the watchtowers, suggesting their access through retractable ladders.

The upper floors include holes for beams and timbers for supporting floors, windows and arrow-slits (Figures 7 and 8). The overall plan and the associated features of watchtowers suggest their primary function as independent and self-sustaining structures at the time of hostile attacks. The multiple arrow-slits on all floors face various directions, suggesting their offensive function of shooting arrows on the advancing army or repulsing attacks (Figs. 7 and 8).

Fig. 7 - The most intact watchtower showing platform, windows on 2nd and 3rd floors and the arrow-slits, site 111, Charat Pass, district Malakand Agency.

The analysis of Hindu Shahi sites with watchtowers suggests that Mayar valley had the largest number of 29 (or 31%) of 140 watchtower sites, corroborating its highly defensive status in the study area (Fig. 9 and Table 2). The localities around Kot Agra and Pingal passes, such as Tauda Cheena, Qulangai and Matkanai appear to be the second highly protected

– and first among the localities around the passes – with 31 sites (Fig. 9 and Table 2). The Qulangai locality serves as a convergence region and links the Vale of Peshawar through Kot Agra pass, the district Bajaur Agency through Pingal pass and district Lower Dir through a river crossing bridge (Fig. 9). The Mayar valley and other localities across the Swat River up to Qulangai include a total of 76 (or 54%) of 140 watchtowers sites, making this area as the most highly protected and densely populated during the Hindu Shahi period (Fig. 9). Around the Charat and Nullo Passes, a total of 26 watchtower sites are located in Pinjin and Gunyar and its nearby localities, followed by Katkela pass with 19 sites (Fig. 9 and Table 2). Darra in Lower Dir and Qaldara in Malakand Agency include 10 and 8 sites respectively, whereas remaining localities include 1 to 7 sites (Fig. 9 and Table 2).

Fig. 8 - Showing the filled platform, arrow-slits, beam slot and a window on the upper extreme left side, site 153, Tauda Cheena, Lower Dir.

Within the Hindu Shahi sites with watchtowers, sites with single watchtowers are more common and are widely distributed in the study area, while sites with multiple watchtowers are relatively few and

confined to certain localities (Fig. 9 and Table 2). The Mayar valley alone includes the highest density of sites with watchtowers, housing 21% of the total 217 watchtowers (Fig. 9 and Table 2). It is followed by Tauda Cheena, Qulangai and Matkanai localities situated around the Kot Agra and Pingal passes, where 58 (or 27%) of 217 watchtowers are constructed (Fig. 9 and Table 2). Additionally, these localities include sites with 4 to 8 watchtowers per site, highlighting the overall high position of this area in the study area (Fig. 9). A total of 41 (or 19%) of 217 watchtowers are located around the Charat and Nullo Passes in Pinjin and Gunyar localities, followed by localities around the Katkela pass with 28 (or 13%) of 217 watchtowers (Fig. 9 and Table 2). Other sites with watchtowers are sparsely distributed throughout the study area in association with their nearby passes, routes and the neighbouring regions (Fig. 9 and Table 2).

