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The Bala Hissar of Kabul

Revealing a fortress-palace in Afghanistan

by

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The Institution of Royal Engineers has been undergoing a number of changes recently, to meet the professional needs of members of the Corps of Royal Engineers.

Whilst we are shaping the Institution for the future, we still wish to retain our strong links with the past. So it is not inappropriate that this monograph, the first of a new series of Professional Papers Royal Engineers, has a heritage theme.

Brigadier Bill Woodburn, a former Royal Engineer, has for many years been studying historic fortified architecture in Europe and Asia. In this paper he examines the premier fortress-palace of Afghanistan, the Bala Hissar of Kabul, with which Royal Engineers were involved in the two Anglo-Afghan wars of the nineteenth century. Drawing on European archives, particularly the resources that this Institution holds in its Museum and Library, a clear description emerges of what that fortress-palace was like before much of its structure was lost. The paper is enhanced with reconstruction drawings by Ian Templeton, an architect who also served in the Royal Engineers during his National Service.

Currently the Royal Engineers are again involved in Afghanistan; this time assisting its government and people. Although that country is rightly looking to the future, it is also trying to preserve aspects of its historic environment. To that end, this paper makes a contribution towards a clearer understanding of a site of central importance in Afghan history; the Bala Hissar of Kabul.

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Bill Woodburn joined the Royal Engineers in 1951. After training at Sandhurst and Cambridge University, he saw service in Libya, Cyprus, Jordan and the Arabian Gulf, as well as in a variety of regimental and staff appointments in the United Kingdom and Germany. From 1973-76 he commanded an engineer regiment in Germany, returning there a couple of years later as a deputy commander of an armoured division and then as the defence attaché at the British Embassy, Bonn. From 1983-86, he was Deputy Engineer-in-Chief (Army) in London. After retiring from the Army, he worked at the Royal Institute for International Affairs in London.

Bill has studied castles and other early fortification in Europe and Asia for much of his adult life. It was in the early 1960s that he started looking at architecture in the heartland of Asia. Usually accompanied by his wife, Ingrid, he has travelled in the Near-East, Iran, Central Asia, India and, several times, in north-western Pakistan and Afghanistan.

The Bala Hissar of Kabul

Revealing a fortress-palace in Afghanistan

BRIGADIER C W WOODBURN MA FINSTRE

The Bala Hissar, or “High Fort”, of Kabul was for many centuries the seat of a ruler and played an essential part in state development in Afghanistan. Fortified from perhaps the 6th Centuryⁱ, the fortress reached its peak under Mughal rulers in the 16th and 17th Centuries. Its palace was rebuilt by an Afghan king in the late 18th Century and British troops were stationed in the fort during each of the 19th Century Anglo-Afghan wars. After 1880, the upper Bala Hissar was used as an arsenal and prison; the lower part became a ruin, within which new military installations were later built. The site was extensively damaged during fighting in the 1990s but it remains in military use.

This paper examines what can be learnt about the former structure of the Bala Hissar, particularly in the early 19th Century, when it was still a great fortress palace, and then identifies changes that were made later in that century.



Figure 1. The Bala Hissar of Kabul, in 1972. This is looking at the south-west walls of the upper Bala Hissar, or citadel. [Author.]

ⁱ Dates refer to the Common Era.

[Throughout the paper Roman numerals are used for footnotes, Arabic numerals for endnotes.]

INTRODUCTION

In Afghanistan, fortresses played a crucial role in the governance of the country. Although armies might engage in battle, time and again a power struggle could not be resolved without the capture or capitulation of the major fortresses. In eastern Afghanistan this was particularly true of the citadels of Qandahar, Ghazni and Kabul. The Bala Hissar of Kabul is sited on an outcrop of a large hill, called today the *Sher Darwaza*, which borders the older part of Kabul on its south (see plan, Figure 2 and sketch map, Figure 4). The site is a natural place for a citadel; high enough to dominate the adjoining town, low enough to sink wells for water. Kabul's location on a strategic corridor from Central Asia to India ensured that, even when not the primary seat of power, its fortress always had military and political significance. Today the Bala Hissar is still an Afghan military base, whose perimeter fence encompasses nearly the whole of the former fortress, except for a small section in the north-west corner. Although the upper fort is in ruins and the lower fort has lost all its walls and former buildings, the whole site has enormous archaeological potential. It has been fought over many times and has been lived in for centuries; the debris of both war and peace lie beneath its soil.

The author first looked at the Bala Hissar in 1972, but from the outside only; in recent years he has been permitted to have some short visits inside. Combining local knowledge with extensive material from European archives, it is possible to interpret what the Bala Hissar was like in the early 19th Century and to note subsequent changes, so as to be better able to understand the archaeology of at least the surface layers of this important site. This fortress is not, however, an island and the area all around it, particularly the hill rising to its west, also has archaeological significance, some aspects of which are covered in this paper.

The first part of the paper consists of a brief summary of the history of the Bala Hissar up to the late 18th Century. There is then an outline of local construction methods, as an introduction to a detailed look at the structure of the fort. The next sections deal with the Bala Hissar in the first half of the 19th Century. In particular, these build on what can be learnt from British sources dealing with the period just before and during the First Anglo-Afghan War of 1839-42. This is the core of the paper, as from this material a fairly accurate description can be established both of the fortifications of the Bala Hissar and of its palace-township complex at that time. Using a vari-



Figure 2. A sketch plan of the Bala Hissar in 1839. The fort had two parts, the *Bala Hissar Bala*, or Upper Bala Hissar, which was sited on a small hill and also called the citadel or *Arg*, and the *Bala Hissar Payin*, or Lower Bala Hissar, which contained palace buildings and a small township. The whole was rather like a large “motte and bailey” castle. [Adapted from plan in Figure 5.]

ety of drawings, photographs, descriptions and plans, it has been possible to draw a reconstruction of the palace complex, as it might have been in 1839.

The paper then outlines changes that took place later in the 19th Century. The nature of the buildings of the British Residency in 1879 is examined, the sacking of which sparked the British advance to Kabul in 1879, during the Second Anglo-Afghan War. A section then looks at the changes made, not only within the Bala Hissar but on the hills to its west, before the British departed in 1880. The paper ends with a brief summary of what happened to the Bala Hissar from then until the present day.

EARLY HISTORY OF THE BALA HISSAR

THERE are thought to have been defensive walls on the hills around Kabul since at least the time of the Hephthalites in the 6th Century, but we know very little about the citadel in its early days.¹ It may have seen conflict during Turkish military activity in the area in the late 6th Century and during the Arab advances in the 7th Century, when the Kabul valley was a main centre of resistance against the rising tide of Islam.² Arab rule was replaced by the Samanids, then Turki Shahis and Hindu Shahis. All are likely to have made some use of the fort.

In the late 10th Century, Kabul came under the rule of the Ghaznavids and in 1031 Sultan Mas'ud reviewed 1,670 war elephants at Kabul, "all plump and ready for action".³ Such a huge force could not, of course, have been based within the Bala Hissar, but it indicates the continuing importance of that area. Ghaznavid rule was in turn replaced by that of the Ghorids in 1148, who themselves came under Khwarizm rule in the early 13th Century. Genghis Khan, having chased a Khwarizm army down to the Indus, wintered in the vicinity of Kabul in 1221.⁴ When Tamerlane passed through the area in 1398, on his way to invade India, he already had a grandson as governor there.⁵ Throughout this whole period there are few accounts of the fort, but a brief archaeological investigation in the lower Bala Hissar in 2007 did confirm the presence of pre-Islamic and medieval ceramics.⁶

In the early 16th Century the Bala Hissar comes more to life. Ulugh Beg, a descendant of Tamerlane and ruler of Kabul, died in 1501. His young son was deposed in a revolution; anarchy followed and a usurper seized the throne. Ulugh Beg's nephew, Zahir al-Din Muhammad, nicknamed Babur, who had failed to hold on to ancestral lands in Central Asia, took Kabul by force in 1504. His memoirs, the *Baburnama*, describe a spirited action in front of the Leather-workers Gate of the town. This gate, later known as the Lahore Gate, lay below the Bala Hissar on its north side, and the action there was visible to those in the fort, who promptly surrendered both the town and its citadel.⁷

Kabul became Babur's base for the next twenty-two years. During this time the city developed and consolidated its trading importance. For most of this time Babur preferred to live in tented accommodation in the extensive gardens that he developed around Kabul. But he describes the citadel, with the great walled town of Kabul at its north end, as lying in

excellent air, with a beautiful outlook when meadows were green. And he quotes a couplet in its praise:

"Drink wine in the castle of Kabul and send the cup round without pause;
For Kabul is mountain, is river, is city, is lowland in one."⁸

In 1526, Babur captured Delhi and took enough of the Indian sub-continent under his control to establish an empire.⁹ But he retained a deep interest in Kabul and, in 1529, he wrote from Bengal to his governor in Kabul, a letter in which he was concerned about the completion of a building made of burnt-brick, which had been under construction in the citadel. If a design existed, the building was to be finished precisely according to it; if not, after making a "gracious and harmonious design", in such a way that "its floor would be level with that of the Audience-hall."¹⁰ Sadly, that appears to be all that is known of that building.

Babur died in Agra in 1530 but some years later his body was brought back to Kabul and buried in a favourite garden.¹¹ Babur's son, Humayun, struggled for some years to hold on to the throne and was forced to flee to Persia for a while. He returned in 1545, capturing Qandahar before going on to take Kabul from his brother, Kamran. Humayun lost Kabul twice more before finally ousting Kamran. He then went on to retake India and re-establish the empire.¹¹

In spite of animosity between Humayun and his brother, Humayun's son, Akbar, was brought up in Kabul, under his uncle's protection, while his father was exiled in Persia. When Humayun died in 1556, Akbar succeeded to the throne (at the age of thirteen). Much of the 49 years he ruled was spent expanding and consolidating his empire. Although Kabul was on the periphery of this, it retained a considerable significance. It lay on a busy trading route, especially for the supply of horses, but more importantly it was the frontier city on the road back to Central Asia, where the Mughals still hoped one day to recover their lands.

At the outset of his reign, when Akbar was in the Punjab, a ruler from Badakhshan attempted to take Kabul. Fierce fighting took place both in the city and, particularly, around the Bala Hissar, which came under close siege, with frequent attacks on the walls and gates.¹² The siege was lifted after six months, but during the next thirty years Akbar often had problems with a half-brother who had been left in charge in Kabul, and was also threatened from the north. Having moved his capital to Lahore, Akbar brought Kabul under his direct control in 1585. From then on, Kabul was run by an imperial governor, who lived in the Bala Hissar.

Although the fortifications of the Bala Hissar played a significant part in all these times, there is little to tell us about the buildings within it. Akbar's son, Jahangir, who succeeded in 1605, gave a few details in his memoirs. He travelled there first in 1607, giving an order that, as the province of Kabul could not support a large army, only the immediate attendants of the court should accompany him.¹³ When he arrived there in June, he camped in a large garden, rather than in the Bala

ii His tomb and its associated garden have recently been restored by the Aga Khan Trust for Culture.

Hissar. After a while, he went to the fort. "Having gone to the Bala Hissar, I inspected the buildings in that place. As the place was not fit for me, I ordered them to destroy these buildings and to prepare a palace and a royal hall of audience."¹⁴ Jahangir returned to Kabul only once after that, in 1626; he died the following year.

His son, later called Shah Jahan, had shown from his youth a great interest in building. When he was in Kabul in 1607, he rebuilt his quarters in a garden there: "The existing buildings not being to the Prince's taste, he soon carried out suitable alterations, after which he invited his father to visit the garden. Jahangir was exceedingly delighted with its renovated appearance and with the tastefulness and noble proportion of the new buildings . . ."¹⁵ Shah Jahan went on to build some of the finest structures in India, the Taj Mahal and the new capital at Delhi among them.

In 1628, early in Shah Jahan's reign, there was a raid on Kabul by an Uzbek ruler from Balkh. After a skirmish, the imperial forces retired to the Bala Hissar; the Uzbeks then entered the town and besieged the fort. "The garrison responded with heavy volleys but, in spite of this, the trenches were extended until they got close to the ditch and could erect batteries. The garrison was alarmed, since they were ill-prepared to withstand a siege; they had neither men nor provision enough to hold the fort. They sallied out, raided the trenches, killed a large number of Uzbeks and levelled the batteries."¹⁶ As it happened, a new governor was on his way to Kabul and, when his force came near, the siege was lifted and the invaders withdrew. It was eleven years later, in 1639, that Shah Jahan first visited Kabul as emperor. On this occasion, as on four further visits, he travelled up after the snows had melted in the late spring and returned to India in early autumn. Each time he based himself at Kabul while his armies were on campaign, either trying to win territory in the Oxus valley or to regain possession of Qandahar from the Persians.

The expenses of these campaigns, together with many construction projects were, however, a severe drain on the imperial finances. One such expense is recorded. On Shah Jahan's second visit, in 1646, it was noted that, although Jahangir had had the outer defences of Kabul fort built of "lime and mortar", the walls of the citadel were of an "impermanent" construction (presumably using mud). Shah Jahan ordered them to be rebuilt with "lime and mortar" (this infers plastering on brickwork). At the same time, since the citadel did not have water, a wall was to be built enclosing a well on the south side of the citadel.¹⁷

In 1658, one of Shah Jahan's sons, Aurangzeb, deposed him and shut him away in Agra Fort. For the next two years, Aurangzeb fought his brothers for control of the empire. Although he is later credited with building vaults in the upper part of the Bala Hissar¹⁸ and a mosque within the lower fort,¹⁹ from the time that he seized the throne he never actually returned to Kabul. Aurangzeb died in 1707; none of the succeeding Mughal emperors visited Kabul but the area remained under a governor.

In June 1738, the Persian ruler, Nadir Shah, having captured Qandahar, approached Kabul. The governor there had earlier pleaded to the emperor for financial help to give his soldiers some of the back-pay they were owed. Getting no reply, he withdrew to Peshawar. The town of Kabul surrendered to

Nadir Shah but some elements held out in the Bala Hissar, which was only taken after a short siege. Nadir Shah stayed some months in the area and then went on to effect major conquests in India, returning to Persia through Kabul again. When Nadir was murdered in 1747, Ahmed Khan Abdali, the commander of a considerable corps of Afghan soldiers, broke away from Persia and returned to Afghanistan with enough resources to take over the country and establish himself as king, with the title Ahmed Shah Durrani.

The Bala Hissar at Kabul was at that time held by Persian troops; Ahmed Shah negotiated their surrender.²⁰ Throughout his reign, however, he made Qandahar his capital, from where he expanded his control of western Afghanistan and invaded the Punjab several times. After his death in 1773, his son Timur Shah moved the capital back to Kabul. Having been somewhat neglected since the time of Nadir Shah, and possibly never having had proper care from a ruler since Shah Jahan, the accommodation within the Bala Hissar, particularly the palace, needed refurbishment. Timur Shah had some such work done during his twenty-year rule. The kingdom then underwent a period of internal strife, in which the Bala Hissar often featured.

THE BALA HISSAR IN THE EARLY NINETEENTH CENTURY

FOR a few years one of Timur's sons, Shah Shuja ul Mulk, was on the throne, further developing the accommodation in the Bala Hissar. He used to winter in Peshawar (then part of the Afghan kingdom), and it was there that Mountstuart Elphinstone met him in 1809 in his fortress-palace, which was also called *Bala Hissar*. Although Elphinstone never travelled to Kabul, his account of "Afghanistan" provides a valuable account of Afghan court life and ceremonial that can also be applied to the palace in Kabul.²¹ Shuja was deposed (and took refuge in British India) when further civil war broke out later in 1809. The leadership was disputed between factions for several years, with the Bala Hissar often changing hands (once by exploding a mine under the gate of the upper citadel), until Dost Muhammad Khan Barakzai came to power in 1826. Dost Muhammad declined to take the title *Shah*, "King", but eventually styled himself *Amir al-Muminin*, "Commander of the Faithful".²²

Amir Dost Muhammad was ruling when Charles Masson came to Kabul, first very briefly in 1828 and then in 1832, when he stayed for six years. Masson was the assumed name of a British deserter from the Bengal Artillery, who was pretending to be an American traveller. He was a self-taught archaeologist and became such a pertinent observer of the local scene that the British eventually gave him an official pardon and a small stipend. Masson later wrote an account of his travels, which devotes several pages of description to the Bala Hissar.²³ This is of particular value, as it portrays the fort as it was before the First Afghan War. Masson was also an accomplished artist and his collection of original drawings in the British Library includes many sketches of the Bala Hissar. These are valuable for confirming details of other artists' work from the Afghan wars.

At about the same time as Charles Masson arrived back in Kabul in 1832, Lieutenant Alexander Burnes passed through on his epic journey to Bokhara. Burnes's account of that travel



Figure 3. Charles Masson's drawing of the Bala Hissar from the South in the 1830's.²⁴ The building on the highest point of the citadel was nicknamed the *Kulah-i Firangi*, or European's Hat. This had lost its "hat" by 1839 but the name lived on for that location.

included a short description of the Bala Hissar in which he mentioned that "the citadel is uninhabited by the present chief; but his brother built a palace in it called the Koolah-i-Firingee, or the European's Hat, which is the highest building."²⁵ This is the curious structure on the highest point in Figure 3. Masson recorded that, as it overlooked the palace area below, orders had been given forbidding people to use it. It had been demolished by 1839 but the name hung on, being later mistakenly applied to the whole upper citadel area. Burnes also commented that, although the upper fort was small, the lower fort contained about five thousand people, a figure confirmed by Masson.

In 1837, Alexander Burnes returned to Kabul on an official mission and the Amir allotted him space to reside within a large garden in the lower Bala Hissar. When the following year the Amir received a Russian mission (albeit reluctantly) the British Government took offence and decided to assist Shah Shuja-ul-Mulk to recapture his throne, thus starting in 1839 what became the First Afghan War. This is not the place to go into the details of that war, however, save as it concerned the Bala Hissar.²⁶

The British "Army of the Indus" accompanying Shah Shuja's forces took Qandahar and Ghazni. As they approached Kabul, Dost Muhammad fled. The Shah was reinstalled in the Bala Hissar in August 1839. A British envoy, Sir William Macnaghten, accompanied the King and, with his Mission officers, was housed in the same garden in the lower fort as Burnes had been in 1837.

At that time, the King had as his engineer adviser Lieutenant H.M. Durand of the Bengal Engineers.ⁱⁱⁱ Durand wrote an extensive report on the state of the defences of the Bala Hissar, strongly advocating their strengthening. This report gives valuable insight into the structure of the Bala Hissar.²⁷ Durand, however, resigned his post when he felt that he was not being given enough authority, his place being then taken by Lieutenant J.L.D. Sturt, Bengal Engineers. The King then only stayed a few weeks in Kabul before going down to Jalalabad for the winter, accompanied by the Envoy. Sturt was among those left in Kabul.

Both Durand and Sturt had recommended considerable works to be done to the Bala Hissar, and several buildings to

be occupied by British troops. The King would not agree and, when the court returned in the spring of 1840, the King requested that the British troops be moved out to a cantonment about a mile and a half away (see Figure 4.). The very bad location of this was commented by the historian of the First Afghan War, Sir John Kaye: "And whose was this stupendous error? . . . Durand, who had first held the post, had urged upon the Envoy the necessity of constructing barracks and posting our troops in the Bala Hissar; and Macnaghten, yielding to these solicitations, had overcome the reluctance of the Shah – but the barracks had been afterwards given up to the accommodation of the old king's harem; and from that time, though Sturt who succeeded Durand insisted with equal urgency on the expediency of locating troops in the Bala Hissar and strengthening its defences, all hopes of securing a strong military position at Caubul was gone."²⁸

For a while, however, Kabul was mostly peaceful and many army families came up from India to live in the cantonments. Several memoirs from that period contain useful accounts of the Bala Hissar.²⁹ In the 19th Century, field sketching was an important part of an officer's skills and a number of officers made sketches of the Bala Hissar, some of which were later redrawn by lithographers and published. Two notable artists, James Atkinson, Superintending Surgeon with the Army of the Indus, and Lieutenant James Rattray, 2nd Bengal Native Infantry, each published a collection of their drawings.³⁰ In Atkinson's case one is able to check his lithographed work against his original sketches in the British Library and his perceptive account of his experiences in Afghanistan.³¹ Other works were included in volumes assembled by Sir Keith A. Jackson and W.L. Walton.³² There are further pictures to be found among the many books written about the campaign. All such pictures, however, have to be viewed with some caution; with such large subjects it is difficult to get every detail right.

When, in November 1841, an insurrection broke out in Kabul, the fate of the badly-sited British army was further compounded by very inept leadership. For a while some British troops were back in the Bala Hissar and there are useful accounts from that time. But the force had left the fort before the army in Kabul started its ill-fated retreat in January

ⁱⁱⁱ At this time, most engineer officers in India were serving directly with one of the Presidencies of Madras, Bengal or Bombay. In 1862, these engineer officers were amalgamated with the (British) Corps of Royal Engineers. The separate Madras, Bengal and Bombay units of Sappers and Miners remained, with all new officers appointed from the Corps of Royal Engineers.



Figure 4. Part of a reconnaissance sketch of Kabul and its environs made in 1842 by Captain F. Abbott, Bengal Engineers. It shows how the Bala Hissar lies at the eastern end of the hills lying south of Kabul, and its situation and size relative to the rest of Kabul. By 1839 there was little left of the walls around the city, but the sketch shows an area at the west end of the city "Chundowl" [or Chindawol] which was still separately walled. This was inhabited by the Qizilbash community, of Persian origin. The cantonments occupied by the British were about a mile and a half away to the north and badly sited, being spread out, overlooked by hills and on the wrong side of the river. [Institution of RE]

1842. Left unsupported, Shah Shuja was besieged in the Bala Hissar for a time, but in April, after leaving the fort to join his small army, he was assassinated. The British “Army of Retribution”, that returned to Kabul in September 1842, briefly occupied the Bala Hissar but, although they destroyed the Grand Bazaar in Kabul city, they left the fort intact when they left in October.³³ So what can be known of the structure of the Bala Hissar at that time?

CONSTRUCTION METHODS³⁴

THE most common walling material in Afghanistan, for houses as well as fortifications, was (and still is today) mud set on a foundation of heavy stones. Mud walls could be constructed in layers or built out of sun-dried bricks. Such walls were vulnerable to rain but, where the upper surface was protected, they could last for a long while, their outer surface being baked hard by the sun. Walls around more important areas were often built with shallow blind-arcading. For detailed or vulnerable work, burnt bricks set in lime mortar could be used to form a lasting wall, but such bricks were costly due to the firewood needed.

Most buildings had a flat roof, with horizontal timber poles (commonly poplar) supporting a brushwood layer with a thick coating of mud. There was often a parapet around the edge of the roof, frequently high enough to shield families who were using the roof in hot weather. Walls within buildings were usually constructed of mud or mud-brick, with niches set into the walls of most living rooms. The upper floors of some houses were constructed with timber frames, with infilling of brick or timber. Timber was used for doors and windows; the joinery could be quite elaborate, particularly in the ways that windows were formed with fixed or sliding lattice-screens. Carved timber columns were used in the verandas of some palatial buildings and mosques. These timbers were expensive, as they would have to be transported from distant forests, but in the dry Afghan climate, timberwork was durable and was often used again in a new building.

Even in the grander buildings there was little permanency; many rulers preferred to build anew, rather than refurbish the palace of their predecessors. This would also be the case for other housing in the fort. Mud walls could easily be re-built and labour was cheap. Over the centuries, the ground levels within the fort probably rose on the accumulation of mud-debris from former buildings.

Some of the external walling of the Bala Hissar was, however, constructed more durably, with stones set in mud-mortar or, later, lime-mortar. In places these walls were reinforced with timbers set horizontally in the wall. This is a device that was quite widely used in the earthquake zone stretching from the Balkans across to the central Asian uplands (and, indeed, in many old European buildings).³⁵ These external walls were sometimes topped with upper sections and battlements in burnt-brick. Their apparent thinness today may be due to banquettes (the raised platforms behind the parapets) having been made of mud which has now eroded.

THE FORTIFICATIONS

It is possible that the fortress that Babur occupied was confined to the area of the upper Bala Hissar. It would have been large enough for his military base, particularly as he himself preferred

living in one of the gardens, and he may not have had the resources for a major expansion. Humayun had neither resources nor time to expand the Bala Hissar, but it was fought over several times during his reign and it seems that at least part of the lower fort existed. Akbar, having lived there as a boy, would have had the motivation to expand the fort, had it been needed, and would have had the resources. Jahangir certainly did some building there and Shah Jahan, who visited Kabul several times, was very interested in it as a base for his Central Asian conquests and had the resources to spend there.

It seems doubtful that any subsequent ruler governing Kabul had the resources to make major changes to the walls and that the final line of the outer walls and gates of the upper and lower Bala Hissar mostly date from Jahangir’s and Shah Jahan’s eras in the first half of the seventeenth century. Possible exceptions are the north-west corner of the lower Bala Hissar, which has the appearance of a later addition, and changes to the line of the wall in the main palace area.

Lieutenant Sturt drew up a scheme for strengthening the Bala Hissar and the adjoining Bala Burj in December 1839. A transcript of his report is held by the Royal Engineers Library.³⁶ A plan accompanied his proposals (Figure 5); it would probably have been lost, had it not been re-printed at the outset of the Second Afghan War in 1879.³⁷ This plan is a most valuable resource and is central to this study but it must be read with caution. It was drawn to support his proposals and some details that were not relevant to these (such as the mass of buildings in the lower fort) may not be accurate. It also has marked on it defensive walls that were only Sturt’s proposals and were never carried out. Sturt was the son-in-law of Lady Sale and in her diary she records his death during the retreat in 1842.³⁸ In a passage in a book of lithographs by W.L. Walton,³⁹ Lady Sale tells of nearly all Sturt’s papers being lost during the retreat; these may have included the sections indicated on the plan.

Even in the age of artillery (from the early Mughal period onwards), Afghan fortresses were rarely taken by assault. This was partly because of the difficulty of moving heavy cannon in mountain terrain; thick mud-walls were more vulnerable to rain and earthquakes than to light cannon fire. It was more common for a citadel to be besieged until it capitulated, either from lack of provisions or, as fitted the nature of the contestants in Afghanistan, by secret negotiation between the warring parties. But for a citadel to withstand even a short siege its walls must not only be stout, they must be high enough to deter assault.

Charles Masson’s drawing of the Bala Hissar from the South (Figure 3), gives a feel of how the walls ran. Figure 1 and Masson’s sketch show a very strong section of walling on the west end of the upper Bala Hissar, where the Bala Hissar was at its most vulnerable from the hill to its west. Below the main wall there is the line of a wall that formed a defensive line between the main wall and the moat; what Europeans called a *faussebraye*. Dost Muhammad had been rebuilding this wall while the British were advancing, making a layered mud wall in the local fashion, but the works were incomplete. Durand recommended that this wall be made more substantial and become the main defensive line of the fort, the high wall behind being retained, to foil escalade.⁴⁰ Sturt shows the line



Figure 5. "A plan and Survey of the Bala Hissar or Fort of Kabul: shewing the present state and nature of its defences and pointing out improvements recommended for its better security." Lithographed in 1879 from the original plan drawn by Lieutenant J.L.D. Sturt in 1839. Note: **South is at the top**. The garden in the centre of the plan is confusingly labelled as "Residence of the Mission", as that was where the British Envoy and his staff, who had accompanied Shah Shuja to Kabul, were first billeted in 1839. [Institution of RE]



Figure 6. Bastions on the south face of the Bala Hissar (in 1972). [Author.]

of the *faussebraye* on his plan, but it is not clear whether parts of this were only proposed work. Whichever, further works were not carried out and the mud wall shown by Masson has eroded away.

All of the bastions of the upper Bala Hissar were rounded or “D” shaped; many of those in the walls of the lower fort were semi-octagonal, indicating a later date of foundation. That

does not mean that the walls of the upper fort were not rebuilt, but that they were not taken down to foundation level when rebuilt. Much of the walling was of a high quality.

A photograph taken from the west in 1880, Figure 7, shows the high quality of walling coming down from the upper part of the Bala Hissar to the postern gate on the left of the picture.^{iv} Both the walling and its bastions are of high quality. It



Figure 7. Part of the walls of the Bala Hissar in 1880, seen from the hill to its west. The gate, on the bottom left, was a postern to the lower Bala Hissar. It had been bricked up in 1839, but the British opened it up in 1880, to give access to the Bala Burj hill from which this photograph was taken. [Bengal Sappers & Miners; Institution of RE]

^{iv} Although this section of the paper is dealing with structures that existed during the early nineteenth century, all photographs are from a later period. Where the photographs show significant changes that had taken place after 1842, a comment will be made in the captions to the photographs.

may be that we are looking at the rebuild of the upper fort's walls, which had been ordered by Shah Jahan in 1646.⁴¹ In the merlons on the top of the wall one can see a series of hooded firing points. Figure 8 is a sketch explaining the function of these.

It is noticeable that hooded firing points occur on every third merlon (sketches by Masson show the same rhythm). A similar routine of a hooded firing point on every third merlon can be seen on the external walls of the Red Fort in Delhi, which was built by Shah Jahan in 1639-48. Hooded firing points are by their nature fairly fragile; all the hoods have been lost from the Bala Hissar, though the holes behind remain. Figure 9 shows part of that section of the wall in 2007. The openings where the hooded firing points were are very clear. If one did not know their origin one might conclude that they were artillery loops, but the size of the parapet would preclude any but the lightest guns. The quality of workmanship in the wall is still very apparent at that point.

Figure 10 shows a length of wall on the north side of the upper fort. This is one of the few stretches of wall remaining that still have casemates below the parapets. These vaulted chambers were built into the ramparts, open at the back, with firing-loops through the main wall. Their construction was a mixture of stone and burnt-brick, on which parts of a plaster coating can be seen (Figure 11). These casemates were quite sophisticated, with the firing-loops in them, and on the parapet above, being carefully angled.

Although the fortress may have reached its greatest extent in the 18th Century, which is well into the age of artillery, it was not designed for artillery in the way that European forts of that period were. Its walls were high, to deter escalade, and most of its firing loops were for smaller weapons. On some parapets and gateways these could include small guns, *jinjal*, which were mounted on swivels and were adapted from guns



Figure 8. Sketch showing hooded (or projecting) firing-points. [Ian Templeton.]

light enough to be carried on a frame on the back of a camel (and which, almost unbelievably, could be fired still attached to the camel when it was in a crouching position).⁴² Heavier pieces could only be mounted on solid ground in the upper Bala Hissar or on the few bastions large enough to take them.

The use of artillery often benefited the defenders, who were firing from behind walls, more than the besiegers, who were partly in the open. However, when the Bala Hissar was being



Figure 9. A section of the walls of the Bala Hissar, running down from the upper fort to the (now vanished) postern gate, in 2007. The holes in the merlons show where hooded firing-points formerly were. [Author.]



Figure 10. The interior of the walls on the north side of the upper Bala Hissar, probably of the Mughal period. [Author.]

besieged by the Persian King Nadir Shah in 1738, the recoil of one of the defenders' heavy cannons shattered the tower on which it was standing and with it a section of wall; a spectacular "own goal" that yielded up the fort.⁴³

One tower that does seem to have been specifically designed for the use of artillery was in the north-west corner of the lower fort. It has long since vanished but there is a drawing of it among Walton's lithographs that may have been taken from a sketch by Sturt, (Figure 12). The town comes very close to the fort at that point, and the gate on that side would have been vulnerable. The walls seem to have been

extended forward at that corner (see bottom-right on 1839 plan, Figure 5) and a large octagonal tower erected that is almost detached. During the uprising in the town in 1841 a force set out from the Bala Hissar with two artillery pieces. Overwhelmed, they had to abandon these guns as they retreated back into the Bala Hissar. "A gun was mounted on the walls, and brought to bear on the abandoned guns, and the shot told so effectively, that the carriages were completely broken to pieces, rendering them totally useless."⁴⁴ Sadly, the site of the tower seems to be just outside the modern perimeter fence, so its archaeology may be lost.



Figure 11. One of the probable Mughal-period casemates on the north side of the upper fort. The parapet above has angled firing loops. [Author.]

THE BALA HISSAR OF KABUL



Figure 12. The north-west corner tower of the Bala Hissar. This was possibly drawn by Lieutenant Sturt between 1839 and 1841.⁴⁵ [Afghanistan Institute, Switzerland.]

The Bala Hissar is overlooked from the spur rising up to the *Sher Darwaza*. Walls ran up to a tower on a subsidiary peak (see top right corner of Figure 12). Masson records that these walls were rebuilt by Sirdar Jahan Khan Popalzai in the time of Ahmed Shah (18th Century). Masson says the tower was called then *Burj Hulaku*; its 16th Century name was *Burj Laghlaghu*, but by 1880 it was called *Bala Burj* (or “high tower”). These walls were in a state of ruin when the British

came, and have not since been repaired (although, see below, the *Bala Burj* tower was rebuilt in 1880). The walls originally joined up to the Bala Hissar, with a gateway through on the line of the low col which separates the Bala Hissar outcrop from the main hill. This gate was called the *Darwaza Jabar*. It allowed the townspeople access through to the south but it had gone before Masson’s time (it stood in the dip on the left side of Figure 3).