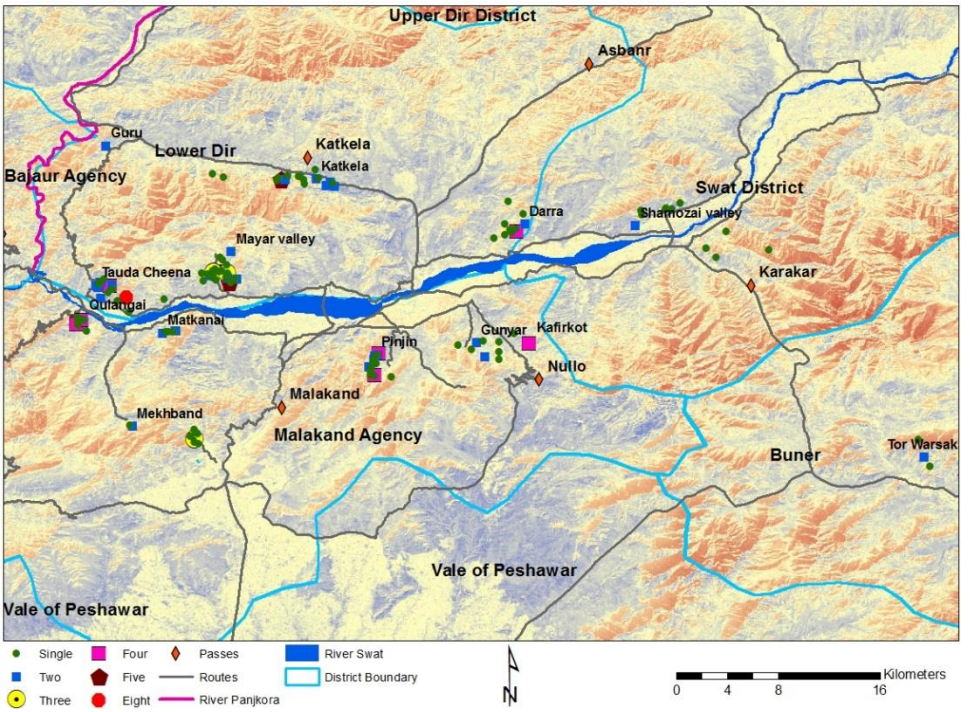

Fig. 9 - The distribution patterns of Hindu Shahi sites with watchtowers.

Locality	n=140	Single	Two	Three	Four	Five	Eight	*Total*
Mayar valley	29	20	5	2	1	1		***45***
Qaldara	8	7		1				***10***
Mekhband	2	1	1					***3***
Qulangai	9	6			3			***18***
Tauda	16	9	5		1		1	***31***
Cheena Matkanai	6	3	3					***9***
Pinjin	16	10	4		2			***26***
Gunyar	10	7	2		1			***15***
Katkela	19	13	5			1		***28***
Guru	1		1					***2***
Darra	10	8	1		1			***14***
Shamozai	7	6	1					***8***
Barikot	4	4						***4***
Tor Warsak	3	2	1					***4***
Total	***140***	***96***	*29*	*3*	*9*	*2*	*1*	***217***

Tab. 2 - The distribution of watchtowers in different localities.

The plan and distribution of watchtowers suggest their roles in defence, suppression of the enemy attack, supervision of the routes and counterattacks on the enemies in broader context of the safety and security considerations of study area. The watchtowers are encountered in all the surveyed localities; however, their density is much higher in the Mayar valley and around passes that are connected to the Vale of Peshawar.

7. The Hindu Shahi non-watchtower sites, wells and temple

The non-watchtower sites are mainly located along the Swat River close to the large size Hindu Shahi sites (Fig. 10). Of the total of 82 non-watchtower sites, 51 (or 62%) are located in the Mayar valley and its surrounding localities, followed by 18 (or 22%) sites in the Shamozai and its adjoining localities (Fig. 10). The non-watchtower sites are either absent or limited to 2-5 sites close to the neighbouring localities (Fig. 10). These sites are not only missing the watchtowers but other structures are also in limited, such as rooms. A total of 8 sites include 10 structures,

while the remaining sites 1 to 2 structures or rooms within. The relative scarcity of non-watchtowers sites along the routes and passes suggests that the Hindu Shahi intentionally avoided their construction in the bordering regions of study area, possibly due to the fear of exposure to the enemy.