Figure 13. The Bala Hissar from the East, by Lieutenant J.L.D. Sturt, Bengal Engineers. Extracted from the side of his 1839 plan of the Bala Hissar (the annotations in blue are the author’s).



Figure 14. The *Darwaza Shah Shahid*, also called Lahore gate, of the Bala Hissar in 1879. [Bengal Sappers & Miners; Institution of RE]

Masson describes four gates into the Bala Hissar itself, and these are marked on the 1839 plan (Figure 5). The principal gate, on the eastern side of the lower fort, was called the *Darwaza Shah Shahid*, as it was near the shrine of a Muslim warrior martyr. The British either called it the “Lahore Gate” or the “Peshawar Gate”. A sketch by Sturt (Figure 13) shows that there was a small fore-gate, like a barbican, in front of it. This fore-gate also features in Masson’s sketches but was probably more for ceremonial purposes than defence. The main gatehouse was quite an elaborate design, almost certainly from the Mughal period, better seen in an 1879 photograph (Figure 14), although by then parts of the battlements had collapsed.

It appears from this photograph, and the plan, that the gate had a straight-through passage, possibly with a second gate at the back (portcullises are most unusual in the Indian sub-continent, where gateways have to be high enough for the entry of elephants). Sturt’s plan shows a widening within the gateway; this would be consistent with Mughal (or other Indian) architecture, where there is usually a platform on either side of the roadway within a gatehouse. The stucco rendering that is shown missing from the lower storey of the outside of the gate-towers was already missing in 1839.

The gate on the west side of the lower fort, marked on the plan as the “City Gate”, was more properly the *Darwaza Naqqara Khana*, or “gate of the drum fanfare”, so called as in the chamber above the gateway drums used to be beaten, particularly to welcome royalty or special visitors. This gate was sometimes called the “Ghazni Gate” as it was the gate leading towards that city. In earlier times it was called the *Darwaza Ahani*, or “Iron Gate”, but that might have been before a rebuild.⁴⁶ It was through this gate that Shah Shuja made his entry into the Bala Hissar in August 1839, with

drums beating from above and “a tremendous discharge of camel artillery – *jinjals* fixed on swivels and mounted on camels – saluted our entrance into the citadel.”⁴⁷ A photograph, taken in 1880 (Figure 15), shows it to be of a comparable design to the *Darwaza Shah Shahid*, though not quite so elaborate. The 1839 plan indicates that the passage way through the gatehouse takes a dog-leg turn; not an unusual defensive precaution.

Further up that western face of the lower fort, near the upper citadel, there was a postern gate (this can be seen in Figure 7). The 1839 plan shows this to have been blocked at that time. It was re-opened during the 1880 occupation.⁴⁸

Sturt’s sketch of the Bala Hissar (Figure 13) shows two more gates. The first was a gate between the lower fort and upper fort (marked Gate “A”); doubtless an important defensive feature but of which no trace remains today. The second is more significant. It was a gate on the eastern end of the upper Bala Hissar, which gave access from outside, without having to go through the lower fort. Masson calls it the *Darwaza Kashi* (or tiled gate) and said that it was blocked, as does Sturt’s plan. From Sturt’s sketch, and confirmed in other sketches from that period, it was a fine gate with semi-octagonal towers and blind-arcading, rather like the *Darwaza Naqqara Khana*. It may be that this was once a main entry point (and which was earlier called the *Darwaza Yarg*). The base of the south tower of the *Darwaza Kashi* can still be seen today (Figure 16). It has good brickwork, outlining blind-arcading.

British officers seeing the Bala Hissar in 1839 tended at first to be dismissive of it as a stronghold. A more balanced view was that of Captain Henry Havelock: “The profile of the walls of the place is lofty, the towers and curtains are as well



Figure 15. The *Darwaza Naqqara Khana*, also called “City Gate”. The top of the right-hand tower appears to have been re-fortified, possibly British work from 1880. [*Bengal Sappers & Miners; Institution of RE*]

disposed as in most Asiatic fortresses, and a broad stagnant moat runs round the place, which a few strokes of the spade would have filled with water. The ditch is also, as at Ghuznee, defended by a *faussebraye*. There is a little town within the walls of the fortress, the houses of which, if the

inhabitants were excluded, and grain collected within them, would form tolerable barracks, and inexhaustible storehouses. A part of the lower works are, as has been intimated, under command from heights to the northward, but at a much greater distance than that at which Moohummud Hyder Khan’s citadel [Ghazni] was seen. A force established on the mountain to the southward would also overlook even the loftier towers of the upper fort; but the labour of forming a battery on so lofty and precipitous an elevation would not be a light one. It is not, at the same time, to be forgotten that the streets and bazars of the city, running up to the very counter-scarp of the western ditch, afford a considerable facility for a favourable lodgement on that side. But, after all, here again was a fortress on which we could not have reasonably hoped to make an impression without the aid of a siege train, if it had been properly garrisoned and stoutly defended. . . Here all depends, in a military point of view, on a firm hold of the Bala Hissar. It is the key to Cabool. The troops who hold it ought not to suffer themselves to be dislodged but by a siege; and they must awe the population with their mortars and howitzers . . .”⁴⁹

The sheer size of the fort could be a problem for command and control in an emergency. This is brought out by Lieutenant Thomas Seaton, who was billeted in one of the pavilions in the palace garden during the winter of 1839: “The snow made our rounds at night very dangerous work. We had fully two and a half miles to go to visit all the guards, and in some places along the lofty walls the rampart was only two feet wide while it was twenty feet high. It generally took us two hours to go round and visit all the guards, groping our way through the snow as carefully as we could.”⁵⁰



Figure 16. The base of the south tower of the Mughal period *Darwaza Kashi*; the only bit of the gateway still standing. This part may have been tiled or the tiling might have been on an upper level, with this as plain blind-arcading. The quality of the brickwork is apparent. The tower on the top is modern. [*J.Grindle.*]

Those British troops who were enclosed in the fort with Shah Shuja during the uprising in late 1841 found, however, that although they had comparatively few troops, they could hold the fort with some confidence by carefully positioning their forces. The upper Bala Hissar was held by several companies and some artillery, which could fire into the town. A sizeable detachment of infantry, with artillery, was placed at the two main gates into the lower Bala Hissar, all other gates having been bricked up. A reserve was stationed in the palace square with posts allocated in case of an attack.⁵¹ Given well-led defenders, and adequate supplies, the Bala Hissar offered effective enough protection against all but a strong and determined enemy. The disaster of the First Afghan War stemmed from the British withdrawal from it.

THE PALACE AND TOWNSHIP

MOST forts in Afghanistan, as in the Indian sub-continent as a whole, would have been better called “castle” in English, for they were the fortified *residence* of the local ruler, not just a military base. The seat of power contained not only palaces, as appropriate, but also administrative buildings, strong-rooms for the treasury, arsenals and stables, as well as accommodation for household and military staff. Such a castle could become a small township, as it did in the case of the Bala Hissar.⁵²

As with the fortifications, we know little about the palace area of the Bala Hissar in its early days.

Once Babur had left Kabul, the Mughal emperors only came on occasional visits; it was their governors who would have lived in the palaces most of the time. Even they would go down to Peshawar in the winter months, leaving a deputy in Kabul. This practice of wintering down-country was continued under the Afghan rulers.



Figure 18. Remains of tiling above a string-course on the upper part of the platform in Figure 17. [J.Leslie.]



Figure 17. The remains of a platform projecting from the side of the north wall of the upper fort. [J.Grindle.]

It seems highly likely that in earlier time the main living-quarters were in the upper fort. Later, it was used for state prisoners. By Masson’s time, however, it was empty and ruinous; there was only the recently built *Kulah-i Firangi* there, and that had gone before 1839. Sturt’s plan shows lines of rubble, indicating ruined walls. On the north side of the upper fort there is still today a projecting section of wall (Figure 17). This had a band of tiling, set above a string course. The blue and white tiles of diamonds and stars were of quite good quality (Figure 18). Masson mentions a couple of *takht*, or sitting platforms, on this north side of the upper fort, which were made of marble and, as one of them had a flagon carved on its side, were possibly for taking refreshment while enjoying the view and the fresh air. They could have been on this projecting platform.

By the time that Masson came, the main residential area was in the lower Bala Hissar. A block layout of this extensive area is shown in Figure 19, which has been compiled from Sturt’s plan and modified from later surveys. The ruler’s palace was on the north side of the fort, with its ceremonial courtyard and garden to its south; the whole palace complex separating two large areas of housing.

We do not know whether this was where a Mughal era palace had been, possibly so.



Figure 19. Axonometric outline drawing of the Bala Hissar in 1839, viewed from the north-east. [Ian Templeton.]

Masson said the palace that was there in the 1830's had been built by Timur Shah after he moved his capital back to Kabul in 1775, his predecessor, Ahmed Shah, having resided in the town when in Kabul. "It has a sombre external appearance, but commands beautiful views over the surrounding country, particularly towards the north, where the distant snowy masses of the Hindu Kosh terminate the prospect. It is most substantially constructed, and the interior is distributed into a variety of handsome and capacious areas, surrounded by suites of apartments on a commodious and magnificent scale. These are embellished with ornamental carvings, and highly coloured paintings of flowers, fruits and other devices."⁵³

One gets a flavour of this from a photograph taken in 1880, long after this palace had been abandoned by the Amir for a new one and while it was occupied by British troops (Figure 20). Courtyards of this sort were often symmetrical, so that one side would have platforms that were pleasant in winter sun, while platforms on the other side gave shade in the heat of summer. From other, distant, photographs, it appears that that was the case here. It seems that this courtyard was completed by Timur Shah's successors, for Masson records: "When Taimur Shah, in his last visit to Kabal, in progress to the eastward, beheld the palace *then unfinished*, he complained that the *situn*, or pillars, were too slight. It was submitted that they were made of the largest timbers procurable."⁵⁴

Figure 21 is a view of the palace from the north, taken from one of Sir Keith Jackson's lithographs. Details in this drawing correlate with some of Masson's sketches, such as Figure 22.

Although the palace courtyard has a unity, suggesting that it was built at one period, the complexity of the whole structure on this north side indicates successive alterations, with parts being constructed on the outer walls of the fort, the line of which may have been modified. There is a tendency throughout the Indian sub-continent for palace buildings of a later period to be placed in part on the earlier outer walls of forts, regardless of any military disadvantages, for the air is fresher there and the views more pleasant. The small pavilion on the roof, the *Bala Khana*, which would have had breezes in summer, was mentioned by British officers as providing attractive views.⁵⁵

There had been another pavilion on one of the wall-towers to the east of the palace. This pavilion, *Chehel Situn*, or Forty Pillars, had been built in the time of Timur Shah's successor, Zaman Shah (1793-1800), to provide views over the country to the north. It was demolished in 1833, as it was thought to weaken the security of the palace, whose wall in that area was then strengthened; an illustration of how the palace was itself regarded as a secure unit within the lower fort.⁵⁶

Sturt's plan labels the north-east corner of the palace as containing the "Baths" and shows three circles. These appear in Jackson's lithograph (though not quite on the line shown by Sturt). Elsewhere in Afghanistan there are bath houses, *hammam*, built with domed roofs, and that seems to be what had been built here.

From these pictures and other, more distant, pictures and photographs, and using both Sturt's plan and one drawn in 1880 (see later, Figure 44), it has been possible to create an axonometric drawing of what the palace looked like in 1839 (Figure 23). The



Figure 20. The courtyard of the former royal palace in the lower Bala Hissar. This photograph was taken in 1879 or 1880 when the palace area was occupied by a Gurkha regiment. The canvas shrouds were either hung to provide shade or protection from winter cold. The buildings have a basement storey (with kitchens, store rooms, servants rooms, etc) above which was the main level, with verandas interspersed with living quarters. These could also be on a floor above. [*Bengal Sappers & Miners; Institution of RE*]



Figure 21. "Bala Hissar and Palace of Schah, Caubul." From Jackson's *Views of Affghaunistan*. "A venerable building in a dilapidated state."⁵⁷
[*Afghanistan Institute, Switzerland.*]

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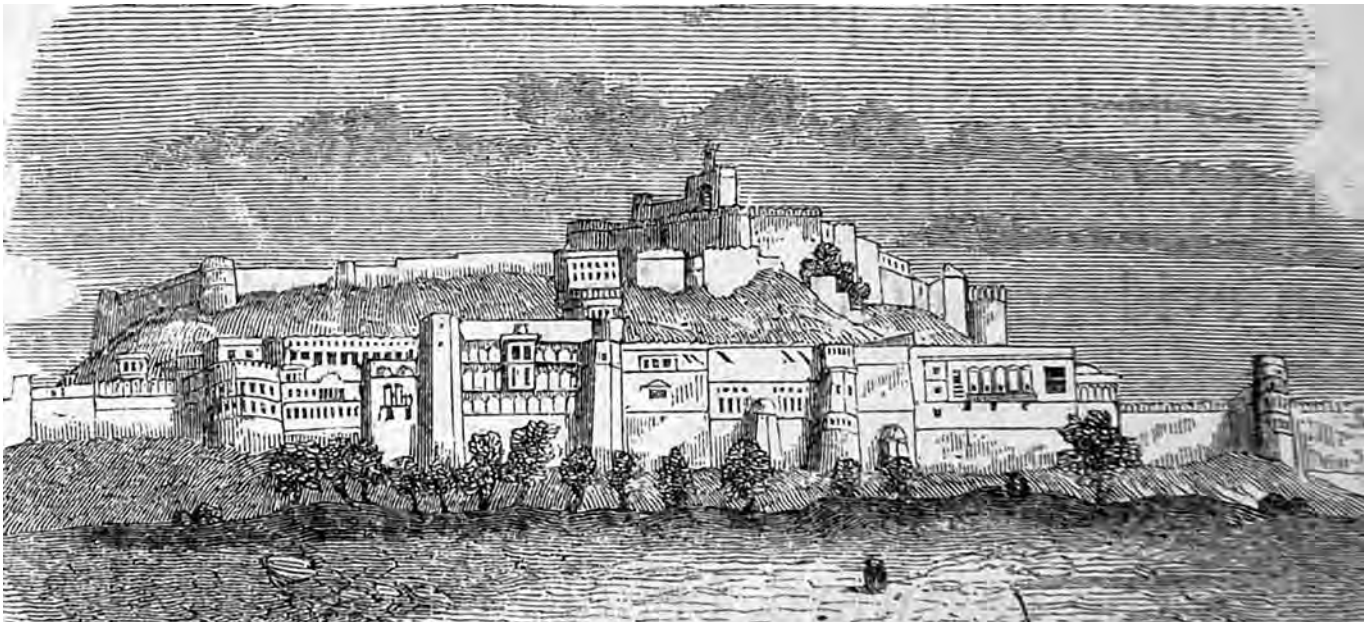


Figure 22. “Palace of Bala Hissar” An engraving from one of Charles Masson’s sketches, drawn a few years before Figure 21, and from a slightly different viewpoint.⁵⁸ The viewpoint used by Masson means that the protruding platform on the upper fort (Figure 17) is, confusingly, in line with the pavilion on the roof of the palace. [Private Collection.]

size of it is impressive (the courtyard is about 100m broad). Within the complex there were a multitude of small rooms. But few of the British visitors in 1839 failed to comment on how dilapidated the palace had become. The account by Lieutenant Nash is typical: “Upon arriving at the palace, the King led the way into it, hurrying eagerly over the scene of his former state and weeping as he surveyed the dilapidations time and neglect had wrought in the dwelling place of his youth. . . . A grand state Durbar was held at the palace . . . The ceremony took place in the courtyard, but the decay into which the palace had been allowed to fall by the Baurikzye rulers, destroyed much of the effect of the scene.”⁵⁹

The ruinous state of the palace was also commented on by Lieutenant Havelock. “Shah Shuja found his own apartments in even a worse state of repair than he had anticipated. Soon after he resumed possession of them, he narrowly escaped being crushed to death by the fall of the roof of the audience chamber. He had scarcely left it, for the purpose of attending to the forms of his religion, when the formidable *avalanche* of beams, rafters, and masonry took place.”⁶⁰



Figure 23. Axonometric drawing of the Palace, as it could have looked in 1839, viewed from the north-east. [Ian Templeton.]