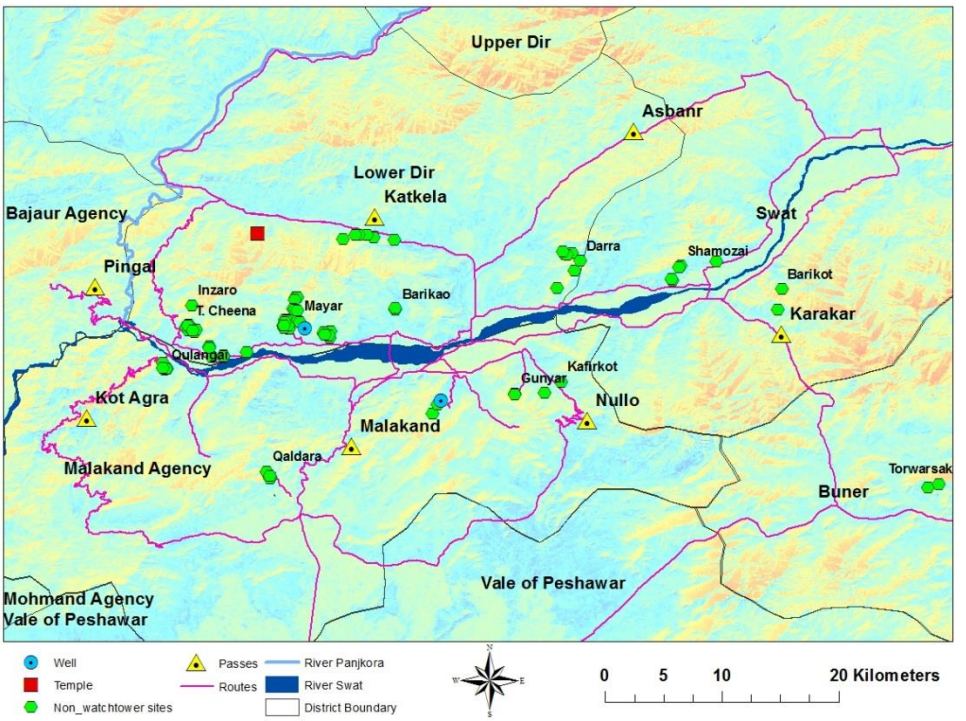

Fig. 10 - Distribution of non-watchtower sites, temple and wells.

The two sites with wells are located in the Mayar valley and Pinjin locality (Fig. 10). In the Mayar valley, the well is dug below the largest site of the study area in terms of structures, while in Pinjin, it is located in the lower valley close to the Hindu Shahi settlements. Both the wells are still being used by the local population as a source of drinking water.

The singular Hindu Shahi temple is situated in Gumbat locality within the Talash valley, district Lower Dir (Dani 1968; Deane 1896; Rahman & Khan, 2008; Stein, A. 1921; Fig. 12). The site of the single Hindu Shahi temple in fortified valley of Gumbat, district Lower Dir was also protected through the provision of numerous forts around it (Dani, 1968, p. 11; Rahman, 1968, p. 105). Hindu Shahi temples have been

recorded in other parts of the kingdom at Nandana in Punjab and Dera Ismail Khan in Khyber Pakhtunkhwa (Masih, 2002; Meister, 2010). The scarcity of temples and abundance of forts in the study area show major differences in the typology of sites with other parts of the Hindu Shahi kingdom, where the temples number is higher than the reported forts or the watchtowers. The location of a Hindu Shahi temple at Gumbat at the extreme northern extent of the study area in an isolated valley away from the densely populated localities is very interesting and unusual.

The Hindu Shahi and the Ghaznavids are historically known to have engaged in conflicts since circa 963 CE (Al-Bīrūnī & Sachau, 1964; Dani, 2001; Dupree, 1980; Elliot & Dowson, 1966; Farishta, 1958; Shah, 2012; Stein, A., 1900). They fought several battles and finally the Hindu Shahi lost the capital centre of Hund to the Ghaznavids around c. 1001-2 CE (Mishra 1972; Pāṇḍeya, 1973; Rahman 1979a). With this conquest the Hindu Shahi are historically known to have shifted their capital centre to a new location. However, the concerned historical accounts are silent on the name or location of the new capital (Mishra 1972, p. 129). This absence has led scholars to consider Nandana (e.g. Ali and Qazi 2008; Masih 2002, Nazim 1927; Pāṇḍeya, 1973), Lahore (e.g. Khan F. , 1986; Ray, 1931 ; Vaidya, 1926)) and Bhatinda in the modern state of Patiala in India (Khan M. , 1976, p. 980) as the capital centre after the fall of Hund. Mishra (1972, p. 129) places the foundation of the new Hindu Shahi capital in a secured mountain range far away from the main river. However, Mishra (1972) neither furnishes the archaeological or historical source, nor the names of the river and the secured mountain range, leaving the matter ambiguous. Dani (1968, p. 31), Rahman (1979a, p. 305) and Olivieri (1996, pp. 74-75) suggested that after the fall of Hund, the Hindu Shahi dynasty retreated to the secured mountainous region of the district Malakand Agency, Lower Dir, Swat and Buner (the present study area) and continued their rule from here for some time.