Figure 24. "The Durbah-Khaneh of Shah Shoojah-ool-Mulk, at Caubul." Plate 22 of James Atkinson's *Afghaunistan*, (see note 30). [Institution of RE]

To the south of the palace there was a large courtyard, on the south side of which was the *Diwan-i 'Amm*, also called the *Durbar Khana*, or Audience Hall, of the ruler. This had a marble throne on its open platform and was placed so that the ruler would be sitting in the shade. A picture, drawn by James Atkinson in 1839, shows Shah Shuja in audience (Figure 24). The line of courtiers has been formed so as to provide a processional route from the palace door to before the throne.

A contemporary picture (Figure 25), drawn by Lieutenant James Rattray, shows the elaborate decoration of the internal walls of the *Diwan-i 'Amm*. A court official is sitting on a white marble throne, behind him there is a fireplace. The shallow niches in the wall are fairly typical of quality Afghan buildings. Although this building was probably built, or rebuilt, in the late 18th Century, it draws on a Mughal architectural form that restricted pillars of a baluster shape to buildings used to frame the emperor's appearances.⁶¹

The building containing the *Diwan-i 'Amm* once had verandas on each side.⁶² That on the south face formed a fine pavilion overlooking the Palace Garden. This is clearly shown in a photograph taken in 1879 (Figure 26), which also shows part of the veranda on the west side. This pavilion had a counterpart at the other end of the garden. This was drawn by an officer who was billeted in this area in the winter of 1839, when Shah Shuja had gone down to a warmer climate at Jalalabad. It shows a terrace at the upper end of the garden, with steps coming down (Figure 27). The garden below this terrace is a perfect square (sides of about 150 m) and forms a traditional Islamic *chahar bagh*, a garden divided into four parts which themselves are divided by water channels. It

would have originally had far more fruit trees and other vegetation than was there when the photograph was taken. This garden might have been laid out in the Mughal period, possibly at a time when the main palace was still in the upper citadel. A garden would have had to be sited in the lower area, where water could be brought. This garden might be that which was called *Bagh-i Jilau Khana*, or "Garden of the Forecourt" in Shah Jahan's time.

Sir Thomas Seaton (as he later became), describing the building he drew in Figure 27, explained that it was: "divided into a centre and two wings; the centre has rooms on the ground, and above is a fine open hall used as a drawing-room in the summer. On each side of this hall in the wings are three tiers of chambers, the windows of which are closed by wooden shutters, made in small panels of two and three inches square worked into geometrical patterns. These are pretty and picturesque, but not exactly adapted to the transmission of light. A stream of water comes through the centre chamber, fills a little square basin on the terrace in front of the house, and from thence flows through the garden."

He went on to describe his accommodation: "The walls of our rooms were very neatly ornamented, in a simple and effective manner that might be copied with advantage in England. All round the door and windows there was a raised moulding on the wall, about three inches broad. Whilst the plaster was wet, a pretty pattern was impressed on it by a wooden stamp, and it was then dusted over with pounded talc, which glitters and looks quite bright and shining. In some of the rooms the walls were divided by this moulding into panels, which were painted with light blue, green, or

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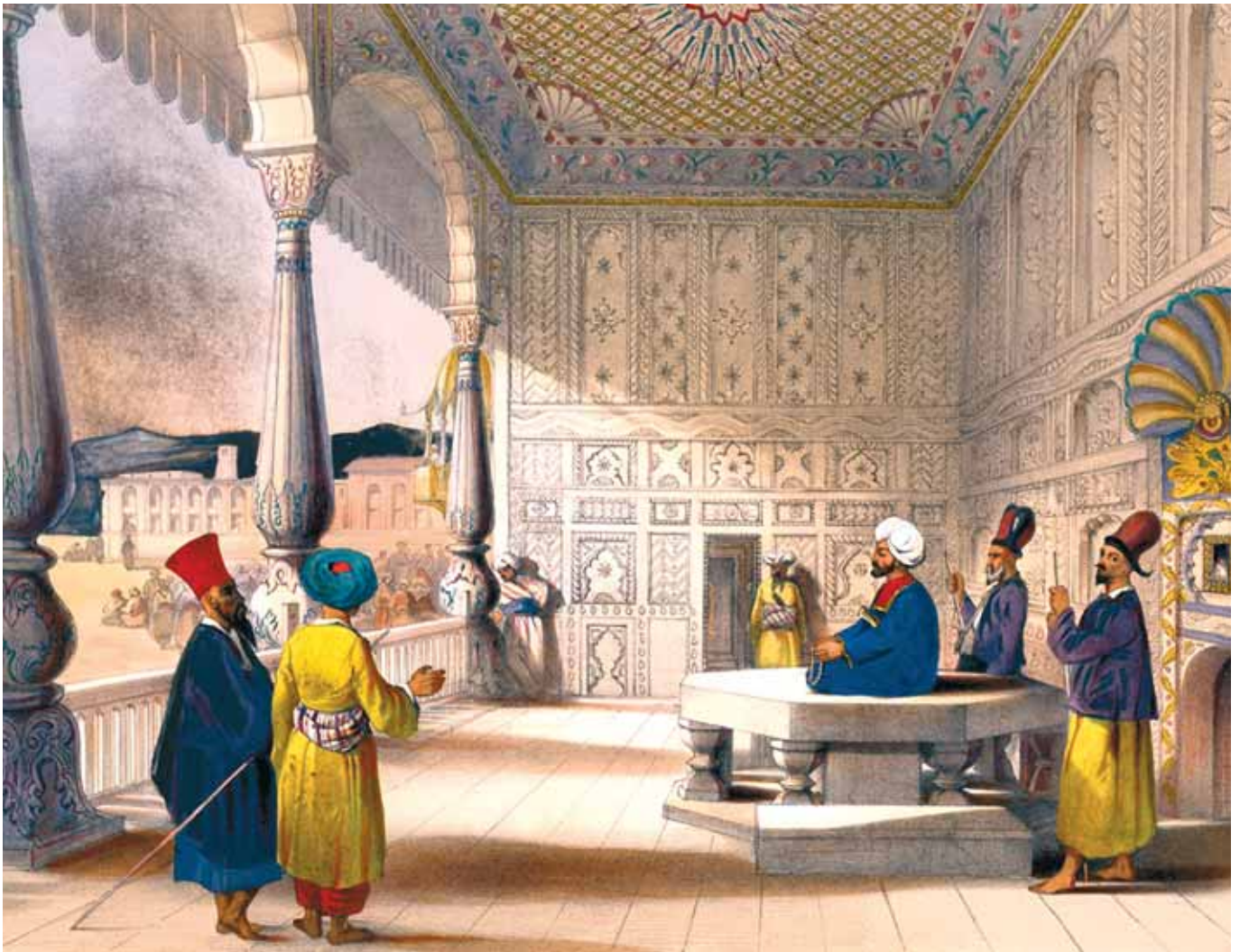


Figure 25. A court official is sitting on the royal throne in 1842. Plate 3 of James Rattray's *Afghanistan*, (see note 30). There is a bit of artistic licence in the picture; the hall faced north, so the shadows could not have been as shown. [*Afghanistan Institute, Switzerland.*]



Figure 26. Part of the Bala Hissar showing the Old Palace Garden, 1879. [*Bengal Sappers & Miners; Institution of RE*]

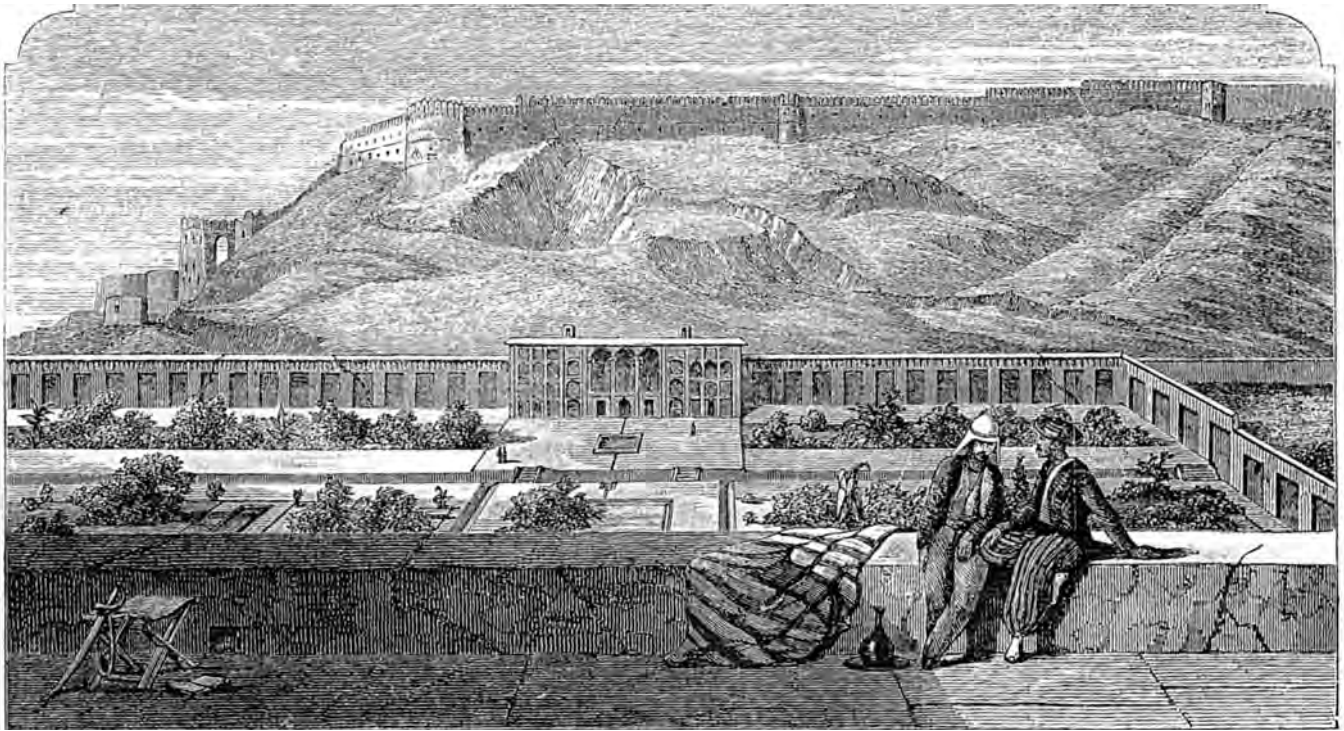


Figure 27. "Officer's Quarters, Bala Hissar" (Seaton). During the winter of 1839 some officers were accommodated in the pavilions in the palace garden.⁶³ This drawing shows that the garden had a raised terrace at the southern end, with steps coming down to what (deduced from Figure 26) is a square lower garden. The garden wall on the centre left of the picture is, however, drawn extending further than it could have done in reality. [Private Collection.]

grey. This threw out the moulding, and heightened its brilliancy. Sometimes there were raised figures of flowers in the panel, covered with the glittering of talc, and the ground was coloured in such a way as to throw the figures into high relief, producing an effect which was very pleasing."⁶⁴

Immediately to the west of the garden was the "Royal Mosque". It is clear from Masson's account that Amir Dost Muhammed did not like it, possibly because its "royal" connotations referred to the Duranni line which he had ousted; so through deliberate neglect he was letting it fall down.⁶⁵ Sadly there is no trace of it in any of the photographs and it only appears incidentally in various drawings from the 1830s and 40s (see, for instance, Figure 29). There are enough different versions of these to be certain that it had a dome and several pinnacles. The size of the latter is not clear but they appear too small to be minarets and resemble the decorative pinnacles around the tomb of Ahmed Shah Durrani in Qandahar, built in the late 18th Century.⁶⁶

Putting together these and other fragments of information, a possible reconstruction of the royal palace, courtyard, audience hall, garden and mosque, as it was in the early 19th Century, is shown at Figure 28. If the garden pre-dated the other buildings, it might explain the unusual layout, where the private palace, which had been placed on the north walls to get fresh air and the views, is separated from its garden by a very public courtyard, which was also used as a thoroughfare between the western and eastern parts of the lower fort.

In the background of the reconstruction drawing is part of the mass of housing in the lower fort. In common with most fortresses in the Indian sub-continent, a considerable township had grown up within the walls of the lower Bala Hissar. One gets an impression of this from a drawing by James

Atkinson in 1839 (Figure 29) and from a photograph taken in 1879 (Figure 30).

Masson says that the lower Bala Hissar might have had about a thousand houses with some five thousand inhabitants. These would have been courtiers, servants, soldiers, armourers and many others whose livelihood depended on the ruler. The whole estate belonged to the rulers; the houses were owned on a sort of leasehold, and were largely valued on the amount of wood they contained.⁶⁷ Along the road running from the *Darwaza Naqqara Khana* to the Palace Court, there was a bazaar serving the inhabitants of the fort. This was spacious and had lines of trees extending along its centre. Inside the *Darwaza Shah Shahid* there was another, smaller, bazaar area.

The lower fort was divided into areas inhabited by different groups; among these was an Armenian community that even had a small church in the eastern part of the fort. This community included descendants of a group of artillerymen that Ahmad Shah Durrani had brought from Lahore in the 18th Century. In 1842, the Reverend J.N. Allen, a chaplain, set forth to visit the Armenian Christians: "After some inquiry, we discovered them in a street in the Bala Hissar, leading from the Jellalabad [*Shah Shahid*] Gate; their buildings were on the North side of the street. We went up an alley and turned into a small court on the left, surrounded by buildings and filled with the implements of their trade. A little door led from this court into their church, a small dark building, but upon procuring lights, I found that it was carpeted and kept clean, apparently with great care. Its aspect was due east and west and an altar stood at the east end."⁶⁸

Masson describes two main sources of water for the fort. A canal, the *Jui Pul Mastan* which predated Babur's time, brought water from the Logar River about five miles away, to a pool out-

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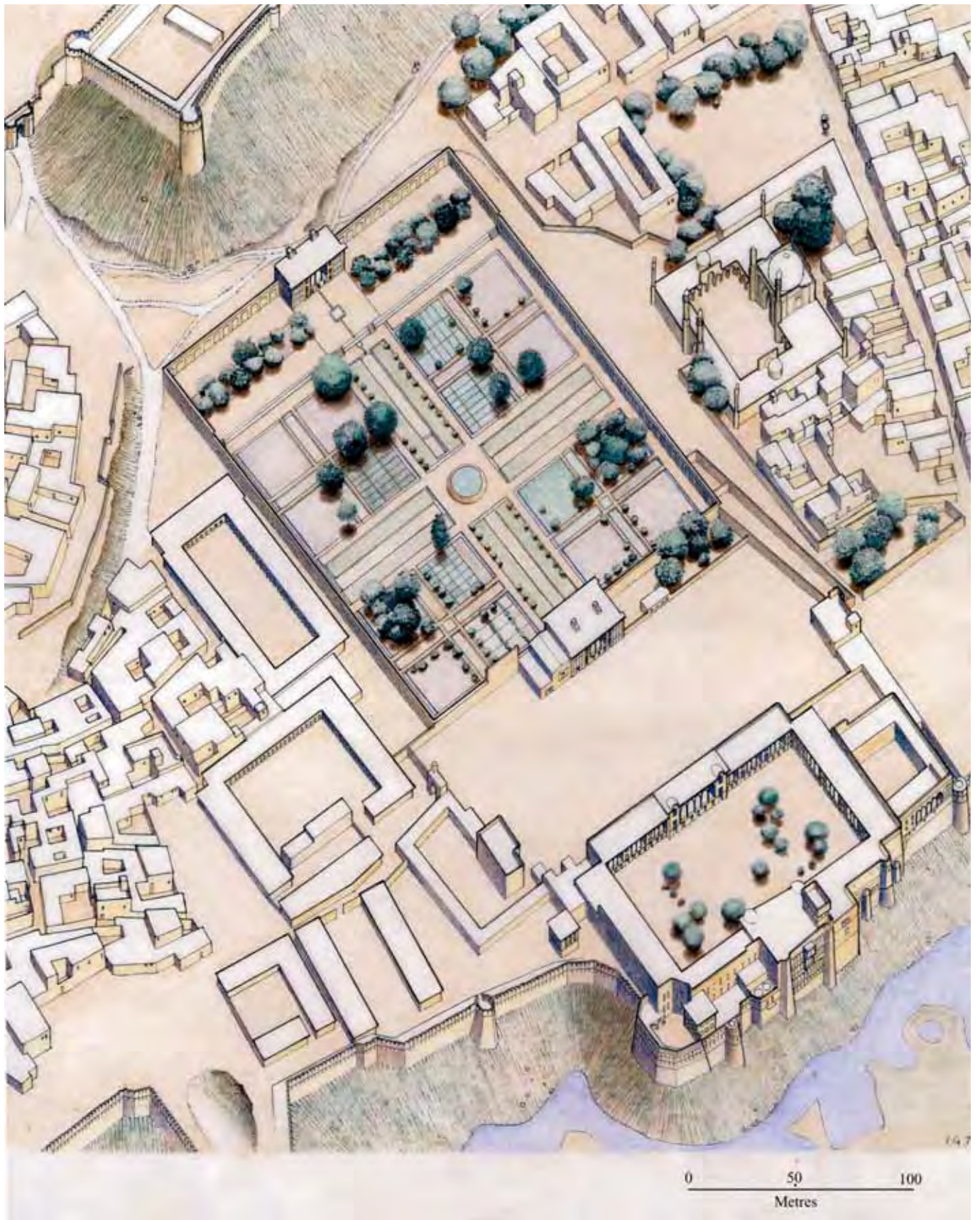


Fig. 28. Axonometric drawing of the palace and garden area of the lower Bala Hissar in 1839, viewed from the north-east. The only features remaining today are some walling of the upper Bala Hissar, shown in the top-left corner. [Ian Templeton.]



Figure 29. "Bala Hissar and City of Cabul from the Upper Part of the Citadel." Plate 20 of Atkinson's *Afghaunistan* (see note 30). [Institution of RE]



Figure 30. Part of the Lower Bala Hissar and the City of Kabul from the Upper Bala Hissar in 1879. [Bengal Sappers & Miners; Institution of RE]

side the south-east corner of the fort. This was said to be good drinking water, although the kings were accustomed to have even sweeter water carried to them from a source about nine miles away. Another canal, the *Bala Jui*, led in from the west. It tapped into a higher part of the Kabul River, then, having taken water to the garden at Babur's tomb, it followed the contours around the *Sher Darwaza* hill on the south of Kabul city. From a plan drawn in 1880 (Figure 48), it can be seen entering the lower Bala Hissar beside the postern gate. From there it travelled along the base of the citadel hill and flowed through the pavilion on the south side of the palace garden, from where it filled the pools and channels in the garden.

In addition to the canals, there were many wells throughout the lower Bala Hissar, where the water was mostly about 12 – 20 metres below ground. Masson mentions two masonry-lined wells in the upper Bala Hissar, one of which might have been the *ba'oli*, or step-well, that Shah Jahan ordered to be built on the south side of the citadel in 1646.⁶⁹ Masson said one well became the *Siah Chah*, a notorious dungeon, although such a prison was probably purpose-built.⁷⁰

The moats that surrounded the fort on its south, east and north sides may have been partly filled with water from the *Jui Pul Mastan* or, in winter, when the flat plain to the south of the fort becomes an extensive lake, water from this might have been channelled to top up the moat. In the 1839 plan (Figure 5) there seems to be such a channel marked on the southern edge of the moat. The *Bala Jui* might have provided some water to the moat on the western side, but none of these sources could have provided a flow. An officer stationed in the lower fort in 1880 recorded that the moat was full of stagnant water in places and everywhere foul and insanitary. When the weather got hot, fever broke out.⁷¹

CHANGES IN THE MID-NINETEENTH CENTURY

THE British left Kabul in October 1842. The next year Amir Dost Muhammed Khan was back as ruler and living in the Bala Hissar. He ruled for a further 23 years but following his death in 1863 there was a struggle between several of his sons and the heir he had selected, Sher Ali Khan, with the leadership, and possession of the Bala Hissar, changing hands. Amir Sher Ali recovered his throne in 1869 and held it for ten more years. In 1878, however, the appearance of a Russian mission in Kabul caused a crisis that led to the start of what became (for the British) the Second Afghan War.⁷² The fighting during that first phase took place on the eastern frontier of Afghanistan. Following British successes, Amir Sher Ali fled north (where he died a couple of months later), leaving his son, Yakub Khan, as Regent. Yakub Khan negotiated with the British and signed a treaty that would allow a British mission to be established in Kabul.

Sir Louis Cavagnari, the new envoy, was greeted with a salute of guns and ceremonially welcomed into Kabul on an elephant. He was allocated a residence in the Bala Hissar, in a compound on the raised south-east side of the lower fort, overlooking the wall. Five weeks after he had arrived, Amir Yakub Khan was unable to control three regiments of his soldiers, who were mutinying over arrears of pay. On September 3rd 1879 they turned their fury onto the British Residency, killing Cavagnari and his staff and escort. Only a few men, who had been elsewhere, escaped to take the tale down to India. The news prompted a new phase of the Second Afghan War. Forces re-assembled on the frontier of British India, under General Sir Frederick Roberts and, brushing aside an attempt by Amir Yakub Khan to negotiate a delay, advanced rapidly towards Kabul. After a couple of fierce actions, Afghan resistance ceased and



Figure 31. The south-east corner of the lower Bala Hissar in 1879, with the main gate on the right. The walls had become fairly degraded by this time and parts could not be used as a firing platform as buildings had been constructed on them. [Bengal Sappers & Miners; Institution of RE]



Figure 32. The north-east corner of the lower Bala Hissar in 1879, showing Amir Sher Ali's palace. [*Bengal Sappers & Miners; Institution of RE*]

Roberts reached the capital in early October. Unlike the First Afghan War, when British troops were only stationed in the Bala Hissar in support of Shah Shuja, on this occasion the British took over the Bala Hissar completely.

By this period, photography was possible in the field, albeit with heavy plate-cameras. There are two important sources of photographs of Kabul in the Second Afghan War; the most well-known being a professional photographer, John Burke, who visited General Robert's forces in Kabul. He made an extensive series of photographs of landscape and people. These were advertised in a catalogue and could be bought, either singly or made up into albums. There are, therefore, a lot of his photographs around in various collections but with individual plates varying in their deterioration. Because of his catalogue, one can be fairly sure that one has seen all the pictures that he took of the Bala Hissar. The other set of pictures is by the Photographic School of the Bengal Sappers and Miners. There is no definitive list of these. They were often used with official reports but there are fewer original copies of them around and those that do exist have often deteriorated. A valuable selection of them was, however, published in a book printed privately by Lieutenant Colonel E.T. Thackeray, Royal Engineers, in 1881, and these pictures are clear and useful.^v

The photographs show that some features of the Bala Hissar had been modified since the 1840s and lengths of wall were degraded for defence by having palaces and other building constructed on top of them. Some parts of walls, particularly parapets, had tumbled and not been rebuilt to their previous standard. Figure 31 shows a section of wall in the south-east corner of the lower Bala Hissar which indicates how degraded the walls had become by 1879.

By the 1870s, Amir Sher Ali had been residing in a new palace, with rooms on top of the walls in the north-east corner of the lower fort (Figure 32). There are few details of the size and shape of this palace but a room in it was described as being

pictured, carpeted, and ornamented, with glass chandeliers.⁷³ Sher Ali's son, Yakub Khan had a palace nearby. This, also, was described as being furnished with thick carpets and bright rugs. "English-made" furniture was ranged side by side with local cushions. There were numerous glass chandeliers and pictures in gilded frames.⁷⁴

Many of the other houses in the eastern Bala Hissar had been rebuilt by this time. Typically, they were surrounded by high walls (as are most houses in the Old City of Kabul today). Howard Hensman, Special Correspondent of the Pioneer newspaper of Allahabad who accompanied Roberts' force to Kabul, wrote: "Entering one of these large houses in the Bala Hissar some days ago, I found myself in an inner courtyard full 20 yards square. At either end were sets of rooms with open verandahs in front, built of a framework of wood fitted in with bricks, and then carefully plastered over. The lower rooms were four or five feet above the level of the courtyard, and broad flights of steps led up to them. Every bit of wood used as supports or for partition walls had been carved and fretted with great skill, while the inner rooms were cut off from the glare outside by carved wooden screens, some of the patterns being extremely pretty. But the greatest wealth of ornamentation had been lavished above, in what were the quarters for the women. A handsome wooden staircase, broad enough for four persons to walk abreast, led up to these; and once on the higher level the change from the dull brown below was quite refreshing. There was the same repetition of carved woodwork and open screens; but the inner walls were gay with frescoes in every colour, the plaster being covered with native designs of scroll-work, filled in with birds of startling plumage and flowers of hues to shame the rainbow. The ceilings and cornices were similarly adorned, the latter being set with mirrors in long narrow strips of various sizes. The recesses for lamps and the lintels of the doors had all shared in the general ornamentation, and to its inmates the *zenana* must have seemed a triumph of artistic skill. All was deserted now . . ."⁷⁵

^v A well-known photographer, Sir Benjamin Simpson, also took part in the campaign and made some excellent photographs, but he did not come to Kabul.

THE BALA HISSAR OF KABUL



Figure 33. Extract from an 1880 plan of the Bala Hissar, showing the location of the ruins of the former British Residency by the south-east wall of the Bala Hissar. Note: **South is at the top**. The location of the house occupied by Cavagnari has been tinted green; the remainder of the residency buildings lay to its north and west.

[Adapted from a plan in the Institution of RE]

THE RESIDENCY

It was a grand set of buildings, rather like those described above, that was allocated to Sir Louis Cavagnari, the British Resident who had been imposed on the Afghans in 1879. On one side of a courtyard, and built onto a portion

of the south-east wall of the Bala Hissar, was a rather elegant two-storied pavilion which Cavagnari occupied. On the north side of the large courtyard was a three-storied house, which was used by his staff. On the west side of the courtyard complex, and separated from it, was another



Figure 34. "Ruins of the British Residency at Kabul" from a sketch made in October 1879. *[Illustrated London News, 29 Nov. 1879; author's collection.]*

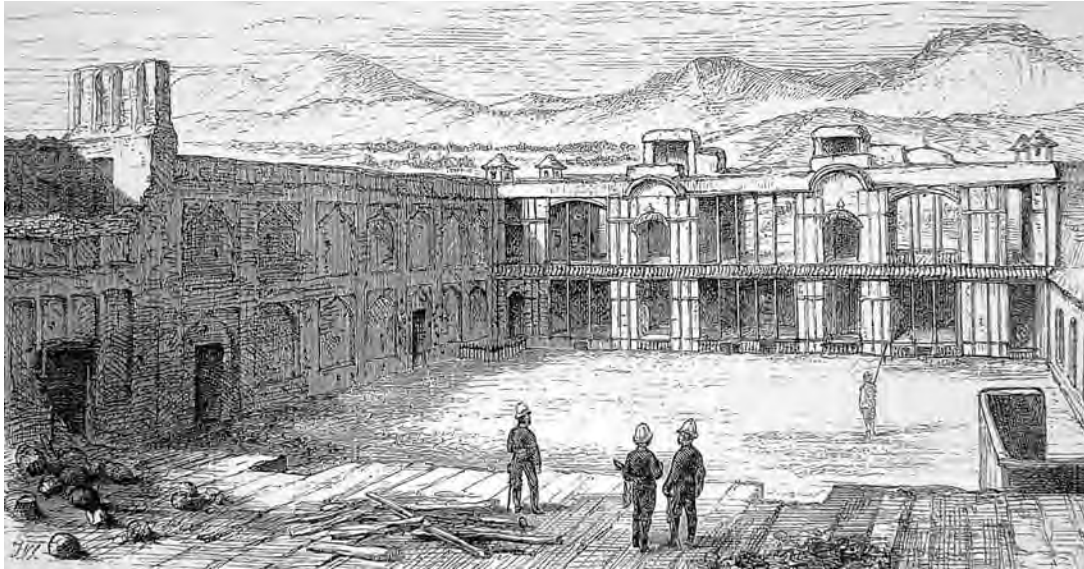


Figure 35. "Interior of the British Residency, looking south" from a sketch made in October 1879. The building on the far right was the one that had been occupied by Sir Louis Cavagnari. [*Illustrated London News*, 30 Dec. 1879; author's collection.]



Figure 36. A photograph of Cavagnari's residence. After the assault on it, all removable fittings were looted. There was some further damage from the explosion in a magazine in the upper fort.
[*Bengal Sappers & Miners; Institution of RE*]



Figure 37. Cavagnari's Residence (the central building), from outside the fort looking across the moat, in 1879.
[*Bengal Sappers & Miners; Institution of RE*]



Figure 38. The main gate into the Residency outer compound. This is a rather confusing photograph, due to the high contrast between sunlight and shadow. The gallows (left side) was said to have been erected where the mutineers had placed a gun they had brought up, and where Lieutenant Walter Hamilton, VC, commanding the escort, was killed on a last charge out of the fort. In fact, the gallows was placed on the highest point in that area, where it would have been clearly seen, and may not be on the exact spot where the gun was. [*Bengal Sappers & Miners; Institution of RE*]

THE BALA HISSAR OF KABUL



Figure 39. A view from the upper Bala Hissar over the main part of the Residency complex. Cavagnari's residence was the building centre-right, his staff were housed in the building whose burnt-out remains are centre-left. The Escort's compound is in the foreground. The horse-lines were even nearer the camera, and out of the picture. Further damage had occurred throughout from the explosion of the nearby magazine in the upper fort and this had also scattered debris over the entire area shown in the photograph. [*Bengal Sappers & Miners; Institution of RE*]



Figure 40. A similar view to Figure 39, looking east from the Upper Bala Hissar, over the area of the former Residency, in 2006. The wrecked armoured vehicle (arrowed) lies beside where the west wall of the Residency compound would have been. The compound stretched north to the highest part of this feature. The mounds of spoil there might be part of the debris of the three-storied building, which had been at the back of the Residency compound. The escort compound and horse lines were between that and the bottom-right of the picture. [*R.Grindle.*]

set of buildings which accommodated the Resident's escort of about 80 soldiers from the renowned Queen's Own Corps of Guides. Beyond that, and very close to the east wall of the upper fort, were the horse-lines for the escort. It is beyond the scope of this paper to recount what happened on September 3rd 1879, when the Residency was attacked by mutinying Afghan troops and all the occupants killed, except in so far as it enables a better understanding of the buildings that made up the Residency complex at that time.

A few servants and members of the Escort were outside the Residency when it was attacked. Some of these were able to make their way down to British India. Whenever they first crossed the frontier, they were interviewed by British officers, who telegraphed their accounts to the Government (in Simla). Parts of those accounts are confusing and it has to be realised that none of the officers translating them and writing them down would have seen the Residency. A rough sketch plan drawn up at that time had errors. A modified version of that sketch, still with some errors, was used in a later history of the Guides and is useful when reading some of the accounts.⁷⁶ A plan drawn in 1880 shows the location of the Residency, but by then many of the structures had been demolished (Figure 33).

The day after General Roberts reached Kabul in October

1879, he visited the burnt-out Residency with his staff, accompanied by Howard Hensman: "Our first view of the Residency was of the rear wall, still intact, but blackened at the top where the smoke from the burning ruins had swept across. At each angle where the side walls joined were seen the loop-holes from which the fire of the little force on the roof had been directed against the overwhelming numbers attacking them. Every square foot round these loop-holes was pitted with bullet-marks, the balls having cut deep into the hard mud plaster."⁷⁷

Roberts ordered sketches to be made of the site; some made their way to the London press (such as those in Figures 34 and 35). By the time that the first photographs were taken a few days later (Figures 36 – 39), a gunpowder-magazine in the upper Bala Hissar had exploded, doing some further damage to the nearby Residency. The Residency buildings had gone by the late 19th century and the site is now mostly wasteland; with a wrecked armoured vehicle and some trenches from recent fighting, which were probably dug through layers of the debris of former buildings (Figure 40). From a very careful analysis of photographs, drawings and several (often conflicting) contemporary accounts it has been possible to draw a tentative block-drawing of what the complex looked like in 1879 (Figure 41).