8. Discussion

The systematic methods and up-to-date survey strategies utilized during the current archaeological landscape survey resulted in the recording of 225 Hindu Shahi sites. This figure surpasses all their known regions including the capital centres of Kabul, Afghanistan and Hund in the Vale of Peshawar. The selected sampling, transects, community engagement

and pilot survey strategies resulted in the recording of new sites. The utilization of different software packages, such as Google Earth and ArcGIS, helped in understanding and investigating the relationship of sites with each other and with the landscape features such as mountains, passes, rivers and trade and communication routes.

Hindu Shahi sites geographically located and focus around passes and routes, such as Kot Agra, Malakand, Karakar, Shahkot, Nullo, Pingal and the Katkela passes in the study area. These passes are located at critical junctions, connecting the study area with the neighbouring regions. The layout and organization of the Hindu Shahi sites at these predominant convergent locations effectively seals the study area from all directions. However, areas along the Vale of Peshawar are far more densely populated and systematically protected. Furthermore, within the study area, the Mayar valley in district Lower Dir holds a central and distinct location away from all access routes and the neighbouring regions. It also houses the largest number of Hindus Shahi sites – the watchtowers, and the non-watchtower sites – pointing to their intensive presence and activities.

All of the recorded Hindu Shahi sites in the study area are located in rough terrain and over high hilltops and slopes, occupying strategic locations. This setting of sites enables the occupants to administer the surrounding routes and passes, taking full advantage of the steep cliffs and slopes as natural barriers against enemies from their respective valley floors. This setting also facilitates visual interactions and communications with the nearby Hindu Shahi sites, offering inhabitants real time opportunity to allow or deny entry and launch or repulse an attack.

The watchtowers include highly defensive and offensive architectural features. The relatively significant height of the narrow doorways on the first floors, without permanent means of access, empower the occupants to control entry to the interior of the watchtowers during peace and wartimes. The multiple arrow-slits on all the floors of the watchtowers could have been used to shoot arrows in all directions by many individuals in defence or attack during wartime. The windows on 2nd and 3rd floors are primarily meant for light and fresh air; however, it is equally possible that these could have been used for historic wartime activities such as shooting arrows, throwing stones, hot water and fireballs. Windows on the first floors were probably avoided due to their

low heights that could pose a threat to the watchtowers for facilitating access to the interior of the watchtowers.

The large number of 217 highly visible watchtowers on top of mountains and slopes must have been of considerable value to the Hindu Shahi and could have effectively reflected and conveyed the messages of their authority and power in the study area. Their documentation is not only significant in the study area, but, also in Pakistan and the South Asia. It is for the first time that such a large number of defensive structures and watchtowers have been reported in Pakistan and South Asia, and importantly from a relatively small study area and belonging to a single chronological period. The study area and its surrounding regions have witnessed the onslaught of invasions from outside from at least the 6th century BCE. However, there is almost no archaeological evidence of the preparation or construction of such a huge defensive structures and strategies by a single Indian ruling house or common people against an invading army.

The majority of the non-watchtower sites are situated along the Swat River, especially in the Mayar valley and its nearby localities. The non-existence of watchtowers and the relative scarcity of other structures make these sites ordinary and less defensive. Perhaps their secured location and their locations away from the passes and their neighbouring regions was the reason for their absence. In contrast, the Mayar valley and other localities along the Swat River are relatively distant and safer from the neighbouring regions, such as Vale of Peshawar, and mountain passes. The locations of Hindu Shahi sites without watchtower suggest that these sites were probably used for housing soldiers, domestic servants and skilled workers. The high number of non-watchtower sites in Mayar valley and other localities along the Swat River seems to have been deliberate. This possibly meant to keep maximum number of soldiers and citizens in important localities close to important or administrative centres in order to call on a short notice in case of external threats, and for other tasks, such as construction and as required by officials in high offices.

The location of a single Hindu Shahi temple in the study area away from densely settled localities such as Katkela, Mayar valley is unusual. The isolated location of Gumbat temple away from the political centres, coupled with the lack of other temples in the study area, point to a significant difference from Hindu Shahi practices in other parts of the kingdom, such as Nandana, Hund and Dera Ismail Khan. The Hindu Shahi

used to construct multiple temples in populated areas and key centres of their kingdom. This rare phenomenon suggests that either the geo-political situations or the religious preferences of Hindu Shahi changed at the time and as a result, they not only constructed the lone temple at the extreme northern edge of the study area in a desolated valley but they also kept their numbers to the minimum. It is possible that the geo-political situations did not allow them to construct elaborate Hindu temples in the study area as they used to in other parts of their kingdom prior to their defeat at Hund.