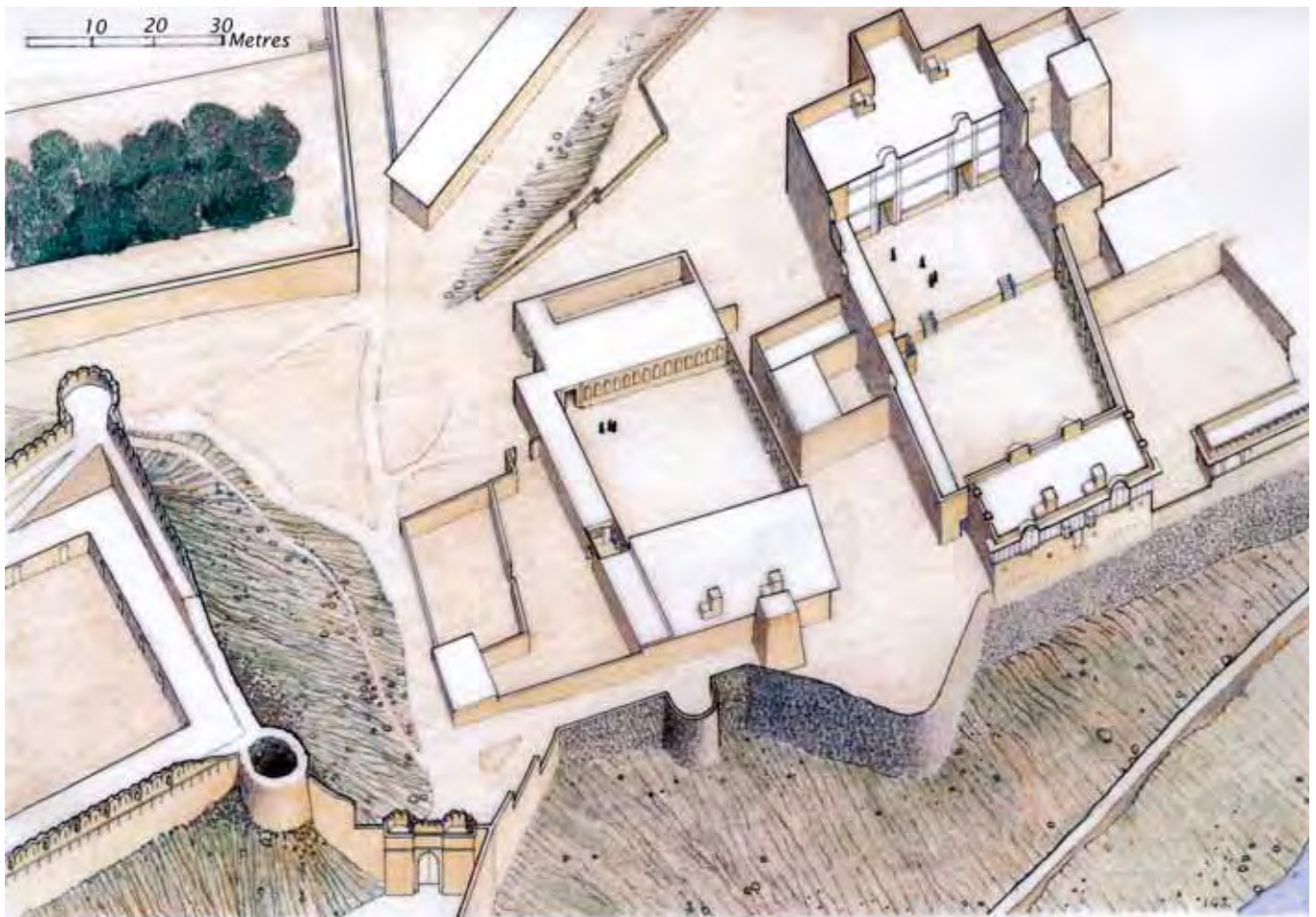


Figure 41. An axonometric drawing of the Residency complex, as it would have been in 1879, viewed from the south. [Ian Templeton.]



Figure 42. The south-east corner of the upper Bala Hissar, after some gunpowder stores had exploded. Gunpowder, made locally, was stored in the type of earthenware pots shown.

[*Bengal Sappers & Miners; Institution of RE*]

THE EXPLOSION OF TWO MAGAZINES AND THE DEMOLITION OF BUILDINGS

UNDER Amir Sher Ali, the eastern end of the upper Bala Hissar had become an important arsenal, with armourers' workshops, gunpowder mills and several magazines for storing gunpowder. A few days after the British troops had occupied the Bala Hissar, one of the gunpowder stores blew up, killing several soldiers. Whether this was the result of an accident or deliberate sabotage has never been determined. The fort was evacuated and a couple of hours later exploding ammunition or smouldering ruins set off a second explosion, but this time there were no further casualties. By good fortune, however, the main powder magazine nearby remained intact.

It is commonly reported that this explosion destroyed the fort; it did not. The buildings within which the explosions occurred were destroyed, as were the adjoining section of wall and the (already damaged) south-east corner tower of the Upper Bala Hissar (Figure 42). Debris was scattered widely, doing some secondary damage to buildings, but the bulk of the Bala Hissar remained undamaged, at that point. There are excellent accounts of the explosion and its aftermath by Howard Hensman and Joshua Duke, a medical officer with a Gurkha regiment that was stationed in the citadel.⁷⁸

In the winter of 1879, Roberts decided that as he could not get his whole force into the Bala Hissar and as, anyway, there was a continuing threat of an explosion in the main powder magazine, he would concentrate his force in the military cantonment that Amir Sher Ali had been building at Sherpur, to the north of Kabul and a little over two miles from the Bala Hissar. This lay on the south side of the

Bemaru hill and just north of where the 1840s cantonment had been. Sherpur was very much bigger than the Bala Hissar but its walls were not complete and only part of the accommodation had been built. To build barracks there, and for fire-wood, timber was needed. The most readily available source was the Bala Hissar, which, at that time, it had been decided to demolish anyway. The first buildings to be dismantled were those in the west part of the lower Bala Hissar and some of the shakier buildings in the palace area. At some time a road was driven from the east gate (*Darwaza Shah Shahid*), through the palace garden to the western half, possibly to aid the removal of timbers. In December, a visiting general could report that the entire destruction, which was then in progress, would soon be completely accomplished.⁷⁹ This, however, was not to be the case.

For a short period in mid-winter the British abandoned the Bala Hissar entirely and were then briefly besieged in Sherpur. Once that threat had gone, Roberts ordered the re-occupation of the Bala Hissar, which had been occupied by Afghan forces. Interestingly, his Chief of Staff wrote in his diary of the concern he had of the prospect of having to retake the fort by force. "I think this is very risky as the Bala Hissar is very strong indeed, to an assault, the walls are too high to escalate, and so the only way in is by the gate, which may be strongly retrenched inside, and if these fellows are determined they may, being so numerous, beat us off; then we shall be in a worse hat than before."⁸⁰ But the enemy withdrew from the Bala Hissar and, in January 1880, it was re-occupied by a British brigade without any fighting.

STRENGTHENING OF THE DEFENCES IN 1880

THROUGHOUT the spring of 1880, some new fortifications were built on the hills around Kabul and existing fortifications were improved. Roads, to ease the passage of artillery and supplies, were also constructed.⁸¹ These works came under the direction of Lieutenant-Colonel Æ. Perkins, Royal Engineers, and he ordered his officers to draw up plans of all the defensive works that they had built around Kabul. These drawings were eventually brought together in a folder, "Cabul Defences". Part of the overall plan from this, "Cabul Defences No. 1", is at Figure 43.

As part of these defensive preparations, the Bala Hissar was strengthened. At this time, Lieutenant J. Burn-Murdoch, Royal Engineers, made a survey of the Bala Hissar and drew a new plan of it (Figure 44). This plan records both the destruction that had been carried out within the lower Bala Hissar during the winter of 1879 and the new works that were carried out in the spring of 1880. The survey for this plan was more detailed than that for the 1839 plan and when overlaid onto a present-day satellite image of the site it is apparent that it, while not quite a perfect fit, is not far out. It has been used as the base for the reconstruction drawings.

The main threat to the fort was perceived to be an assault on the north-west corner, where city houses came very close to the walls of the lower fort. The outer walls there needed some repair, as did the gate (*Darwaza Naqqara Khana*). A line of buildings and walls, just west of the old palace and its garden, was strengthened as a second line of defence. Many of the buildings between the outer wall of the fort and this inner line had already been demolished, the remainder were now flattened to provide a clear field of fire for the second line of defence (the mud debris from them must have raised the ground level in places). A drawing made in March 1880 (Figure 45) shows this flattening very clearly. Some of the trees, still remaining at that time, indicate where the roadways had run. A photograph taken a little later confirms the removal of the housing (Figure 46). But both the drawing and the photograph show the number of buildings left standing in the old palace area and beyond.

Some troops were accommodated in the old palace buildings. Two hospitals were placed in former stables and other buildings on the east side of the old palace complex. The headquarters was sited in Amir Sher Ali's palace. Barracks and new magazines were constructed in the upper Bala Hissar. The horse-lines of the former Residency became a "sheep pen" (presumably for rations still on the hoof). A high house just east of the Residency's ruins housed the brigadier commanding the garrison. All this indicates that, in spite of what had been demolished, a number of buildings still survived.

And the walls were strengthened, where needed. In places the tops of the walls were repaired. Guns were placed on appropriate batteries and on some stout towers (Figure 53). In all, the Bala Hissar was still very much a going concern as a fortress, but no longer including a residential township.

Lieutenant Sim, who drew the picture at Figure 45, also drew a panorama of the Kabul area from the top of Bemaru

hill. A section of this (Figure 47) shows the relationship between the garrison still in Sherpur and that in the Bala Hissar. In between, and close to the north walls of the Bala Hissar, Sim has recorded "groves of willow that had been planted by (Amir) Sher Ali to dry the marsh land and for making gunpowder".⁸² Willow produced a light charcoal, favoured for making gunpowder.⁸³ Part of the land where those willows were is still within the modern perimeter of the fort and, lying adjacent to the old walls, could have a rich potential for archaeological investigation that is not so available on the other sides.

The walls running up to the Bala Burj feature on the right of Sim's drawing. Lieutenant Burn-Murdoch also surveyed the hill with these walls and the Bala Burj on it (Figure 48).

The walls show in a photograph taken from the south side of the Bala Hissar (Figure 49). These walls were not strengthened or repaired but the fortified post on its top, the Bala Burj, was rebuilt as a post for thirty rifles (Figures 50 and 51). Along the crest-line of the Sher Darwaza, three more fortified posts were built on the old wall, but, except where incorporated in these posts, the old wall was not renovated. A road was built along the entire wall to ease access (See plan Figure 43 and Figure 52.)

At the beginning of May 1880, General Sir Donald Stewart took command of all British forces in Afghanistan. Following a change of government in London, all construction work was put on hold while negotiations went on with the Afghans for the installation of a new Amir. The choice having fallen on Abdur Rahman, preparations were made for the withdrawal of British forces. Stewart wanted to demolish all the fortifications, including the Bala Hissar, and orders to that effect were issued to his engineers. His Chief Political Officer, Sir Lepel Griffin, argued strongly that to do so would severely weaken the incoming Amir. Griffin's view eventually prevailed and, as the British forces withdrew in August 1880, Afghan soldiers took over all the fortifications, including the walls of the Bala Hissar, intact.⁸⁴

Howard Hensman described the British departure on 11th August 1880: "As we rode along we could see the forts on Bemaru already occupied by small parties of the Amir's infantry. The Asmai fort had been occupied the night before, as soon as our own pickets had left it; the big fort on Siah Sang was occupied during the day, as were the Sherderwaza and other forts. The Bala Hissar was taken over by General Gholam Hyder Khan, with one regiment of infantry and about a hundred cavalry. Sherpur itself was garrisoned by the Haz Danari, a celebrated Turkistan cavalry regiment, and 500 khasidars, a force scarcely strong enough to defend any single corner of the huge cantonment."⁸⁵

What is so clearly shown as being still there in the spring of 1880, in these plans, descriptions, drawings and photographs, was what was handed over to the Afghans. That Amir Abdur Rahman decided to build a new fortress-palace elsewhere is understandable; the palaces left in the Bala Hissar were in a deplorable state. What is not correct is the bald statement, so often made, that "General Roberts destroyed the Bala Hissar".

THE BALA HISSAR OF KABUL

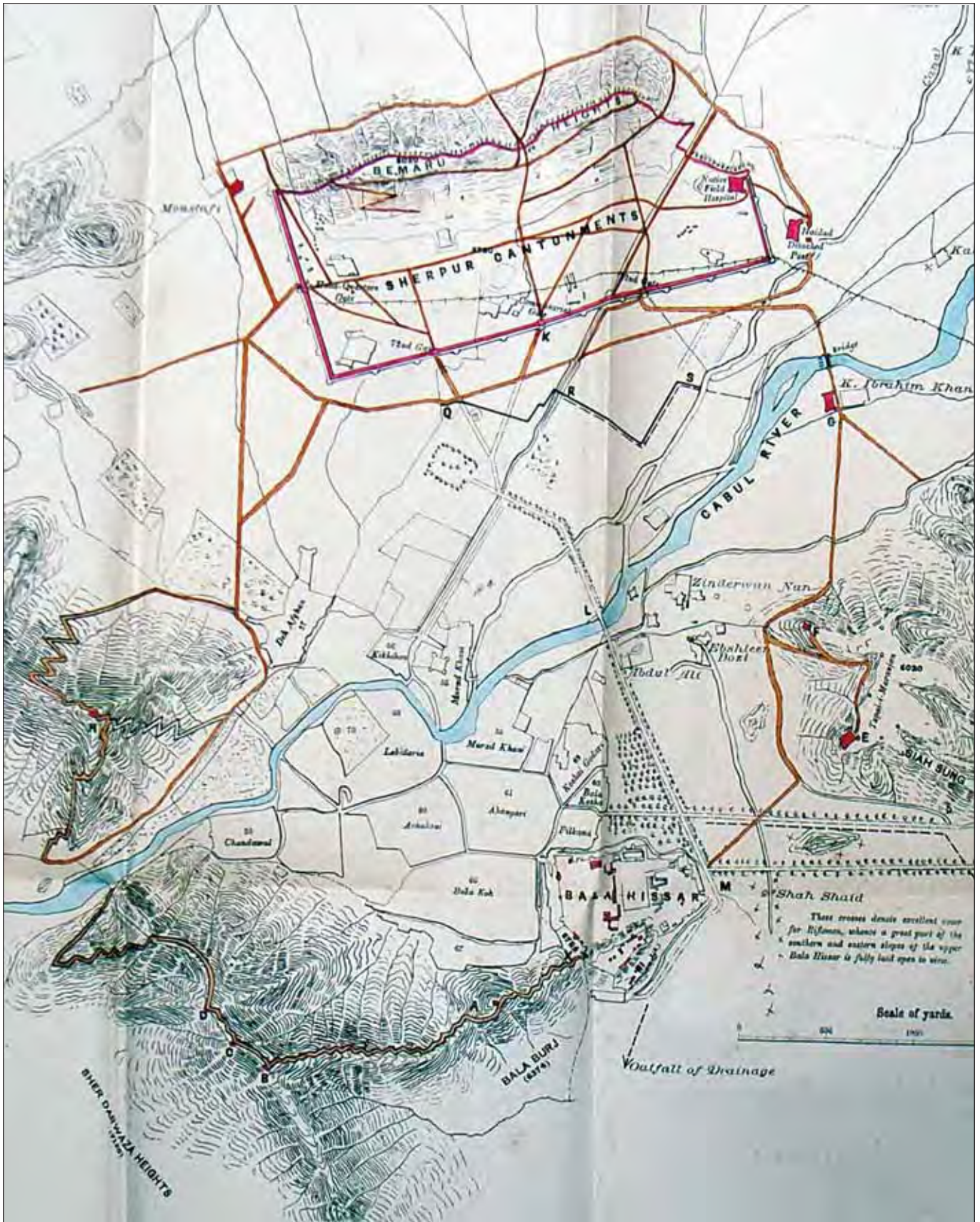


Figure 43. Part of "Cabul Defences No 1". This was drawn in 1880. The walls and blockhouses built or strengthened by the British in 1880 are picked out in red. The roads constructed to connect with these defences are in brown. [Institution of RE]



Figure 44. Part of “Cabul Defences No. 6. Plan of Bala Hissar, Subsequent to Demolition and Reconstruction.” Surveyed by Lieutenant J. Burn-Murdoch, RE, 1880. Note: **South is at the top**. Buildings marked in light red were new accommodation for troops, those in dark red were structures strengthened as part of the defences against an attack from the direction of the city. The plan shows that the housing in the western sector of the fort had been cleared. The nearest buildings of the city are shown hatched on the bottom-right of the plan. [Institution of RE]

THE BALA HISSAR OF KABUL

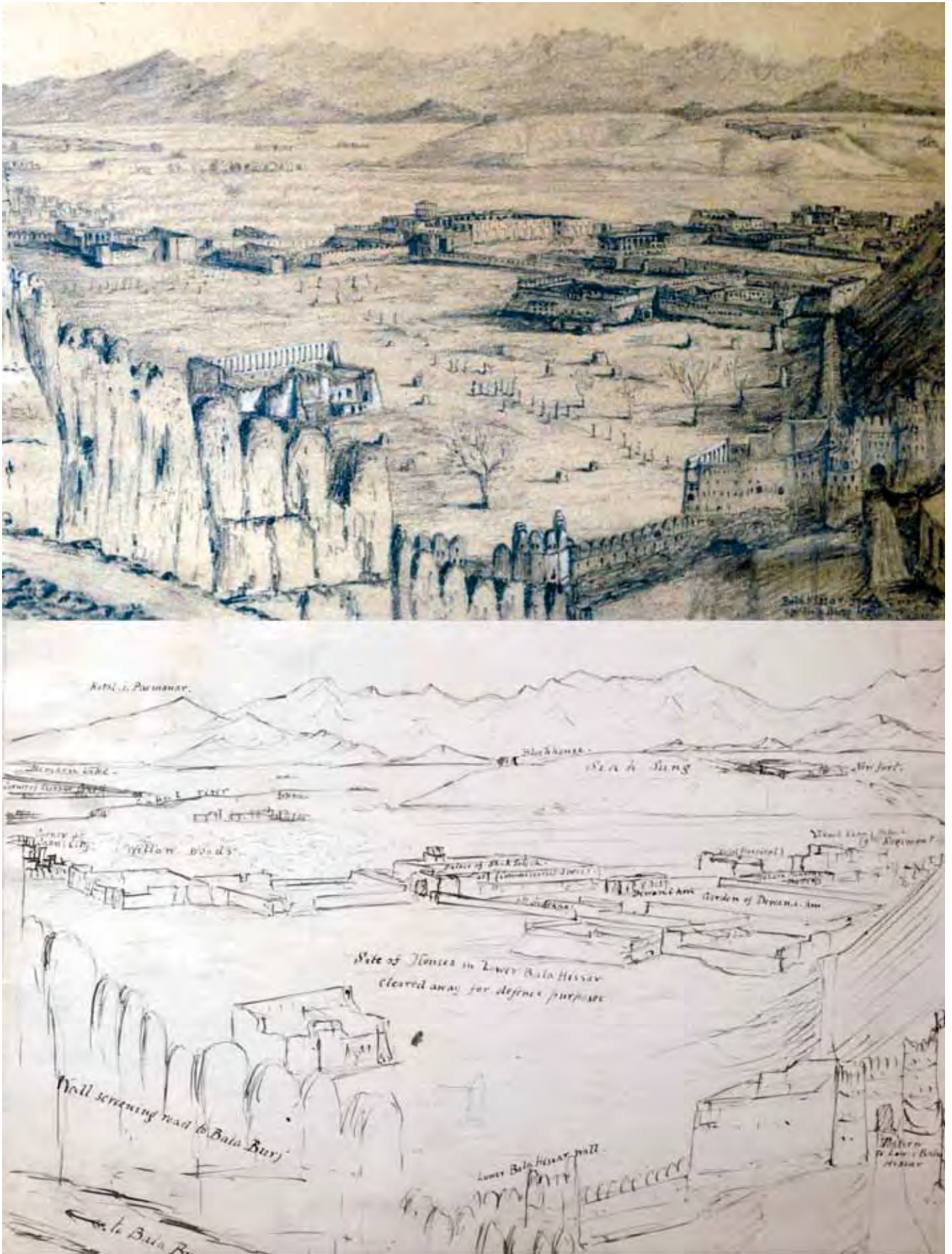


Figure 45. “The Bala Hissar, Cabul, from the Road to Bala Burj”. The left-hand panel of a two-part drawing by Lieutenant G.H. Sim, Royal Engineers. This was completed 28 March 1879.⁸⁶ It shows the amount of housing that had been cleared in the western half of the lower Bala Hissar but also the retention of a second line of defence along the west side of the former palace-garden complex. [*Institution of RE*]



Figure 46. Panoramic view of the Bala Hissar, from the west, in the spring of 1880 (after a fall of snow). The outer walls of the fort, although missing some battlements, were intact and in places had been strengthened. Within the fort, the western area of housing had been totally flattened, to provide a clear field of fire in front of a second line of defence that had been created in the walls and buildings across the middle of the lower fort. This was served by a roadway through the main garden (gaps can be seen in the garden walls). Behind that, in the eastern half of the lower fort, palaces, other buildings and stables had been retained for use by the troops. The circles in the centre foreground were not part of the fortifications but were pits in which ice was stored for use in the summer. On the right are parts of the walls running up to the Bala Burj. There is an enlargement from the right side of the panorama at Figure 7. After this photograph was taken, there were no significant changes made to the Bala Hissar prior to it being handed back to the Afghans in August 1880. [Institution of RE]



Figure 46a. An enlargement, from Figure 46, of the north-west corner of the lower Bala Hissar. This shows the corner tower to be somewhat damaged (compare with Figure 12) but still capable of having artillery mounted on it. The gate that led to the city (the Darwaza Naqqara Khana, see Figure 15), is in the centre of the picture. The wall-tower on the right has some accommodation on its top. The moat in front has very little water in it; snow melt might have provided more in the late spring.

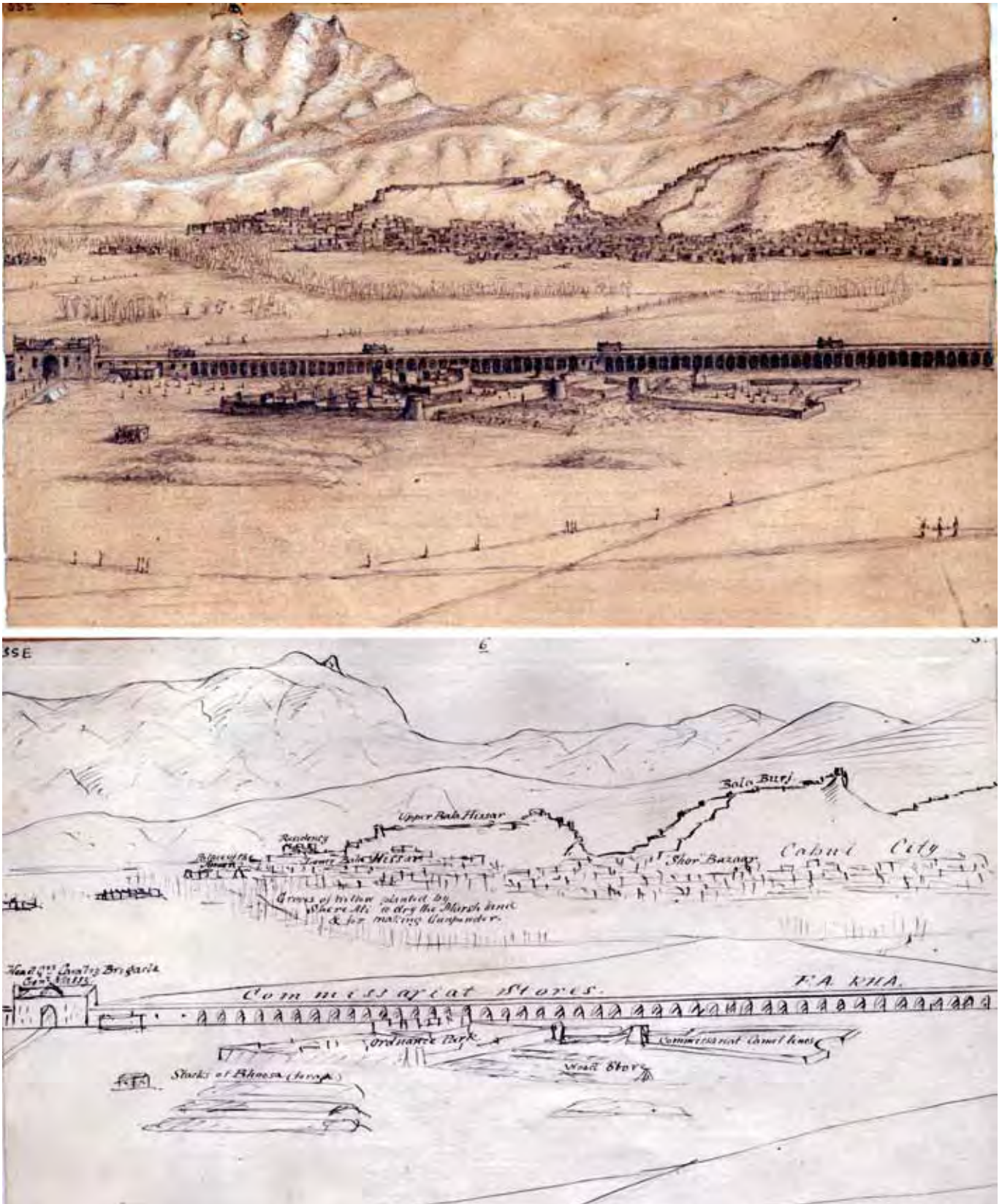


Figure 47. Section 6 of Lieutenant Sim's "Panorama of the Kabul Valley" 1880. The view is from the Bemaru hill, looking just east of south, across a portion of Sherpur cantonment to the Bala Hissar in the distance. In his key below, Sim points out the visible remains of the Residency to the left of the Upper Bala Hissar. To the right is the tower on the Bala Burj. [Institution of RE]

THE BALA HISSAR OF KABUL



Figure 48. Part of “Cabul Defences 6A, Bala Burj Survey.” Drawn by Lieutenant J. Burn-Murdoch, RE, in 1880. The remnants of the walls have been coloured red and the *Bala Jui* waterway outlined in blue. [Modified from plan in *Institution of RE*]



Figure 49. The partly-ruined walls rising up the hill to the west of the Bala Hissar to the Bala Burj. The wall at the bottom left of the photograph had no defensive purpose; it surrounded a vegetable garden. [Bengal Sappers & Miners; *Institution of RE*]



Figure 50. Panoramic view of the Bala Burj, from the west in 1880. The tower is being rebuilt. [Bengal Sappers & Miners; Institution of RE]

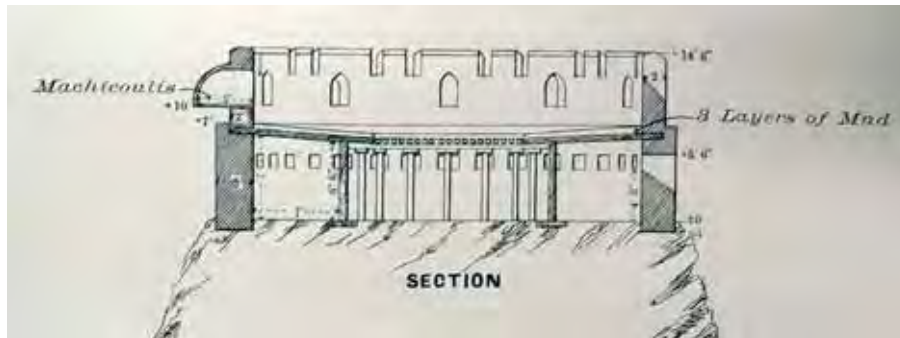


Figure 51. Section showing the reconstruction of the Bala Burj. [Extract from "Cabul Defences No. 7"; Institution of RE]



Figure 52. Posts which were strengthened along Sher Dawza walls in 1880. The road built at this time lies along the right (north) side. [Bengal Sappers & Miners; Institution of RE]



Figure 53. "City of Kabul and Asmai Hill from Upper Bala Hissar" (F.B. Longe, 1880).⁸⁷ [*Institution of RE*]

LATER CHANGES

THE incoming Amir, Abdur Rahman, decided that, with so many buildings within the lower Bala Hissar destroyed and the remaining palaces badly damaged, he would build elsewhere. The royal "Arg" fortress-palace was built on the, then, outskirts of Kabul, north of the river. Abdur Rahman retained the Upper Bala Hissar as an arsenal and as a prison. At some time after 1880 new magazines were constructed into the hillside of the upper citadel on the west and south. They were placed so that, were an accident to occur, the blast would be directed away from the occupied part of the fort or the city beyond. Blast walls were placed outside, some of which remain today. The magazines were vaulted with burnt bricks and the workmanship is of a good quality. In the upper fort there was also a notorious dungeon; its location is not obvious but doubtless it could be found.⁸⁸ The lower Bala Hissar was left to decay. This would have been accelerated by the removal of any re-usable material, particularly timbers.

In 1893, Sir Mortimer Durand, after a visit to Kabul, wrote that the lower Bala Hissar was levelled and not a trace of the old residency was left, except a wall of the escort's quarters. "The Amir leaves the shell of Sher Ali's palace standing in mockery – so that people may compare it with his own fine buildings." Sherpur was little changed in any way and the forts that General Roberts had built on Siah Sung, Asmai and elsewhere were being kept up by the Amir and were looking "quite smart and in good repair".⁸⁹ Some photographs taken by Dr Lilius Hamilton, personal physician to the Amir's family in the 1890s, show the external walls of the lower Bala Hissar crumbling away, with just a fragment of Amir Sher Ali's palace remaining.⁹⁰

In the late 1930s, the lower Bala Hissar had a new lease of life when a Military Academy was built there. The main building was sited roughly where the old palace court had been, with a parade ground in front, where the northern half of the palace garden had been, and a garden re-created on the site of the southern half of the old garden. Tucked under the slope that leads to the upper citadel, a swimming pool was later built. On a wall beside the pool there are two inscribed plaques, one dating from the time of the construction of the Military Academy, the other from 2002. The ruins of the Military Academy were still visible in 2005 but have since been removed as part of a reconstruction programme.

The Bala Hissar was later enclosed by a new perimeter wall and became an important military base again, not generally open to the public. But in the late twentieth-century, it twice more was the scene of heavy fighting. In August 1979, when a rebellion took place against the, then, communist government, fighting broke out at the Bala Hissar, with rebels killing most of the pro-government officers and their Soviet advisers. But government forces surrounded the fort and the insurgents, although armed with tanks and heavy weapons, were unable to break out. For six hours planes and helicopter gunships attacked the fort and its surroundings, and the fort was eventually retaken.⁹¹

In the mid-1990s, during inter-factional fighting for the control of Kabul, the Bala Hissar was entrenched and fortified with armoured vehicles by forces from two factions who had defected from the government. In June 1994, forces loyal to President Rabbani launched an attack on the fort. Jets carried out at least a dozen bombing raids, which

were followed by shelling from artillery and mortars. Rabbani's troops first captured the strategic hill to the west of the Bala Hissar (the old *Bala Burj*), and then scaled up into the main fort, by which time most of the opposition had fled. The fort was left pock-marked with large holes made by the bombs.⁹² Parts of the interior still have wrecked armour from the fighting (Figure 54) and the potential hazard of unexploded munitions.

THE FUTURE

ANY decisions about the future of the Bala Hissar site are for the Government of Afghanistan to make.

It is hoped that this paper will have illustrated some aspects of the unique archaeological legacy of the whole of the former fortress-palace complex and the area surrounding it, and may act as a stimulus for further studies on the ground. Historically and architecturally, the Bala Hissar is of world importance.