The results of the present survey in the study area revealed that Hindu Shahi sites are highly defensive and distinctive in nature that from other regional sites of the dynasty. The nature of these site is also different from preceding and succeeding cultural epochs, from Neolithic to the British period, in the study area and its surrounding regions. For the very first time during the Hindu Shahi period, the study area has witnessed such an organized geographical distribution of defensive sites, covering all key entry and exit points on either side. It is also peculiar to note that they exclusively occupied the rugged terrain of mountains and introduced an entirely new pattern in the settlement history of the study area, and broader regions of Pakistan and South Asia. The abundance and colossal sizes of watchtowers with highly defensive and offensive features have no parallels during any chronological period in north-western Pakistan and South Asia. The unprecedented numbers of sites, their geographical distribution, strategic locations on mountains' tops and slopes, the massive architecture in the form of fortifications and watchtowers, point to a highly militarised architecture and purpose. These sites also shed light on the Hindu Shahi defensive networks and strategies in mitigating attacks or invasions from rom neighbouring regions.

The analysis of the survey data also indicated both similarities and differences within the Hindu Shahi architecture in the study area. The uniform construction of sites on naturally secured locations, the size of walls and the nature of masonry technique applied exhibit regional resemblances. Throughout the study area, the watchtowers followed the same plan, shapes, sizes and masonry. The majority of the watchtowers are concentrated in the Mayar valley and bordering regions of the Vale of Peshawar. This organization reflects conscious decisions and landscape choices in the development and distribution of watchtowers in the study area. The differences in the number of sites, especially the sites with

watchtowers, indicate the possible socio-political and economic statuses as well as the security concerns of the Hindu Shahi dynasty. The Hindu Shahis decisions on the numbers of sites and the distribution of watchtowers study area were possibly driven by their needs, and by their citizens. Similarities in most aspects of the Hindu Shahi sites in the study area suggest that these sites are contemporary and were developed within a short span of time.

The building material is abundantly available around the sites. However, quarrying, shaping and dressing the stone blocks would have required financial resources and the involvement of large number of skilled and unskilled construction workers. Probably, the construction of sites was commissioned by a single ruling authority and through the utilization of state resources. It would have been almost impossible to commission such a huge strategic architectural endeavour particularly on high mountains in a relatively large study area without the supervision and resources of the state. Such regional similarity, consistency and architectural symmetry could have only be achieved through institutional or state patronage. It was probably driven by the survival instincts and defensive strategies of the Hindu Shahi dynasty. The uniform, predetermined, calculated, deliberate and purpose-built considerations suggest the involvement and close supervision of the Hindu Shahi and their elites or bureaucrats in the development of sites.

The number, nature and distribution of the Hindu Shahi sites raise many important questions, such as when and why did the Hindu Shahi establish such a large number of sites in the study area? Why did the Hindu Shahi build sites with mostly defensive features? What forced the Hindu Shahi to introduce radical changes in the settlement patterns of the study area? Why the Hindu Shahi settlement activities in the study area are absent in the relevant historic accounts? To answers these and other questions, it would require scientific and extensive investigations in the future. However, the retreat of the Hindu Shahi after the fall of their capital at Hund, district Swabi in Khyber Pakhtunkhwa province, as suggested by the scholars to the present study area (Dani 1968: 31; Rahman 1979a: 305; Olivieri 1996: 74-75) is not without valid basis. The study area is located around 115 kilometres to the north of the Hund to Batkhela Town. The Vale of Peshawar and the study area were both under the Hindu Shahi control right from their alleged emergence in circa 822 CE. The close proximity of these regions suggests that the Hindu Shahi

were familiar with the study area and they copiously utilized defensive strengths and potentials of this broad landscape after the siege and fall of Hund around 1001-1002 CE to the Ghaznavids.