Figure 54. Inside the Upper Bala Hissar in 2005; wrecked armour from the 1990s, with ruined Mughal period casemates. [Author]

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NOTES

- 1 Caspari, P.E, “Les Murs de Kabul”, in *Afghanistan, a quarterly of art literature and architecture*, No. 2, 1946, pp. 33-36; Dupree, L., *Afghanistan*, Karachi, 1997, p. 310. For the history and topography of Kabul see Dupree, Nancy Hatch, *An Historical Guide to Kabul*, Kabul, 1972.
- 2 Vogelsang, W., *The Afghans*, Oxford, 2002, p.182. This is a good source for early Afghan history beyond the scope of this paper.
- 3 Bosworth, C.E., *The Ghaznavids; Their Empire in Afghanistan and Eastern Iran, 994-1040*, Edinburgh, 1963, p. 116.
- 4 Sykes, Sir Percy, *A History of Afghanistan*, London, 1940, Vol. I, p. 225
- 5 *Ibid*, p. 259.
- 6 Gascoigne, A.L., Thomas, D.C. and F. Kidd (forthcoming paper), “In the trenches: rescue archaeology at the historic site of Bala Hissar, Kabul, Afghanistan”.
- 7 Beveridge, Annette S. (trans.), *Babur-Nama*, London, 1921, pp. 198-9.
- 8 *Ibid*, pp. 201-2.
- 9 For this, and neighbouring dynasties, see: Robinson, Francis, *The Mughal Emperors; and the Islamic Dynasties of India, Iran, and Central Asia, 1206-1925*, London, 2007. For the early period: Gascoigne, Bamber, *The Great Moghuls*, London, 1971.
- 10 Beveridge, *op. cit.*, pp. 646-7.
- 11 Sykes, *op. cit.*, Vol. I pp. 300-1.
- 12 Beveridge, H., (trans.), *The Akbar Nama of Abu-l-Fazl*, Calcutta, 1902, (repr. New Dehli, 1972), Vol. II pp. 41-43.
- 13 Rogers, A. (trans.) & Beveridge, H. (ed.), *The Tuzuk-i-Jahangiri, or Memoirs of Jahangir*, London, 1909, p. 101
- 14 *Ibid.*, p.118.
- 15 Saskena, B.P., *History of Shahjahan of Dilhi*, Allahabad, 1932, p.9.
- 16 *Ibid*, pp.184-6.
- 17 This is referred to in Fuller, A.R. (trans.), Begley, W.E. & Desai, Z.A., (eds.) *The Shah Jahan Nama of ‘Inayat Khan*, Delhi, 1990, p.363. I am grateful to Professor Ebba Koch for also clarifying this from: ‘Abd al-Hamid Lahauri, *Padshahnama*, Pers. text ed. vol. 2, ed. Kabir al-Din Ahmad and ‘Abd al-Rahim, Calcutta, Royal Asiatic Society of Bengal, 1866-72, pp. 590-91.
- 18 Burnes, Lt Alexander, *Travels into Bukhara*, 1834, repr., Lahore, 2003, p.72.
- 19 Atkinson, James, *The Expedition into Affghanistan: notes and sketches descriptive of the country contained in a personal narrative during the campaign of 1839 & 1840, up to the surrender of Dost Mahomed Khan*, London, 1842, p. 278.
- 20 Sykes, *op. cit.*, Vol. I, p. 354.
- 21 Elphinstone, Hon Mountstuart, *An Account of the Kingdom of Caubul and its Dependencies in Persia, Tartary, and India*, London, 1815, Vol. I, pp. 61-71.
- 22 Lal, Mohan, *Life of the Amir Dost Mohammed Khan of Kabul*, London, 1846, Vol. 1, pp. 69-170.

- 23 Masson, Charles, *Narrative of Various Journeys in Balochistan, Afghanistan and the Panjab*, (3 vols.) London, 1842. Unless otherwise stated, all references to Masson will be found in Vol. 2 pp. 249-261. For a recent account of Masson's life see: Omrani, Bijan, 'Charles Masson of Afghanistan: Deserter, Scholar, Spy' in *Asian Affairs*, Vol. XXXIX, No. II, July 2008, pp. 199-216.
- 24 *Ibid*, frontispiece of Vol. II.
- 25 Burnes, *op. cit.* p. 72.
- 26 For the general history of the First Afghan War see: Anon, *Frontier and Overseas Expeditions from India, Vol III, Part II, The First Afghan War*, Compiled in the Intelligence Branch, Army Headquarters, India, 1910; and Kaye, John William, *History of the War in Afghanistan*, Fourth Ed., London 1890. The three wars are covered in: Heathcote, T.A., *The Afghan Wars, 1839-1919*, London, 1980, (rpr. Staplehurst, 2003) and an account of foreign involvement in Afghanistan over the last two hundred years is: Loyn, David, *Butcher & Bolt*, London, 2008.
- 27 There is a copy of Durand's report in: MacGregor, Lt Col C.M., *Central Asia, Part II, A Contribution towards the better knowledge of the Topography, Ethnology, Resources, & History of Afghanistan*, Confidential, Calcutta, 1871, pp. 437-441.
- 28 Kaye, *op. cit.*, Vol. II, Book IV, pp. 141-2.
- 29 In addition to books cited elsewhere in these notes, there are descriptions of the Bala Hissar in: Burnes, Lt Col Sir Alexander, *Cabool, Being a Personal Narrative of a Journey to, and Residence in that City, in the Years 1836,7,8.*, London, 1842. Durand, Sir Henry M., *The First Afghan War*, London, 1879. Eyre, Lt Vincent, *Military operations at Cabul, etc.*, London, 1843. Vigne, G.T., *A Personal Narrative of a visit to Ghuzni, Kabul and Afghanistan, and of a residence at the court of Dost Muhamed*, London, 1840.
- 30 Atkinson, J.A., *Sketches in Afghanistan*, Lithographed by Louis and Charles Haghe, London, (1840s). Rattray, James, *Afghaunistan: Scenery, Inhabitants & Costumes, from drawings made on the spot*, London, 1847.
- 31 Atkinson's original drawings can be viewed on the British Library's website: Online Gallery. For Atkinson's book, see note 19.
- 32 Jackson, Sir Keith A. *Views of Affghaunistan, etc., From Sketches taken during the Campaign of the Army on the Indus*, London, 1840's; and Walton, W.L., *The Defence of Jellalabad by Major Gen Sir R.H. Sale, GCB, Drawn on Stone by W.L. Walton*, London, 1840s. Walton has far more than Jalalabad in it, including a very interesting section written by Lady Sale.
- 33 See Kaye, *op. cit.*, Vol. III Book IX, pp.366-371.
- 34 For this topic generally, see: Bucherer-Dietschi, Paul (ed.), *Bauen und Wohnen am Hindukush*, Liestal, 1988. Hallet, Stanley A. & Samizay, Rafi, *Traditional Architecture of Afghanistan*, New York, 1980. Szabo, Alberi, & Barfield, Thomas J., *Afghanistan: An Atlas of Indigenous Domestic Architecture*, Austin, 1991. For work in the Mughal period see: Qaisar, Ahsan Jan, *Building Construction in Mughal India*, Delhi, 1988.
- 35 The near-eastern origins of this use of timber reinforcing are mentioned in Wilcox, R.P., *Timber and Iron Reinforcement in Early Building*, The Society of Antiquaries Occasional Paper (New Series) II, London, 1981, pp. 3-4.
- 36 RE Library Mss, *Reports on Engineering Operations, Afghanistan, 1839-41*, pp. 66 ff.
- 37 RE Library copy in 954.1 1878/1879 Mil, Anglo Afghan War 1878-79, Third Section. There are also copies in the British Library, the National Archives and the Royal Geographical Society.
- 38 Sale, Lady, *A Journal of the Disasters in Affghanistan, 1841-2*, London, 1844, entry for Jan 9th 1842. Lady Sale was a superb eye-witness of the events that took place in Kabul in 1841-2.
- 39 Walton, *op. cit.*, pp. 2-4.

- 40 This is in Durand's report on the Bala Hissar, see note 27.
- 41 For the sources for this, see note 17.
- 42 Khan, Iqtidar Alam, *Gunpowder and Firearms, Warfare in Medieval India*, New Delhi, 2004, pp. 91-116. See also, Gommans, Jos, *Mughal Warfare: Indian Frontiers and High Roads to Empire, 1500-1700*, London, 2002, pp. 145-162. For Mughal artillery generally, see: Irvine, William, *The Army of the Indian Moghuls, its Organisation and Administration*, London, 1903, pp. 113-159.
- 43 Axworthy, Michael, *The Sword of Persia; Nader Shah from Tribal Warrior to Conquering Tyrant*, London, 2006, p.190.
- 44 Stocqueler, J.H., *Memorials of Afghanistan*, Calcutta, 1843, rpr. Lahore, 1983, Appendix VII, 'Narrative of Events in Cabul etc', by a 'Quondan Captive' (Lt Melville), p. lxi. There is more of use in this appendix.
- 45 Walton, *op. cit.*, plate: "City and Fortress of Cabul". This is unlike most other drawings in the folder and is of a similar style to Sturt's drawing of the Bala Hissar on the 1839 Plan.
- 46 I am grateful to Bruce Wannell for identifying that, in the 16th Century, the gate on the west side of the lower Bala Hissar was called the *Darwaza Ahani*, or "Iron Gate", and for help with other topographical features.
- 47 Kennedy, R.H., *Narrative of the Campaign of the Army of the Indus, in Sind and Kaubool, in 1838-9*, London, 1840, Vol. II, pp. 83-4.
- 48 RE Library Album J1 6/256, Photographs & Plans of Defences round Kabul and Sherpur; Photo 11 has a note pointing to this gate "Postern Gate, opened by us, for communicating with the Bala Burj, Sher-i Darwazi etc."
- 49 Havelock, Capt. Henry, *Narrative of the War in Affghanistan in 1838-39*, 2 vols. London, 1840, Vol II, pp. 138-40.
- 50 Seaton, Sir Thomas, *From Cadet to Colonel; the Record of a Life of Active Service*, 2 vols., London, 1866, Vol. I, pp.179-80.
- 51 Stocqueler, *op. cit.* pp. lxii-lxiii.
- 52 For the architecture of the palace-township of Mughal forts generally, see: Asher, Catherine E.B., *The New Cambridge History of India; 1:4, Architecture of Mughal India*, Cambridge, 1992. Koch, Ebba, *Mughal Architecture*, Munich, 1991. Mukherji, Anisha Shekhar, *The Red Fort of Shahjahanabad*, Delhi, 2003. Tillotson, G.H.R., *Mughal India*, London, 1990. For life in a Mughal court see: Schimmel, Annemarie, *The Empire of the Great Mughals*, London, 2004, pp. 65-80. For Islamic palace architecture, see: Hillenbrand, Robert, *Islamic Architecture*, Edinburgh, 1994, pp. 377-462.
- 53 Masson, *op. cit.*, Vol. II, p. 257-8.
- 54 *Ibid*, p. 258.
- 55 See Havelock, *op cit.*, Vol. II, p. 120, and Fane, H. E., *Five Years in India; comprising a narrative of travels in the Presidency of Bengal, a visit to the court of Runjeet Sing, residence in the Himalayah Mountains, and account of the late expedition to Cabul and Affghanistan, voyage down the Indus, and journey overland to England*, 2 vols., London, 1842, Vol. II, pp. 186-7.
- 56 Masson, *op. cit.*, Vol. III, p.107.
- 57 See note 32.
- 58 Masson, *op. cit.*, Vol II, p. 257.
- 59 Nash, Charles, *History of the War in Afghanistan*, London, 1843, pp. 201-2.

- 60 Havelock, *op. cit.*, Vol. II, p. 151.
- 61 Koch, Ebba, 'Mughal Palace Gardens from Babur to Shah Jahan (1526-1648)' in *Muqarnas*, 14, 1997, p. 157.
- 62 Neil, J. Martin Bladen, *Recollections of Four Years Service in the East with H.M. Fortieth Regiment, etc.*, London, 1845, p. 262.
- 63 Seaton, *op. cit.*, Frontispiece to Vol. 1.
- 64 *Ibid*, pp 174-6.
- 65 Masson, *op. cit.*, Vol. II, p. 258.
- 66 See Rattray, *op. cit.*, Plate 27. Similar examples on Plate 30 and on the drawing of a mosque in Jalalabad in: Trousdale, William (ed.), *The Gordon Creeds in Afghanistan, 1839 and 1878-79*, London, 1984, p. 127.
- 67 Masson, II, p. 255.
- 68 Allen, The Rev. J.N. Diary of a March through Sindh and Afghanistan, etc, London, 1843, pp. 311-2. See also: Lee, Jonathan L., "The Armenians of Kabul and Afghanistan", in: Ball W. and Harrow, L. eds. *Cairo to Kabul, Afghan and Islamic Studies presented to Ralph Pinder-Wilson*, London 2002, pp. 157-62.
- 69 See note 17.
- 70 Masson, *op. cit.*, II, p. 254.
- 71 Scott Moncrieff, Major General Sir George, *Canals and Campaigns; An Engineer Officer in India, 1877-1885*, London, 1987, p. 89. Scott Moncrieff gives a useful account of his time in the Sherpur cantonment and the Bala Hissar in 1880.
- 72 There are full accounts of the war in MacGregor, Sir Charles, revised by Cardew, F.G., *The Second Afghan War, 1878-80, Abridged Official Account*, London, 1908, and Hanna, Colonel H.B., *The Second Afghan War, 1878-79-80, its Causes and its Consequences*. Three Vols. London, 1910. A recent history is: Robson, Brian, *The Road to Kabul; The Second Afghan War, 1878-1881*, Staplehurst, 2003.
- 73 Duke, Joshua, *Recollections of the Kabul Campaign*, London, 1883, p. 159.
- 74 Hensman, Howard, *The Afghan War of 1879-80*, London, 1881, p. 129.
- 75 *Ibid*, p. 131.
- 76 Transcripts of these accounts are in the Lytton Papers; British Library IOR/Mss Eur E 218/127. A copy of the first sketch plan is in IOR/L/PS/7/23/601. There is a modified version of it in: Anon, *History of the Guides, 1846-1922*, Aldershot, 1938, facing p. 102. The main failure of both was not realising that the residency had a forebuilding between its main court and the compound where the escort were housed, and that the main gate to that compound was offset. The account of the action that day, in the *History of the Guides* is, however, a good source for a general understanding of the buildings involved.
- 77 Hensman, *op. cit.*, p. 53.
- 78 Hensman, *op. cit.*, pp. 71-78. Duke, *op. cit.*, pp. 176-189. See also: MacGregor, *op. cit.*, pp. 235-6.
- 79 Telegram from General Sir Michael Kennedy to the Viceroy, 6 Dec 1879. British Library; IOR/Mss Eur E 218/128. Lytton Papers, p.229.
- 80 Trousdale, William (ed.) *War in Afghanistan 1879-80: The Personal Diary of Major General Sir Charles Metcalfe MacGregor*, Detroit, 1985, p. 139-140. The whole diary gives a fascinating insight into the higher direction of the war.

- 81 The works included: 10 forts, 15 detached works, 3 large trestle bridges and numerous small ones, 4,000 yards of defence, 45 miles of road, 2 defended posts and quarters for 8,000 troops. See: Sandes, Lieutenant Colonel E.W.C., *The Military Engineer in India*, Chatham, 1933, p. 387.
- 82 Sim also records this and details of works being undertaken in the Bala Hissar in his journal; RE Library Mss 954.1/1879-80/92.1/SIM.
- 83 During the First Afghan War, Lady Sale commented in her diary: "Now our foes require charcoal as much as we do food, for they cannot make their gunpowder without it; and wood is very scarce in the city." Sale, *op. cit.*, entry for Nov 21st 1841.
- 84 National Archives/ WO 106/166: The Anglo Afghan War 1879-80, Compiled at the Intelligence Branch of the Quartermaster General's Department, Horse Guards, London, HMSO, Confidential, 1881. Section V, p. 13, records that orders were issued for the preparation of mines for blowing up the fortifications but these orders were afterwards countermanded. In Section V, p. 17, it records that all the forts and defensive works were left intact, at the express request of the Amir. This was confirmed in Hensman, *op. cit.*, p. 459: "A concession was made . . . the fortifications we had built about Cabul were not destroyed". See also the clear account of this in: Hanna, *op. cit.*, Vol. III, pp. 518-521.
- 85 Hensman, *op. cit.*, p. 457.
- 86 RE Museum 5301.146 contains both this and Figure 47.
- 87 Drawing by Colonel F.B. Longe (later Surveyor-General of India). RE Library Album I.2.6/4.
- 88 This dungeon is mentioned in: Hamilton, Angus, *Afghanistan*, London, 1906, p. 347, and in Lee, Jonathan L., *The 'Ancient Supremacy': Bukhara, Afghanistan and the Battle for Balkh, 1731-1901*. Leiden, 1996, p. 555.
- 89 Letter by Sir Mortimer Durand to General Lord Roberts, 27 Nov. 1893. [British Library; IOR/Mss Eur D 727/4] Durand is a useful eye-witness, as he had also been in Kabul in 1879-80.
- 90 Lilius Hamilton's photographs from her time in Kabul, with a guide written by Paul Bucherer, are in the library of the Wellcome Institute in London.
- 91 Giradet, Edward, *Afghanistan: The Soviet War*, London 1985, p. 118.
- 92 From the notes of William Reeve, BBC correspondent in Kabul at that time.

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IAN TEMPLETON RIBA AADipl

After finishing his architectural training, Ian Templeton worked with Sir William Halcrow & Partners in London. From 1957-59 he did National Service as an officer in the Royal Engineers, serving in Cyprus and North Africa. From 1960-79 he was working with the City Architect, in Southampton. For the next 22 years he worked with Professor Sir Colin Stansfield Smith for Hampshire County Architects, rising to be Chief Architect and Head of Design of an award-winning team.

Ian has a deep interest in the history of architecture. This is the second time he has helped Bill Woodburn with an historical study; the earlier project involving reconstruction drawings of fortified architecture in Chitral in northern Pakistan.



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