The Hindu Shahi remained in power from c. 822 to 1026 CE and accumulated a huge amount of money, evidenced from the number of their standing army, tributes and lavish lifestyle as recorded by contemporary Muslim historians. They clearly had the resources to invest huge amount of money and mobilize a large workforce to plan and erect defensive settlements to defend themselves, their people and faith in their fight with the Muslim invading army of the Ghaznavids. Thus, their settlement patterns within the study area could be a reflection of their ongoing conflicts with the Ghaznavids. They established numerous networks of forts with multiple watchtowers, across the study area especially along the Vale of Peshawar to prevent and withstand the Ghaznavids' onslaught after the fall of their capital at Hund and continue their rule from the fortified study area.

This study revealed several distinctive features of the Mayar valley during the Hindu Shahi period. Firstly, it is the most secured location in the study area away from all the passes, routes and the neighbouring regions. Secondly, it is surrounded by mountains and the Swat and Panjkora rivers, making it additionally protected and hard to access from outside the study area. Thirdly, the Mayar valley is centrally located and is easily accessible from most of the localities in the study area. Thus, it was logistically and administratively convenient to coordinate and manage the political, economic and administrative affairs of the study area from Mayar valley. The other localities, in contrast, are distant, marginal and prone to assaults from the neighbouring regions. Fourthly, the Mayar valley has relatively good agricultural flat lands along with plenty of water resources to cater for the needs of the Hindu Shahi dynasty and people on the run. The abundance of agricultural resources and potentials could have empowered the valley to host events of social, religious and political significance as well as meet the subsistence, architectural and artistic needs of the Hindu Shahi dynasty. Finally, the most vital aspect of the Mayar valley lies in its naturally safety and centralized location within the study area and the surrounding regions. These distinguishing features, along with the presence of a large number of Hindu Shahi sites and watchtowers, point to the significance and high stature of the Mayar

valley. The Mayar valley appears to be the most suitable place for the centre of Hindu Shahi power in the study area and adjoining regions.

Thus, there could have been many reasons for the unique stature of Mayar valley during the Hindu Shahi period; however, the possible establishment of a seat of power in their retreat to the study area also needs to be taken into account. The considerable number of sites with multiple watchtowers lent support to this argument. These sites helped in meeting the administrative, residential and defensive requirements of the kings and elites of the Hindu Shahi dynasty on the run from the Ghaznavids. However, these aspects require further intensive explorations, scientific excavations and dating for understanding and establishing the site hierarchies and their possible socio-religious and political roles. It is very important to utilize new methods, software packages (such as ArcGIS) and current interpretative regimes in archaeological investigations in Pakistan for visual presentation of data, analyses and interpretations of sites. The landscape approach is also critical for understanding sites well beyond their physical boundaries in the respective areas and on regional level, generally known as landscape archaeology. The excessive agricultural and construction activities and the illegal digging of archaeological sites pose a serious threat to the archaeology of the Hindu Shahi in the study area. It is suggested that immediate steps shall be taken by the concerned authorities and other stakeholders to safeguard this rich and unique Hindu heritage of Pakistan before it is too late.

9. Summary

The present systematic landscape archaeological survey was conducted in districts Malakand agency, Lower Dir, Swat and Buner of Khyber Pakhtunkhwa province, Pakistan. A total of 2542 square kilometres study area was investigated through systematic techniques. The survey resulted in the documentation of 225 archaeological sites belonging to the Hindu Shahi period, including 140 sites with 217 watchtowers, 82 sites without watchtowers, two wells and a single Hindu temple. Most of these sites are massive constructions with simple masonry and without any foundations, utilizing the natural surfaces of the landscape. Almost all of these sites are located on hard to access and naturally protected mountains' tops and slopes. The vast majority of these sites, especially the sites with

watchtowers, are linked with the nearby mountain passes and are strategically placed in defensive positions along the neighbouring regions, particularly with the Vale of Peshawar.

The strategic placement of these sites allowed the Hindu Shahi kingdom to control and administer access routes, entry and exit points to the study area, probably during the turmoil of the Ghaznavid invasion of South Asia. The huge investment in the construction of these massive structures in difficult terrains is reflective of the last ditch effort of the Hindu Shahi dynasty for survival against the Ghaznavids. The natural safety and the Hindu Shahi concerns for the protection of the Mayar valley in the study area – as reflected in the density and nature of the Hindu Shahi sites – makes it as the most plausible and appropriate seat of power for the Hindu Shahi dynasty on the run in north-western Pakistan.

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